

**HOW TO CRACK**  
**CIVIL SERVICES EXAMINATION**

written by

**RANKERS**

**A COMPREHENSIVE GUIDE TO CIVIL SERVICES EXAMINATION**

Contributions by

Vineel Krishna, IAS  
Mutyalaramu Revu, IAS  
Vijay Kumar Mantri, IAS  
B. Sandeep Kumar, IFS  
Arvindhakshan, IRS  
Bala Kiran, IPS  
G. Kranti Kumar, IPS  
A. Vijaya Laxmi, IPS  
K. Veeraraghava Rao, IAS  
Ramesh Reddy, IPS  
Ramanjaneyulu, IRS  
Raja Kumari, IPS

Compiled, Edited & Cover Page Design by  
Vijay Kumar Mantri

**XYZ PUBLISHERS, HYDERABAD**

This book contains full of suggestions and guidelines. Each suggestion in this book is the offspring of lessons that rankers learnt from their mistakes during their preparation. Authors bear no responsibility for any damage from their suggestions and guidelines, which are actually their opinions. Readers may follow these suggestions and guidelines after judging rationally based on the suitability to their nature and environment.

Published by  
GVK Publications,  
Hyderabad -02

© All Rights Reserved  
First Edition 2007

Printed at  
Xyz Press,  
Hyderabad

## **PREFACE**

“How to Crack Civil Services Examination” is a comprehensive guide to Civil Services Examination written by rankers. It covers every aspect of the examination at every stage of the examination including how to prepare, what to prepare, where to prepare, how to choose optional subjects, how to write the exam, how to prepare for interview, etc. It covers detailed strategy of preparation for General Studies Prelims and Mains Exams, Essay and Interview. It gives suggested reading and strategy of preparation for all popular optionals. It even touches upon some miscellaneous aspects, which have impact on the preparation like health, stress management, hobbies, etc.

Each suggestion in this book is the offspring of lessons that Mutyalaraju and other toppers learnt from their mistakes during their preparation. The main aim of this book is to make sure that aspirants do not waste their attempts due to lack of proper guidance.

## INTRODUCTION

The Indian Civil Services is considered as the backbone of India and carries great respect and responsibilities. India's toughest youngsters compete for entry into the Indian Civil Services. Even though corporate jobs may offer very attractive salaries and perks, a majority of youngsters still crave entry into the prestigious Indian Civil Services held by the UPSC. The very fact that a big share of every year's top posts in the civil services exams are bagged by professionals from various streams shows that the IAS is still the dream job for many.

The path to the coveted Civil Services is full of ups and downs and is a highly uneven track to traverse. Before taking a decision about Civil Services as your career, it is expedient to check up oneself and remain determined afterwards.

The first step towards your success is to choose your goal honestly. I mean you shouldn't choose Civil Services as your goal simply because your father or mother has a dream or there is a pressure from your social circle. It should come from your heart. This exam is not like IIT-JEE or any other Engineering/Medical/University Entrance Examination. It demands at least one and half-year full time preparation with solid determination, which is possible only if the desire for Civil Services is burning your heart incessantly.

Many of you may be having presumptions that you should have come from a reputed Institute like IISc or any IIT to succeed in Civil Services. But the fact is that you need not have come from a reputed Institute. You need not to have a splendid academic background. You need not to have great scores in SSC or Intermediate. You need not have come from a rich family. You only need to have a dream to become an IAS officer and the rest will follow. Because, it is the human nature to work hard. It is the human nature to gain knowledge and succeed. I say it is your human right to succeed. Anyone can succeed.

Work hard as there is no short cut to success and hard work never goes unrewarded. Never. Every drop of sweat of your brow through hard work adds to the splendour of your bright career. I would like to quote Napoleon Bonaparte: "*Victory belongs to the most persevering.*"

Your motivation to prepare for Civil Services should be to help the hunger and ignorant people and to drive out the poverty from India. If you have this desire in mind, then the Almighty will also help you to succeed in Civil Services.

This preparation stage is generally the most fruitful stage of your life. Because you are just out of college and your parents are looking upto you for financial support. This is also the time you lay foundations for your career. That is why Preparing for Civil Services at this stage is putting your career at stake. It's a war. You are the one who is fighting the war not the coaching institute, not the person sitting on the bank and giving you free suggestions. You should prepare your own strategy taking guidance from seniors and coaching institutes (if you join). If you follow a wrong strategy, you are the person who is going to lose not the coaching institute not the person who had given you free suggestions. I would like to remind the aspirants the words of Swamy Vivekananda. *"Stand up, be bold and take the whole responsibility on your shoulders and know that you are the creator of your own destiny. All the strength and success that you want are within yourself."*

I would also like to stress that you should not attempt the first Prelims as a trial. The first attempt ought to be the best attempt.

As Swami Vivekananda said *"Arise awake and rest not till the goal is achieved"*. All The Best.

Vijay Kumar Mantri, IAS

## CONTENTS

### **1. About the Exam**

Nature of the Exam  
Choosing the Optional Subjects  
Coaching  
General Trend of Marks  
Exam timetable  
General Suggestions  
How should a fresh candidate approach the exam?

### **2. Examination Scheme**

Preliminary Examination  
List of optional subjects for Preliminary Examination  
Main Examination  
List of optional subjects for Main Examination  
General Instructions  
Interview test  
Number of Attempts & Age Limit

### **3. Preliminary Exam**

Negative Marking  
How to tackle negative marking?  
General Studies – Preliminary Exam  
History  
Polity  
Geography  
Economy  
Sciences  
Mental Ability  
Current affairs  
General Knowledge

### **4. Main Examination**

General Studies – Main Examination  
History  
Geography  
Polity  
Social Issues  
India and the world  
International Affairs  
Economy  
Science and Technology  
Statistics  
Current Affairs

## **5. Essay**

Suggested root topics  
Suggested Reading  
Groundwork Preparation  
Tips  
Strategy

## **6. English and Indian Languages**

English  
Indian Language

## **7. Interview**

What is looked for in the Personality Test?  
How to Prepare?  
What type of questions does the Interview Board asks?  
Mock /practice  
Dressing up  
Entry  
During Interview  
General Do's and Don'ts for the personality test

## **8. Reference Books & Strategy**

Agriculture  
Anthropology  
Botany  
Chemistry  
Civil Engineering  
Commerce  
Economics  
Electrical Engineering  
Geography  
Geology  
History  
Law  
Management  
Mathematics  
Mechanical Engineering  
Medical Sciences  
Pali Literature  
Philosophy  
Physics  
Political Science  
Psychology  
Public Administration  
Sociology

Statistics  
Urdu Literature  
Zoology  
Telugu Literature

## **9. Miscellaneous**

Health  
Hobbies  
Internet Surfing  
Ideal Timetable  
Studying while doing a job  
How to Study  
How to prepare notes?  
Revision  
Where to prepare?  
How to write answers?  
How to remember?  
Stress Management  
For aspirants in the long term

## **Appendix I - Sample Interviews**

## **Appendix II - Marks of Successful Candidates in CSE-06**



## 1. ABOUT THE EXAM

Before starting the preparation, it is very important to have a complete understanding about the exam process, its structure and the various aspects related to the preparation.

UPSC generally issues notification in the first week of December (of the year preceding the exam year) in The Employment News. The complete notification should be studied carefully to understand the structure of the exam and related information. This notification can also be obtained from the UPSC website. Go to [www.upsc.gov.in](http://www.upsc.gov.in), link to examination sections. Then link to the archives, there click on Civil Services (Prel) Exam to view the notification.

### **Nature of the Exam**

Before anyone starts playing a game, he would like to know the rules of the game and that is sportsmanship. Similarly in any competitive exam, understanding the nature of the exam is very critical. The preparation will be more focused when you know exactly what the Examination expects rather demands from you. Remember at every stage of your preparation that this examination is relative. You only need to be better than the other aspirants to get a final place in the merit list.

The nature of the exam can be analysed through the following ways:

- A thorough perusal of Notification and carefully understanding the requirements from it.
- A thorough analysis of the previous year's papers and the recent trends.
- Discussing elaborately with teachers, successful candidates and seniors.

There is lot of hype around the IAS exam. A fresh aspirant comes with the idea that he has to do some hi-funda preparation and be like a scholar in the subjects. He starts his preparation on a high note and works hard in the beginning. For each topic he tries to do maximum and best preparation. In the process, he reads all the textbooks and the coaching material available in the market. Some spend 2-3 days on each topic and prepare 10-15 pages of notes. Gradually, he feels exhausted and the momentum slows down. Due to this approach, he is not able to complete the syllabus. So, he goes for a selective study as the exam nears. Now the pressure becomes unbearable, as on one hand he has not completed the syllabus and on the other hand he prepared so much notes for each topic that revision becomes impossible within a short time. People have a funny idea that Civil Services can be cleared only in multiple attempts. So, the aspirant starts succumbing to pressure and convinces himself that it is only his first attempt and, therefore he can prepare better next time.

Though the exam demands hardwork from the aspirant, it should be “intelligent hardwork” and not just hardwork. This exam is all about the basics with lot of

clarity. The exam can be written well when the preparation is simple and the aspirant is very strong in basics with clarity.

Since the competition is relative, your answers in the examination should not only be correct but also different with a touch of creativity. The creativity and innovation is not something that you will get in the textbooks. They have to be developed on your own. It requires lot of thinking and observation. By innovation in answers what is meant is –

- Catchy introduction
- Diagrams
- Graphs
- Flow charts
- Maps
- Case studies
- Contemporary touch and applicability
- Catchy conclusion.

Basics with clarity will come when there is lot of questioning while studying. The topic has to be studied in a logical manner. Suppose you are studying a topic on Inflation. Think logically as a layman, then you should get the following sequence of questions

- What is inflation
- Why should there be inflation, i.e., causes
- So what if there is inflation, i.e., impact
- If impact is negative, then naturally we should be doing something to reduce it, so what steps were taken and what happened
- If still inflation is there, then what's wrong with the steps taken
- How to control inflation, any suggestions by experts and recent developments.

You can add innovations like a simple graph showing how the inflation has been in recent times and also a flow diagram about the impact of inflation.

In this manner, the basics in the topic can be covered with clarity. And the topic should be remembered in this logical structured way for the exam. It should be understood that once you have done the topic in this comprehensive method through logical questioning, the preparation is over for that topic. You need not go through any journals or hi-funda textbooks for becoming an expert in the topic. This much of basics with clarity are sufficient for the exam. And, this is what humanly possible in view of the huge syllabus.

The following points should be kept in mind while doing preparation:

- The focus should be on gaining basic clarity in each topic, which will come only through lot of logical questioning

- More time should be spent on thinking about the topic and making innovations, rather than on reading too many study material.
- The previous papers should be thoroughly analyzed to understand the expectations of the examiner.
- The preparation should be focused and all the hard work should be channelised in the right direction.

### **Choosing the Optional Subjects**

This is the first and most important stage of your journey and should be accomplished most carefully as coming things hinge on it and a wrong decision may prove to be disastrous. Careful analysis of syllabus, previous years' papers, your caliber, requirement of subject (Visionary, Numerical, Theoretical), comfort level with the subject and past trends should be done. Advice from seniors and fellow candidates should also be sought. To avoid dithering in choice at later stage, initial deep thinking and consultations are a must. Having decided the subject, it is advisable to stick to your choice even if the perception of others about it is not favourable.

Major criteria, which should guide you in choosing optionals, are:

1. Interest in the subject. This is quite important for sustaining the momentum in studies and completing the huge syllabus.
2. Availability of guidance – in the form of seniors who cleared with the optional, coaching, material, etc.
3. Performance of the optional in the last few years.
4. Time gap between the two optionals. Some people try to choose the optionals combination so that there is some time gap between them.

Please note that there is no subject that can be said to be scoring. UPSC is maintaining utmost balance between the subjects. It has brought all the optional subjects onto the same platform as far as scoring is concerned.

Some of the optionals which a majority take are: Anthropology, Geography, History, Political Science and International Relations, Psychology, Public Administration, Sociology and Literature.

The main advantages with these optionals are:

1. Availability of guidance, which reduces the efforts to a large extent
2. The knowledge also helps in GS, Essay and interview.
3. They are also relevant for an administrative career.

If a person is from professional education background (i.e. Engineering /Medicine), which optionals should he choose? This is a basic question for many. There is a tendency to opt for the graduating subject. Lets understand the problems associated with these subjects.

- Previously, science and Engineering Optionals used to do very well. In top 20, there used to be 15-16 from IIT and engineering background. But after 2000, UPSC has modified the syllabus. It became a very huge syllabus and even the exam questions are made tough. That's the reason why, very few are writing the exam from IITs now. Many engineers are taking arts optionals instead of sciences. Just observe the background of the toppers and their optionals.
- There will be no guidance available for engineering/medical/science subjects. So, lots of time will have to be spent in understanding the requirements of the exam. Then, searching for the material. It becomes a trial and error process. All the energies will be spent on this, while you get exhausted when really studying. At the same time, you will also have to complete the huge syllabus of another optional and GS.
- Because of the above problem, it will take more time and more attempts. While, your friends in other fields go far ahead. So, both peer and social pressure starts. The exam is anyhow psychologically demanding, if other pressures add to it, then it becomes unbearable. Finally, your goal of cracking the exam becomes impossible.
- You will have to do every thing on your own. Initially it might be fine. But the exam is of long duration. It becomes difficult to sustain the momentum on your own.

A person might be University topper, but we have to understand the difference between an academic exam and a competitive exam. So it is very important to be careful, while choosing optionals, even though you might feel you are really good in a particular subject.

Still, if you are confident about your subject, then do take that optional. There are some people who cleared with optionals that others don't take generally. But take into consideration the following points

- Whether you have a senior who has cleared with this optional and who can guide you well
- Whether you have close association with professors who have good understanding about this exam.
- Are you clear about the requirements of the exam? Study the previous papers thoroughly and assess yourself
- Be clear about the books to follow. Don't do trial and error process. Do a focused exam oriented preparation.
- Do not neglect other optional and GS. Give equal importance.
- Form a group of aspirants with same optional. If you prepare in isolation, then there will be no flow of information.

Do not be in a hurry to decide about the optional. Be very cautious and consult the right people about the information. Analyse carefully all the pros and cons, and then take a decision purely based on your assessment.

## **Coaching**

Due to the complex exam procedure, the coaching assumes a crucial role. Unfortunately, it is a costly affair.

But the coaching has the following advantages:

- Helps in understanding the requirements of the exam quickly, so that the preparation is focused.
- Reduces the efforts in preparation, as subject experts teach the topics in exam orientation. Anyhow, the candidate has to prepare for at least one new optional.
- Helps in getting many contacts with co-aspirants, which is useful for exam related information. Never prepare for this exam in complete isolation. In any complex situation, information plays the key role.

Please take into account the following points while joining any institute:

- Do not merely go by the advertisements, nor the claims made in magazines or the interviews supposedly given by the toppers.
- Meet the successful candidates and the seniors who have taken coaching from that institute.
- Do not go by the advise of only one person. It is better to contact as many as possible and get a general opinion.
- Meet the teacher personally, ask for their programme details, results, etc, and assess yourself if it is worth joining there.

If you are working somewhere or economically under privileged, and therefore, cannot go for coaching, please do not get discouraged. There are many people who cleared the exam without coaching. You can device ways of getting the required information about the exam. But you should always be aware that you would have to work harder than others to clear the exam. So be prepared for that and believe that hard work will always be paid back in the end.

Check out the competition magazines to get the addresses of various coaching institutes.

## **General Trend of Marks**

The following data about the marks and the ranks will give a general idea about the efforts that are required. The marks and the ranks keep varying every year depending on the vacancies and the standard of the question papers.

Looking at the trend, it is believed by majority that a same proportion of students are taken from each optional. So, in any case, you should to be in the top segment in your optional to get selected for the mains. The qualifying scores vary from optional to optional.

Trend of Qualifying scores for Prelims with Negative Marks	
Category	Marks
General	~240
OBC	~230
SC	~220
ST	~200

The scores for the mains are in the range of 50-55%. Usually, a score of above 1050 is better to ensure a place in the final list.

Trend of Cut-off scores for Interview Call	
Category	Marks
General	~980
OBC	~960
SC	~950
ST	~920

In the interview, a score around 150-180 is a normal performance. Some get a score of even 220-240. The UPSC has deliberately kept a wide range in interview (scores vary between 50-240), so as to have the final say in who would get into the service. So, it is very important to make personality development a vital part in your preparation. The final rank is going to depend very much on the interview marks.

General Trend of Final Scores for Selection	
Category	Marks
Top 20 ranks	1300+
Top 50 ranks	1280+
Top 100 ranks	1250+
Top 200 ranks	1225+

Cut off Scores (Last Rank Marks) for Final Selection	
Category	Marks
General	~1200
OBC	~1175
SC	~1150
ST	~1120

The actual final ranks and the service allocation of successful candidates can be obtained from the personnel ministry website. [www.persmin.nic.in](http://www.persmin.nic.in)

### **Exam timetable**

The exam timetable for Main Examination is almost the same every year. This information will be useful in selecting the optionals. But remember clearly that your interest in the subject should be the main criteria.

The exam sequence is generally as follows:

GS  
Essay and English  
Indian language paper  
History  
Mathematics, Statistics  
Sociology, Anthropology  
Geography  
Engineering subjects  
Political Science, Public Administration  
Literatures  
Physics  
Commerce, Management  
Zoology  
Economics  
Botany  
Law  
Philosophy  
Agriculture, Veterinary Science  
Psychology  
Chemistry  
Geology

### **General Suggestions**

Observe the following points:

- Long hours of study and lot of other sacrifices are needed. You should have a very determined mental make up and a never-say-die kind of spirit.
- The fortune favours the brave. So work hard with courage in spite of the failures. The final reward is bound to come. The luck factor does not help if you don't work hard to your full capacity.
- To err is human, but the one who rectifies is a champion. So, do a lot of introspection as you progress in the preparation. This will help you in identifying the mistakes and rectifying them at the right time.
- Devotion and Determination are the keys to the success. Be ready to work hard. But at the same time, ensure that your efforts are channelised in the right direction.
- Plan your study and try to work it out within schedule. Set weekly targets and at the end of the week, do a self-appraisal.
- There will be lots of temptation to give up the attempt, as you progress in the preparation. This is mainly due to the huge syllabus and the accumulating pressure. But be aware that these are the critical moments. You should face all these pressures with courage. Be determined to clear the exam in the first attempt.

## **How should a fresh candidate approach the exam?**

A new aspirant should keep in mind the following points:

- First try to understand the exam. Gather information from various sources, analyse the previous years' papers, meet seniors and teachers, and think deeply about the exam and the way you should prepare.
- Chose the optionals very carefully.
- Settle down in some place where you can study without disturbances, it is better to be isolated for a year during the preparation.
- Select the coaching centers carefully after enquiring from various sources. Do not merely go by the advertisements.
- Do not be in a hurry to buy all the material available in the market. Be selective and chose only the best, based on advise of right seniors.
- Establish good relation with the teachers and take complete advantage of their experience.
- Remember always that you are going to have a tough period for next two years. So be well prepared for all situations. Keep working hard right from the beginning without any distractions.
- Believe strongly that you will clear the exam in the first attempt itself and do not compromise at any stage. If required work harder than ever before.
- Take care of your health aspects.
- Do not be in a hurry to complete the syllabus. Go slow when you read new concepts. Do regular revisions.
- Make writing practice a part of your daily routine.
- The current affairs notes should be prepared every day.
- The preparation should be started at least a year ahead of the prelims exam.
- Do not give the attempt unless you are confident of qualifying for the interview. The first attempt should be the best one, so work hard with determination.



## 2. EXAMINATION SCHEME

The competitive examination comprises two successive stages:

Stage 1: Civil Services (Preliminary) Examinations (Objective Type) for the selection of candidates for Main Examination; and

Stage 2: Civil Services (Main) Examination (Written and Interview) for the selection of candidates for the various services and posts.

Preliminary Examination is meant to serve as a screening test only; the marks obtained in the Preliminary Examination by the candidates who are declared qualified for admission to the Main Examination will not be counted for determining their final order of merit. The number of candidates to be admitted to the Main Examination will be about 12 to 13 times the total approximate number of vacancies to be filled in the year in the various Services and Posts. Only those candidates who have qualified in the Preliminary Examination in a year will be eligible for admission to the Main Examination.

The Main Examination will consist of a written examination and an interview test. Candidates who obtain minimum qualifying marks in the written part of the Main Examination, will be summoned for an interview for a Personality Test. However, the papers on Indian Languages and English will be of qualifying nature. The marks obtained in these papers will not be counted for ranking. The number of candidates to be summoned for interview will be about twice the number of vacancies to be filled. The interview will carry 300 marks (with no minimum qualifying marks).

Marks thus obtained by the candidates in the Main Examination (written part as well as interview) would determine their final ranking. Candidates will be allotted to the various Services keeping in view their ranks in the examination and the preferences expressed by them for the various Services and posts.

### **Preliminary Examination**

The examination will consist of two papers.

<b>Paper I</b> General Studies	150 marks
<b>Paper II</b> One subject to be selected from the list of optional subjects set out below	300 marks
<b>Total :</b>	450 marks

### **List of optional subjects for Preliminary Examination.**

Agriculture, Animal Husbandry & Veterinary Science, Botany, Chemistry, Civil Engineering, Commerce, Economics, Electrical Engineering, Geography, Geology,

Indian History, Law, Mathematics, Mechanical Engineering, Medical Science, Philosophy, Physics, Political Science, Psychology, Public Administration, Sociology, Statistics, Zoology

**Note:**

- Both the question papers will be of the objective type (multiple-choice questions).
- The question papers will be set both in Hindi and English.
- The course content of the syllabi for the optional subjects will be of the degree level.
- Each paper will be of two hours duration. Blind candidates will, however, be allowed an extra time of twenty minutes at each paper.

**Main Examination**

The written examination will consist of the following papers:

Paper I	One of the Indian languages to be selected by the candidate from the Languages included in the Eighth Schedule of the Constitution.	300 marks
Paper II	English	300 marks
Paper III	Essay	200 marks
Papers IV and V	General Studies	300 marks for each paper
Papers VI, VII, VIII and IX	Any two subjects to be selected from the list of the optional subjects set out below. Each subject will have two papers.	300 marks for each paper

Interview Test will carry 300 marks.

**Note:**

- The papers on Indian Languages and English will be of Matriculation or equivalent standard and will be of qualifying nature; the marks obtained in these papers will not be counted for ranking.
- The papers on Essay, General Studies and Optional Subjects of candidates will be evaluated only after attainment of qualifying marks in Indian Language and English.
- The paper-I on Indian Languages will not be compulsory for candidates hailing from the North-Eastern States of Arunachal Pradesh, Manipur, Meghalaya,

Mizoram and Nagaland and also for candidates hailing from the State of Sikkim.

### **List of optional subjects for Main Examination**

Agriculture, Animal Husbandry & Veterinary Science Anthropology, Botany, Chemistry, Civil Engineering, Commerce and Accountancy, Economics, Electrical Engineering, Geography, Geology, History, Law, Management, Mathematics, Mechanical Engineering, Medical Science, Philosophy, Physics, Political Science and International Relations, Psychology, Public Administration, Sociology, Statistics, Zoology

And Literature of one of the following languages:

Arabic, Assamese, Bodo, Bengali, Dogri, Chinese, English, French, German, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Maithili, Malayalam, Manipuri, Marathi, Nepali, Oriya, Pali, Persian, Punjabi, Russian, Sanskrit, Santali, Sindhi, Tamil, Telugu, Urdu.

### **Note:**

- Candidates will not be allowed to chose the following combinations of subjects:-
  - Political Science & International Relations and Public Administration;
  - Commerce & Accountancy and Management;
  - Anthropology and Sociology;
  - Mathematics and Statistics;
  - Agriculture and Animal Husbandry & Veterinary Science.
  - Management and Public Administration;
  - Of the Engineering subjects, viz., Civil Engineering, Electrical Engineering and Mechanical Engineering–not more than one subject.
  - Animal Husbandry & Veterinary Science and Medical Science.
- The question papers for the examination will be of conventional (essay) type.
- Each paper will be of three hours duration. Blind candidates will, however be allowed an extra time of thirty minutes at each paper.
- Candidates will have the option to answer all the question papers (except the language papers viz. Papers I and II) in any one of the languages included in the Eighth Schedule to the Constitution or in English.
- Candidates exercising the option to answer papers III to IX in any one of the languages included in the Eighth Schedule to the Constitution may, if they so desire, give English version within brackets of only the description of the technical terms, if any, in addition to the version in the language opted by them.
- Candidates should, however, note that if they misuse the above rule, a deduction will be made on this account from the total marks otherwise accruing to them and in extreme cases, their script(s) will not be valued for being in an unauthorised medium.

- The question papers other than language papers will be set both in Hindi and English.

### **General Instructions (Preliminary as well as Main Examination)**

- If a candidate's handwriting is not easily legible, a deduction will be made on this account from the total marks otherwise accruing to him.
- Marks will not be allotted for mere superficial knowledge.
- Credit will be given for orderly, effective and exact expression combined with due economy of words in all subjects of the examination.
- In the question papers, wherever required, SI units will be used.
- Candidates should use only international form of Indian numerals (i.e. 1,2,3,4,5,6 etc.) while answering question papers.
- Candidates will be allowed the use of Scientific (Non-Programmable type) calculators at the Main examination of UPSC. Programmable type calculators will however not be allowed and the use of such calculators shall tantamount to resorting to unfair means by the candidates. Loaning or interchanging of calculators in the Examination Hall is not permitted. It is also important to note that candidates are not permitted to use calculators for Preliminary Examination.

### **Interview test**

The candidate will be interviewed by a Board who will have before them a record of his/her career. Candidate will be asked questions on matters of general interest. The object of the interview is to assess the personal suitability of the candidate for a career in public service by a Board of competent and unbiased observers. The test is intended to judge the mental caliber of a candidate. In broad terms this is really an assessment of not only his intellectual qualities but also social traits and his interest in current affairs. Some of the qualities to be judged are mental alertness, critical powers of assimilation, clear and logical exposition, balance of judgement, variety and depth of interest, ability for social cohesion and leadership, intellectual and moral integrity.

The technique of the interview is not that of a strict cross-examination but of a natural and purposive conversation, which is intended to reveal the mental qualities of the candidate.

The interview test is not intended to be a test either of the specialised or general knowledge of the candidates which has been already tested through their written papers. Candidates are expected to have taken an intelligent interest not only in their special subjects of academic study but also in the events which are happening around them both within and outside their own state or country as well as in modern currents of thought and in new discoveries which should rouse the curiosity of well educated youth.

### Number of Attempts & Age Limit

Category	Age Limits		No. of Attempts
	Minimum	Maximum	
General	21	30 (by Aug of Exam year)	4
OBC	21	33 (by Aug of Exam year)	7
SC/ST	21	35 (by Aug of Exam year)	Not Applicable

### **3. PRELIMINARY EXAM**

This is the first stage of the exam and should never be taken lightly. The preparation should be such that you should not have any doubt about clearing the exam. The prelims should only be a passing phase. If you prepare well for the mains exam and be clear about the basics, then prelims should not be problem. The main focus should be on the optional subject first. At the same time the GS should be done regularly. Since there is well-defined syllabus for the optional, you should prepare thoroughly in all aspects and score as much as possible.

The preliminary exam is a test of recognition. It is sufficient if you can recognise the correct answer from given choices. So if you are strong in basics this should not be problem. Do not spend too much time in memorising facts. It's fine if you can recognise it. Prepare some mnemonics, which will help you in recognizing the right answer.

One should do as many previous year papers as possible. It will help you in time management and also in identifying the weak areas. Please remember that this practice should be right from the beginning and not in the final stages.

#### **Negative Marking**

UPSC has taken a right step introducing negative marking to filter out candidates who get selected on the basis of smart guesses and luck. So, the serious candidates should cheer up now. Negative marking make paper more complex. But it is easy for a well prepared students and gives an extra benefit to a genuine candidates.

#### **How to tackle negative marking?**

- Identify the areas of your strength in the question paper. Solve questions from these areas first. Solving easy question will boost your confidence.
- Don't waste your time for particular questions. Leave time consuming questions to take up in the end.
- The definition of intelligent guessing changes now with negative marking. You should tick only those answers which you feel 70% correct.
- Don't play any blind and stupid game of guessing.
- Practice...Practice...Practice...Mock tests reduce mistake in the exam and prepare you to face real environment in which you can tackle & solve the questions within time limit.
- Mock tests provide you a platform where you can check your own weakness, mistakes and errors and develop a better understanding for solving different types of questions.

#### **General Studies – Preliminary Exam**

UPSC is not following a standard pattern of allotment of questions for various topics. It is becoming difficult now to attempt or even to prepare for complete syllabus. Hence, it is wise to stress on those subjects, which are common for Main Examination. The areas to be taken care of are Modern India, Polity, Indian Economy, Geography, Current Events and General Science. Considering the general nature of the examination the tactics must be to focus on greater rather than intensive coverage giving more stress on subjects, which are common to Main Examination.

### **History**

The areas to be covered are the history from ancient to modern period. The basic understanding can be obtained from below 10<sup>th</sup> NCERT books. The focus should be on modern Indian history, which is covered in the mains. The basic knowledge in Ancient India and Medieval India is sufficient.

The NCERT books (Class XI and XII) are good enough for the purpose.

You can refer following books

- Ancient India , NCERT Class XI
- Medieval India , NCERT Class XI
- Modern India , NCERT Class XII
- Modern India, Spectrum publications

### **Polity**

The Constitution and various related aspects should be done well. Some articles and facts should be memorised. It is better to prepare this area well since it will be helpful in mains and interview.

The Indian Polity by Lakshmikanth and NCERT books are sufficient. Also refer, DD Basu.

### **Geography**

Suggested Reading:

For Indian Geography

- Physical Geography of India, NCERT Class XI
- Land and People, NCERT Class XI

For World Geography

- General Studies Manual by TMH or Spectrum Publications.

For Both Indian and World Geography, follow Prelims issues by Civil Services Chronicle Magazine or Competition Wizard Magazine.

### **Economy**

The basic concepts are being asked along with current affairs based questions. The basic clarity can be obtained from the standard books. The current affairs can be studied from Economic Survey and the newspapers.

Suggested Reading:

- Economic Survey
- Dutt & Sundaram or Mishra & Puri or IC Dhingra

## **Sciences**

Some times the questions are asked very difficult that even science students find it difficult to answer. But the preparation should be in such a way that all the basic questions can be done correctly. The questions are also asked in applications orientation.

Suggested Reading:

- Science and Technology, NCERT Class IX & X
- What, Why & How books by CSIR.

## **Mental Ability**

Do lot of practice from previous years papers. The preparation can also be made from some standard guide like General Studies Manual by TMH. The speed and accuracy should be practised. Concentrate on permutations, combinations, probability, logical reasoning.

## **Current affairs**

This has become a very important component. The preparation should be continuous from the sources given in mains strategy. The notes should be focused on the factual aspects that come in the news. Many questions are asked from this area, so prepare thoroughly. The efforts will be useful for all stages of the exam. It should become a part of your daily routine.

Suggested Reading:

- The Hindu News paper
- Frontline Magazine
- Yojana Magazine
- Competition Wizard or Spectrum Issue on Current Affairs – This is just to make sure that you have covered all the current affairs issues in News Paper.

## **General Knowledge**

Quite a few questions are asked from this area. Some difficult questions are also asked. Do not spend too much time in memorizing unnecessary facts. You should have a broad awareness about various fields. At the same time, focus more on areas, which have been asked in the past.

India Year Book - This is important for the prelims and also for some mains two mark questions. But do not read every thing given in the book, be logical and concentrate on the basics, which can be asked in the exam. You should prepare notes on the various terms that are given in the book. Do not focus too much on unnecessary facts given in the book.

Manorama Year book - This book should also be taken as reference.

For the GS prelims, if you want a compilation of all material at one point then can refer some standard guide like TMH. But do not ignore the NCERT and other books since they give better clarity.



## 4. MAIN EXAMINATION

The Main Examination is the most important stage of the exam. If you are well prepared for the mains, then a good foundation for your success is made. The risk involved with the interview can also be reduced with good performance in Main Examination. Always target the Mains Exam and make clearing the Prelims an incidental objective and a passing phase in the path of your goal. If you always focus on Prelims result and don't think of Mains till the Prelims results are out, you will end up as a loser because there is hardly any time left for a thorough preparation. So always aim at the Mains.

Note:

- Your answer in the exam is the only medium through which you can convey to the examiner. So you should always think as to how to impress the examiner with the answer. Your pen, handwriting, writing style, logical presentation, innovations, relevance to the question, etc, everything matters. Be careful about these aspects right from the beginning.
- The final two months should be devoted to repeated revisions.
- The writing practice within time limit should be done from the beginning. This will help in understanding what you can remember and reproduce within the time limit. If you do this as the preparation progresses then the study will be exam-oriented.
- Improve your handwriting if it is bad. Your handwriting should at least be easily legible.
- You can use colour pens when you draw figures, diagrams etc.
- While writing answers, focus on good introductions and conclusions. The presentation should be logical. The introduction should introduce the reader about the path he is about to take and what's in store for him. It should raise the curiosity of the reader. While, the conclusion should sum up what the reader has gone through in the path. There should be a balanced judgement in the conclusions. (This is suggestible only for 30 and 60 marks questions)
- You need not have a very good vocabulary or scholarly writing style. It is sufficient if you can present your answer in a simple logical manner.
- Your aim should be to score equally well in all the papers. In general, you should get above 300 in optionals and the GS. Depending on your strong areas you should get more marks in some papers. The essay score should be above 100. In this way, if you can get around 1100, then the position will be very strong.
- The presentation is to be practiced well. Do not dump the information in the exam, but present it in a logical and attractive manner. The point form can be used only for some factual areas. Other wise, paragraph mode with good analysis should be used.
- Read the question carefully and grasp the aspect being asked. The answer should be relevant to what is being asked.

## **General Studies – Main Examination**

It is usually observed that many aspirants fear the GS paper. But with proper orientation GS becomes very scoring. In fact, many try to concentrate more on optionals than GS. This may not be a good strategy, as GS gives good marks with lesser efforts. The GS is also helpful in essay and interview, and also later on in career. Therefore, proper attention should be given to GS preparation.

Firstly, the nature of GS should be understood. This can be done by a thorough analysis of the previous years papers. It can be observed that the examiner is not asking everything under the Sun, which is contrary to the opinion of many aspirants. The questions are focused only on certain dimensions, especially those relevant for an administrative career.

It is important to know the difference between a generalist and a specialist. A generalist is a person who knows “less and less of more and more”, while a specialist is a person who knows “more and more of less and less”. The Civils Exam in the GS paper is testing the Generalist approach.

### **History**

The national movement and related developments have to be studied with good clarity. The aspirant should have a clear idea about the chronological sequence, the linkages between various topics and a good analysis about each stage. It should be remembered that the portion is not to be studied as if writing History optional. The GS paper will only test the basic clarity on the national movement.

Suggested Reading:

Modern History by Spectrum Publications – This is written well in exam orientation. Bipan Chandra books as a reference and to get further clarity. NCERT books for a basic understanding.

Note:

- Observe the forward and backward linkages at every stage of national movement and its importance in the overall context. Note that all the events were related in some way or the other.
- Prepare simultaneously for the two markers- note down the personalities, places, terms, movements, journals etc. You should be able to identify them if given in exam. This is a very scoring area.
- Innovations like maps (eg. 1857- spread and centers of revolt), flow diagrams etc can be made.
- Try to attempt factual and non-controversial questions.
- Concentrate on the cultural aspects also which are asked for two markers.

## **Geography**

There should be a good understanding about the geography of India. This will also help a lot in prelims.

Suggested Reading:

- Physical Geography of India, NCERT Class XI
- Land and People, NCERT Class XI
- Geography of India by Khullar – Selective Reading only

Note:

- Some current affairs based questions are also asked
- Maps and diagrams can be used extensively

## **Polity**

There is a standard syllabus for this part and good material with clarity is also available. The questions are mostly asked directly. So scoring becomes easy with good understanding with clarity. The knowledge in polity also helps a lot in the essay and interview. This will give a good foundation for the career as an administrator. It is very important to study polity well.

Suggested Reading:

- Indian Polity by Laxmikant, TMH - it is a very good compilation from various sources.
- DD Basu can be used as a reference.
- NCERT books provide the various topics from which questions can be asked and also provide material with good clarity.

Note:

- You need not to remember all the articles. There are only around 50 articles which are important. Note them when referred to in the text.
- Its better to quote some articles and Court judgements (only very important ones) while writing answers.
- Give examples with contemporary relevance. Generally all the questions in this section are asked with implied contemporary relevance.
- Prepare simultaneously for two markers.
- Some questions are repeated, so be thorough with previous years papers.
- Questions are linked to various topics. So while preparing you should be aware of the inter-linkages between various topics.
- Various current affairs topics which are linked to polity are asked. Also, some times basic questions linked to current affairs can be asked.

## **Social Issues**

There is no standard material for these topics. Further, questions are also not asked every year. Even if asked, mostly they are of general nature, which can be answered with common sense. So do not spend too much time on these areas or in search of

material. Prepare well for other parts of GS and later if time permits then come to these areas.

Suggested Reference:

- “The Hindu” News Paper
- “Frontline” Magazine
- Competition magazines
- Yojana
- NCERT books
- Social problems by Ram Ahuja
- Spectrum Publications.
- Internet

Note:

- You only need a basic logical structure for each topic. If there is no proper material, just spend time in thinking on the topic and to prepare a basic structure. Then, you may spend time in searching for material. For. eg. Drug abuse, you should raise following logical questions - what is drug abuse; what are the causes; distribution; impact; efforts to check; problems with strategy; suggestions
- Discuss it with other aspirants and get the information.
- Current affairs based question can be asked. For eg. Some controversial case related to Child labour comes in media, then you can expect a question on Child labour.

### **India and the world**

The questions are asked to test the basic understanding about the relations with other nations and India’s foreign policy. Mostly, questions are related to current affairs. There is a need to have clarity about the basic contours of the evolution of India’s foreign policy. But do not get into too much depth or controversial topics. You are expected to have a basic clarity on India’s external affairs.

There are not many standard books available on the subject. Mostly, the preparation has to be based on current affairs.

Suggested Reading:

- NCERT 12<sup>th</sup> std. book on Political science
- Old NCERT book on Political Science
- Newspapers - Hindu articles, C. Raja Mohan articles in New Indian Express.
- AIR spot light- analysis by experts.
- Foreign Ministry website

Note:

- Understand the core issues between India and various nations.

- The external relations can be structured into political, economic, defence, cultural, S&T, etc. so prepare in these dimensions.
- The relations with important nations are to be done for long answers, while for other nations it is sufficient for the two markers.
- Note the various terms eg. Track 2, which can be asked for two markers.
- There is no material for the topics on Overseas citizens of India. So look out for any issues that come in media related to NRIs. They can be asked for the two markers.
- You can make innovations like maps, flow charts, etc. For eg. A map for Indo-Iran pipeline, or for Munnabao-Khokrapar rail link.

### **International Affairs**

The questions are mainly current affairs related. The most important developments which appear in the newspapers will be sufficient for the preparation. Observe the terms, personalities, places, etc which can be asked for the two markers. Also prepare for the institutions. First list out the various important institutions. Then gather basic material on them. You can also try the web sites of the institutions for the information. You can also read “International Organizations” by Spectrum Publications.

### **Indian Economy**

This is an area, which is feared by many, especially because of lack of proper exam-oriented textbook with clarity. But with some basic understanding, economy can become very scoring because of 15 two-mark questions.

Suggested Reading:

- Dutt and Sundaram or Mishra and Puri - These books are a big compilation with lots of unnecessary facts. Do not read the book from end to end. You should be able to get clarity out of every topic. So, first scan through the topic and the side headings. Then question logically in various dimensions. Try to find the answers to the questions raised as you go through the material and prepare a logical structure. For. E.g. Unemployment - What is unemployment; types; extent and distribution; causes; impact; efforts to reduce; appraisal of policies; recent measures; suggestions;
- Economic Survey- It is a very useful document, which should be focused upon. Prepare notes from it. Also observe the graphs, which can be used as innovations in answers. While reading, note the terms, which can be asked for two markers. The box items are very important.
- NCERT books
- Indian Economy by Pratyogita Darpan Publications

Note:

- Questions can be on basics or the current affairs based.
- You can use innovations like graphs, diagrams, flow charts etc.

- The main aspect is to gain the basic understanding with clarity. So spend more time on logical thinking and inter-relating, rather than on various books or articles.
- Simultaneously, prepare for the two markers. Note the various economic terms that keep appearing in the newspapers. Also, be thorough on the previous years' papers.

### **Science and Technology**

Some Arts students fear this part and leave them for the exam. However, note that the examiner is not interested in the technical aspects. They are only testing if the candidate has basic understanding on the technological developments. In fact, technology is going to play a very key role in changing the administration. So, do take an active interest in the technological developments, as they will help you in being an effective change agent when you join the service.

In the exam, the questions are being asked from both the standard and the current-affairs based. While preparing, concentrate on the relevance and the application of the topic. The following dimensions should be focused:

- What is the basic technological dimension of the topic
- How is it being used; applicability
- Developments in India

There is no good material available for this area. Notes have to be prepared from various sources. The synopsis should also focus on the diagrams and figures, wherever applicable.

Suggested Reading:

- The Hindu Thursday S&T pages (From May 3rd week previous year to current year September 30)
- Competition Magazines
- Internet
- S&T – Spectrum Series

Note:

- Do not go into much technical detail, even if you are from technical background. Concentrate on applications and related issues.
- Innovate using figures, diagrams, flow charts, etc.
- Prepare notes on the various computer related terms.

### **Statistics**

This is another area, which is feared by students from Arts background. While, others from technical background take it too lightly, and lose marks in the end. This area is very scoring for anybody who can concentrate on the basics and do lots of practice.

Suggested Reading:

- NCERT 11th std.
- Spectrum publications.

Note:

- Understand the basics well with clarity.
- Practice the previous papers with the time limit.
- Show the calculations clearly
- Draw the diagrams and graphs neatly.
- Do not forget to take the calculator to the exam hall.
- Some times difficult questions are asked. Do not orient preparation keeping those questions in view. Just be strong on the basic standard questions that are asked every year.
- Its better to attempt the statistics question in the beginning of the exam.

### **Current Affairs**

This is the most important component of the preparation. It has crucial role in prelims, essay and interview. It requires continuous efforts throughout the year. The notes have to be prepared from various sources. The effectiveness of the preparation will increase if you have a good understanding about the questions that are asked every year. That way you will be in a position to discriminate between what to read and more importantly what not to read.

Sources:

- The Hindu newspaper, some aspects of the New Indian express
- The Frontline
- AIR news - 8AM, 2PM, 9PM.
- Yojana
- Internet

Note the following points:

- Prepare notes topic-wise. As you go through various sources, identify the topics that can be asked in the exam. Write the topics on a sheet of paper. You will be preparing notes for those topics only. The main source will be the Hindu newspaper. The other sources should be supplemented to gain clarity in the topics.
- Everyday listen to the AIR news bulletins. They cover all-important topics in a dispassionate manner. The analysis after the bulletin is also quite good. Try doing some thing else while listening the news so that you don't waste time. If any political or unimportant issue is being discussed in the news you can ignore and concentrate on your work.
- Next day by the time paper comes, you already know what to expect from that since you followed news on AIR previous day. So, go to the important topics and read slowly, and prepare notes.
- Do not read everything in the newspaper. Read only that which is important for the exam. Do not even look at the items from second page to centre page. The

main focus should be on front page, editorials, articles, news analysis, business etc. In the sports page just spend time on recognizing the personalities and tournaments, which can be asked in exam.

- Before reading a news item, question logically about that topic or issue. Then read the article. This way the eyes try to gather the answers for the questions raised. Also, the clarity on the topic increases.
- With practice, you should increase efficiency and should not spend more than 2 hrs on newspaper.
- Many innovations can be made like maps, diagrams, flow charts, graphs, case studies etc.
- Keep two mark questions in mind while preparing for the current affairs. Make separate notes for the personalities, places, awards, terms, etc.
- Keep cuttings of the editorial in a monthly file.

#### General Suggestions:

- Writing practice within the time limit is very important. There is problem of time management for the GS paper-2.
- Go through the Vajiram coaching material if you have access to it.
- While reading newspapers observe the following- abbreviations; new terms; organisations; quotes and examples, which can be used elsewhere; etc.



## 5. ESSAY

The essay paper (200 marks) in the civil services main examination is crucial in determining the final outcome/ selection and ranking. It is decisive because there is no specialization in an essay and so no aspirant can claim expertise, unlike optional subjects.

Essay paper does not have a source of definitive information as in the case of general studies or optional subjects. This constitutes a challenge. It is vital to understand that an essay is a reflection of the personality - ideas, views, analysis, assessments and inferences, values, attitude, aptitude, orientation and communication (written) abilities, all the attributes that are wanted by UPSC in an aspirant.

General trend is that essay paper will contain 6 topics out of which one topic to be chosen. There is no syllabus for essay. Anything under sun can be asked. But, if we analyse previous year paper, it is conspicuous to find some root topics. For example, there is at least one question on women empowerment every year. So, the topic 'Women Empowerment' is a root topic.

### **Suggested Root Topics**

1. Women Empowerment
2. Environment, S&T, Energy Security, Sustainable Development
3. Democracy, judiciary and related topics
4. Education, Indian Culture
5. Current Events

### **Suggested Reading:**

- a) Yojana issues
- b) Frontline cover stories
- c) "The Hindu" Sunday Magazines

### **Groundwork Preparation**

The duration of the essay paper is 3 hours and the word limit is not mentioned. It is generally said that 1500-2000 words should make a good essay. This can comfortably be written even with a moderate pace in 2 to 2 ½ hours. So the first 30-45 minutes can be spent for the groundwork preparation. First is the selection of the proper essay topic. Out of the 6 topics, one topic would generally be related to philosophical issue, unless one is confident it is better to opt it out. Like wise one can eliminate topics with which one is not comfortable. Some topics, most of the aspirants cannot maintain a balance throughout the essay so better opt them also out. Finally select the topic that you think can do justice. The answer booklet of the main examination consists of 24 single pages. The last 3-4 pages can be used for rough work. If you are sure that you can complete the main booklet, then ask for one additional at the beginning of the exam and use it for rough work. In these pages

prepare outline for the essay by asking questions yourselves. It is also called as brainstorming.

Suppose take a topic for example: "Terrorism and global peace (CSE-2005)"

The questions can be

1. What is terrorism, its aims, methodology and its origin?
2. How it is affecting global peace?
3. What are different ways/types of terrorism and how each one is a threat to global peace?
4. What are the causes for terrorism to flourish?
5. How the global peace can be maintained (remedy and a global approach in fighting terrorism because of its spread to all countries)?
6. What is the relevance of terrorism to India and affect on Indians way of living?
7. What should be the conclusion? Ex. Terrorism is affecting global peace and it is a fact. So the solution is to make it disappear. Whatever form it may be, it should be condemned because it involves loss of precious lives and living of many.

On these lines many more questions can be evolved.

The next step is question yourself regarding the topic and scribble whatever comes to your mind without any order in just words, not sentences. After this part is over write the conclusion part in detail in the rough area.

### **Tips:**

1. Good introduction and good conclusion are must.
2. There shall be link between paragraphs.
3. Clarity of expression is very important. Use simple English to express your point clearly. You need not use flowery language. Simple logical presentation is sufficient.
4. Practise is essential for getting a good score.
5. Try to give a good introduction. It should guide the examiner to what you intend to convey in the essay. The conclusion should be good and satisfy the examiner. Always conclude on a positive note.
6. The main focus should be on giving a good analysis of the topic.
7. Do not divert into areas, which are irrelevant to the topic.
8. Make sure that you have sufficient understanding and material to write, before choosing the topic.

### **Strategy**

Introduction: The introduction is the opening part of the essay and should be confined to a paragraph. The introductory paragraph is expected to introduce the

topic, and wherever necessary, explain the central theme or idea, basic or core concepts, and definitional criteria. The introduction should arouse interest and generate curiosity in the mind of the reader. Spend good amount of time for introduction.

**Main Text:** The main text of the essay must develop, support and explain the main ideas stated in your introduction. This essentially is a systematic organisation of information based on a consistent methodology. It deals with the topic and related issues to be addressed, the correlation of facts, figures, ideas, views, concepts; an in-depth, systematic, coherent analysis based on the topic leading to logical inferences; as well as making (if it is required) plausible projections and providing with (if necessary) viable solutions.

**Conclusion:** As the text draws close to the conclusion, the essay should have reached the stage of 'critical mass', a sort of a climax. The conclusion, a summary, should express the essence of the essay. It should not contain any fresh evidence, facts or figures.

## 6. ENGLISH AND INDIAN LANGUAGES

The objective of these papers is to test the candidate's ability to read and understand serious discursive prose, and to express his ideas clearly and correctly in English and one Indian language. Standard of these papers is of matriculation.

These papers are only of qualifying nature, but at the same time cannot be ignored. If you do not qualify then your other mains papers will not be evaluated. Note that every year there are some candidates who get disqualified. So ensure that you have the minimum knowledge about the languages. The score should only be above 40% and the questions are also set in such a manner that this is not difficult at all. There is no need for any preparation. But do see previous years papers to gain familiarity.

### **English**

Those from non-English medium schools might face some difficulty in English paper. Then the preparation should be made from some standard book. Note that the grammar is not much tested, but it is only the functional knowledge in the language. The pattern of questions is as follows:

- Short Essay
- Reading Comprehension
- Précis writing
- Translation from English to the Indian language and vice –versa.
- Usage and Vocabulary

Tips for Reading Comprehension:

- There are two kinds of reading. One is when you read to educate yourself on some topic. Second is when you find answers to some questions in the content. In the first case, reading is slow as you have to understand every concept. But, in the second case, it is faster as you are only looking for answers to few questions. For Reading Comprehension, it is better to follow the second kind of reading. First read the questions and then read the passage to write answers.
- As you read underline the lines, which contain answers.
- You should write answers in your own composition. Do not copy from the passage.

Tips for précis writing:

- The précis should be written in your own composition.
- Examples, illustrations and quotations of the original passage should not be included in the précis.
- No idea or point should be elaborated.
- You should not add your own comments of criticisms in the précis.

Tips for short Essay:

More stress should be on the English rather than the content. Sentences should have sound grammatical construction.

### **Indian Language**

Similarly, some face difficulty with the Indian language paper. Ensure that you have functional knowledge in at least one Indian language.

## 7. INTERVIEW

The Interview stage has emerged as the most deciding phase of the exam. The range of marks awarded itself is a proof, it varies between 50 to 240. If the UPSC board feels that a candidate is unsuitable for administration, then it awards very low marks. As a result he may not get the desired service in spite of good performance in the mains exam. So interview plays a very crucial role in the final selection.

The personality is some thing that cannot be developed in few days. It is a continuous process since your childhood. But, you can modify it suitably to get good marks in the interview.

### **What is looked for in the Personality Test?**

The UPSC is looking for some traits, which can be summarized below:

1. Suitability to a public career
2. Mental Caliber
3. Not only intellectual traits but also social traits
4. Interest in current affairs
5. Mental alertness
6. Critical powers of assimilation
7. Clear and logical exposition
8. Balance of judgment
9. Variety and depth of interest
10. Ability for social cohesion and leadership
11. Intellectual and moral integrity

In the words of former UPSC Chairman Surendra Nath, an ideal civil servant should be:

*“ Firstly, an officer must be a gentleman. He should possess good character qualities. He should have courage of conviction, intellectual and moral capabilities, leadership qualities and capable of taking the right decisions at the right time. He should have in-depth professional knowledge, self confidence, good communication skills, analytical in his thinking, flexible and not rigid, must be able to inspire and motivate his colleagues and his sub-ordinates. There should be a balance of judgment in decision making”.*

So, you will have to improve these qualities as you progress towards the interview stage.

### **How to Prepare?**

- Start full-scale preparation for the interview, immediately after the mains exam.
- Be very careful while filling the mains application form. This form is the basis

on which the whole interview depends. So, consult the seniors and fill the information carefully. Through this form, you can direct the board into your strong areas. The interview will go on expected lines and you can give well-prepared answers. Do keep a photocopy of the form.

- The preparation should be at two levels - the subject matter preparation and the way you present yourself.
- One should prepare for the interview with a group of 3-4 people as the preparation for Interview cannot be done in isolation. Personality is a life-time asset and expecting miraculous changes in personality in a span of a few days or weeks is not possible. Yet, efforts can be made to overcome major deficiency and polishing of views and opinions.
- Use a handy cam or a mirror to see how you speak, the facial expressions, mannerisms etc.
- Keep visualizing the interview scenario and modify yourself accordingly. In interview- you are assessed right from the moment you enter. So the following aspects are important—the way you walk; the way you sit down; the way you dress up; the enthusiasm and cheerfulness in your face; the way you talk; your mannerisms; facial expressions; politeness; behavior; the way you tackle the questions; the confidence you display; the way you take leave and walk out of the room; etc. So in all these dimensions you should keep contemplating and put your best performance on that day.
- The best way of preparation is to just sit and do brain storming intensively. Think what type of questions can be asked and how you can give a simple and logical answer. This will not come from reading many books. It requires lot of introspection.
- Show a positive body language. You believe that you are suitable for the job. Convey to them the message that you are the person they are looking for.
- Read various original interviews given in the magazines to understand what the UPSC expects from you.

### **What type of questions does the Interview Board asks?**

What are the things that trigger a question in the mind of the Interview board? Ans.: The elements in their immediate view. What are these elements? Ans.: First the candidate himself/herself, second his back ground record as revealed from the mains application form, third important events that have happened in last few months or are in news currently and lastly words that we use in our answers to the board. Can we identify these triggers? Ans.: Yes to large extent. By doing so we can be very well prepared for about 85-90% of the questions. How does this help? Ans.: By preparing well on these triggers, we can also work on their presentation as well so as to avoid giving unnecessary triggers through our answers or positively giving triggers that will lead the board to our familiar territory.

Practically speaking we can sit with our mains application form and write down each and every word that we have written in that form separately on a separate page of a register. Having done that, then list questions that can be asked, with that word

acting as a trigger. Refine the list by sitting with few friends. You will have a list of about 100-200 questions. Start preparing on their content and work on their presentation to keep it crispy and meaningful. Similarly we can work on other triggers and try to avoid giving unnecessary triggers in our answers.

Types of questions asked at the UPSC interview:

- Relating to your name: Any famous personality who has a similar or same name or surname.
- Your career choice: Why you want to opt for the civil services.
- Your Hobbies: Why you pursue such a hobby or questions related to your hobby. So research well on your hobby.
- Hot topics of recent days like the Bird Flu and Tamiflu, Growing airlines, Terror attacks in India, India US Nuclear deal, Indian Cricket, Saurav Ganguly etc (These are just examples). Keep reading and watching the news. If the recent headlines have something to do with your subject then specially revise those portions. For example if you are a veterinary doctor, Bird flu may go on to other animal diseases that can infect men. If you are an MBBS, then you might be asked about human to human spread of epidemics or any other epidemics and precautions etc. If you are from an economy background, the same topic will veer towards the economic implications of the Bird flu.
- How you are going to use your specific knowledge (like if you are a doctor, lawyer, engineer etc) in the services.
- Situational questions/ Hypothetical questions: Like If you were the collector/SP of so and so, what would you do after the Communal riots/Bomb Blast?
- Choice of services: The order of your choice of services can raise questions too.
- About your institution and related: If you have studies at IIM you may be asked about the rising salaries, if from IGNOU then even about Indira Gandhi and so on.
- Other areas to be focused are: why optionals; background of the parents; places where you stayed; academic background and related aspects; optional subjects; graduating subject; positions if held; job experience if any; hobbies; sports;

### **Mock/Practice**

- One should form a group of 4-5 people, as the preparation for Personality Test cannot be done in isolation. Try holding as many mock interviews as possible.
- No training institute can develop/transform your personality in a few days. However, some of the tips may help in ironing out some weaknesses/gray areas and can provide an avenue for a well-planned preparation and group discussions.
- Take mock interviews with your friends. In the mock interview, ask your friends to grill you so that you can face pressure from the Board easily.



- Discuss a lot with your friends. This not only helps in you assimilating different points of view, but also enhances knowledge levels.

### **Dressing Up**

- Dress sense is of crucial importance. The choice of dress should be according to the weather conditions. Try not to wear newly stitched clothes, as they might make you uneasy.
- Wear comfortable clothes. Men need to wear light coloured shirt and a dark trouser with a tie. Women appear best in a saree or salwar kameez.
- Pay attention to the details, ironed dress, polished shoes, hair accessories, trimmed nails etc. Polish your footwear meticulously. Use convenient footwear like black or brown leather shoes.
- Women candidates should take care to avoid the hair falling over the face as it could annoy both – you and the interviewer.
- Do not wear anything that connects you with a religious or political group.
- Do not use heavy perfume/deodorants.
- In case you have a running nose or have caught a cold, carry a handkerchief, or sufficient stock of tissue paper. Tissue paper is preferable.
- Some candidates take medicine to relax on the previous night of the interview; this should be avoided as the effect of medicine may decrease your alertness during the interview.
- What and how you eat is also important. Have a light meal on the day of the Personality Test. Do not go for the interview on an empty stomach. However, also avoid over-eating, or having a heavy meal.
- First impression is often the best impression. So create a positive, good impression within the first few minutes of the interview.

### **Entry**

- Arrive 20-30 minutes early. This will give you enough time to relax
- Keep a file/folder to keep your certificates and documents in an organized manner. They are verified before you enter the interview room. (You don't have to carry file/folder inside board room)
- While waiting for your turn in the waiting area, read a newspaper or a magazine and try to remain focused without thinking too much of what will happen in the interview. Do not try to pre-suppose situations in the Personality Test.
- Take a final, deep breath before entering the boardroom.
- Do not forget to knock at the door before entering, as it indicates basic courtesy.
- On entering the room, greet all the members cordially and do not sit down on the seat without being asked to.
- If there is a lady member in the interview board, greet her first.

- Be conscious of your body language when you are seated.
- Men should keep the feet flat on the floor during the interview, knees at waist level, and hands on your thighs and place your elbows on the armchair. Avoid locking hands.
- Women, cross your ankles or legs, but keep the bottom leg straight down and do not swing it over the top leg and keep your elbows positioned on the arms of the chair.
- When the Board members thank you at the end of the Personality test, do not forget to thank the members one last time and keep your body posture straight at the time of leaving the room.
- Be cool. Be yourself during the Interview.
- Your aim should be to make the board members feel comfortable in your presence.
- Don't expect any expression on the faces of board members, even if your answer is very good.

### **During Interview**

- In a personality test, what is of importance is how you say what you say. It is the style of presentation that matters.
- Your personality is, on an average, assessed in 25-30 minutes; it is your responsibility to bring out your very best in front of the board.
- Intelligent listening is the mantra, and for this maintaining eye contact is very important. You should not glare but all the same appear attentive and do not glance at other members, it can be very distracting for the interviewer. However if some other member asks you anything, look at that member and answer and turn back to the first - this is what we do in normal attentive listening.
- Try not to jump into an answer before the complete question has been posed, as you will end up wasting time on answering a question that you were not actually asked. If you are not sure of what was asked, you can always politely seek a clarification.
- Do not try to answer the question as soon as it is posed. Think over the question, take your time and organize the broad outline of the answer before airing it. Pause a while before answering, even if you know the answer.
- Do not speak rapidly. Speak slowly and clearly so that the Board members grasp what you are saying and do not have to interrupt you or ask you to repeat your views.
- Do not fidget or throw your hands around, or shake your head. Less amount of movement does not mean you should sit unnaturally stiff. Your posture should be attentive and relaxed at the same time. Do not crouch/bend forward or place your hands on the table.
- At times, you will be given situations wherein you will be required to take a decision. In such situations, the board is testing your ability to comprehend issues and use reason and good judgment logically, precisely and arrive at a balanced decision.

- Your replies should be crisp and to the point. Do not beat around the bush.
- Cut your answer short to the required patience shown by the member talking to you. They usually like to talk more, so listen carefully and think for a few seconds before you start answering the question. This will show that you are organising your thoughts in mind before starting to speak.
- Leave some room for difference in opinion. Do take a stand, but do not look adamant or unwilling to appreciate the board's opinion.
- Use couple of words from the question while answering any question. It shows you have listened to the question carefully. But at the same time limit the use the technical jargon.
- Do not start evaluating your performance while still in the interview. Even if you have committed mistakes in the beginning, do not think that you have already lost the game. They are looking for warm, sensitive respectful and attentive youngsters. They know you are good or you would not have come so far.
- Talk humbly about your achievements and hobbies. You may have mentioned some hobbies in the form without serious background in them, but before the interview it would be useful to pick up some basic info on the hobby.
- Say less to convey more. Argue logically and generalise correctly.
- Remember, while answering any question, what is easy to see is easy to miss. We often tend to miss the obvious and go for some non-crucial aspect of the subject.
- Questions posed before a candidate by the interviewing board are very well framed and answers to them should be made taking into consideration all possible views and a balanced approach is expected from a candidate.
- Remember, non-awareness of something should be admitted with politeness. It is okay to not know something! It is better to say 'No' than to bluff around. Those interviewing are highly experienced persons and know much better than us.
- If the question put is not clear to you, politely ask for more information. It is not the factual knowledge but your views, which will be tested in the interview.
- Always observe interview etiquette and be honest, polite, convincing a modest. Arrogance, rigidity, flicking round the issue should be avoided.
- Don't be argumentative. Be consistent in your views, i.e. just don't change your views because of the fact that the Board is differing with you. Remember that they are only testing you and often even try to provoke you. Give balanced answers and avoid taking extremes.
- The most important thing to know about the Interview is that it is not a question-answer session and what they are looking out for is different aspects of one's personality. As far as possible, the answer given should reveal a particular aspect of one's personality and attempts should not be made to present a make-up appearance or politically correct answers. There is no harm in taking extreme views if one is able to justify them.
- Maintain a gentle smile off and on during the Personality Test without overdoing it. It displays a sense of ease and confidence. Wherever possible use your sense of humour judiciously.

- Get up to leave only when the chairperson asks you to, not because you think everyone has asked a question. Similarly, even if someone has not asked a question and the chairperson asks you to leave then please leave. Some members do not ask questions at all, due to various reasons like limited time.
- Before leaving politely thank the chairperson and nod at the others politely. Avoid saying "Have a good day sir/madam". A "Thank you Sir/Madam" is enough.

### **General Do's and Don'ts for the personality test:**

- The board members are usually very senior and learned people, so give utmost respect to the board.
- Speak honestly, truthfully and modestly.
- Never make an attempt to present a made-up appearance or politically correct answers.
- If you are taking an extreme view, you should also be able to justify the same.
- Take tea or coffee, if any member offers the same to you. This will show you are relaxed and it will also help in lightening and relaxing further proceedings and give them an informal touch.
- Don't criticize any government policies or even individuals.
- Take a good night's sleep. A good, sound sleep will keep you refreshed, cheerful and relaxed. Otherwise you will have a fuzzy head and you will have a confused personality. You will neither be able to grasp questions correctly, nor be able to think clearly.
- At times, the Board members might pile pressure upon you. Do not panic – it is a strategy aimed at gauging the point till which you can maintain your cool under pressure and can think originally even in tense situations.
- Form your views on the subjects in a logical and rational manner supported by data whenever necessary.
- To be in touch with the latest happenings/events – nationally and internationally, candidates should read magazines and newspapers (at least two for interview), watch current affairs-based television programmes.
- Assume that all questions are asked with a good reason and answer them accordingly.
- Do not entertain any rumors regarding the integrity of the board. The UPSC interviews are of the top class and the marks awarded are also proportional to what the candidate deserves. The rumors are, mainly spread by people who do not clear the exam. Instead of criticizing others, it is better to introspect and make efforts to develop one's personality. So, go to the interview with utmost respect for the board and confidence in their integrity. Put your best performance on that day.
- Avoid conversational clichés, like: 'as you know', 'that's correct', 'of course', 'indeed', 'obviously', etc.
- Avoid technical jargon. However, if a member continues to probe you in any technical field, you can use technical expressions.

- Maintain a cheerful disposition. Now and then you can appear serious; but most of the time keep smiling or look cheerful and composed. One caution here: if the board laughs, you should only smile. It is only when you maintain some amount of distance that the board begins to wonder about the depth of your personality.
- Do not give long introductions. Come straight to the heart of the matter.
- Show human concern whenever possible in your answers.
- You should be logically consistent and analyse things rationally while talking. You are supposed to defend what you say, but with due respect to the views of the board. Stop trying to defend an answer if it becomes difficult to do so logically and fairly.
- Do not make hasty or sweeping generalisations.

## 8. REFERENCE BOOKS & STRATEGY

### Agriculture

#### **Suggested Reading for Preliminary Exam**

1. Soil Science - D.K Das Or Brady
2. Agronomy By Yellamananda Reddy
3. Plant Breeding By B.D. Singh
4. Genetics By B.D. Singh
5. Physiology By Pandey & Singha
6. Indroduction To Horticulture - Kumar
7. Handbook Of Agriculture By ICAR
8. Agricultural Economics and Farm Management
9. Agricultural Extension Education in India

#### **Suggested Reading for Mains Exam**

1. Soil Science - D.K Das Or Brady
2. Agronomy By Yellamananda Reddy
3. Plant Breeding By B.D. Singh
4. Genetics By B.D. Singh
5. Physiology By Pandey & Singha
6. Indroduction To Horticulture - Kumar
7. Handbook Of Agriculture By ICAR
8. Agricultural Economics and Farm Management
9. Agricultural Extension Education in India
10. Pathology - Singh
11. Entomology - Vasantha Raj & David
12. The Hindu - Survey Of Indian Agriculture
13. Agriculture Statistics - Dept. of Agri. and coop. statistics at a glance -  
[www.agricoop.nic.in](http://www.agricoop.nic.in)

#### **Paper I**

Paper I focuses basically on farm practices and basic foundation of agriculture. Expression in the examination should be simple, application oriented and should consist of flowcharts as and when required. Farm practices must correspond to the Indian situation. Students should ensure that they should focus on sustainability and economic dimensions of any method. Some examples must correspond to recently debated issues in different areas. Agricultural marketing, pricing etc must have latest data taken from Government of India reports such as economic survey and ministry of agriculture's annual report.

#### **Paper II**

Students who have botany as another optional subject need not prepare cell biology, genetics, biotechnology, plant breed, plant biochemistry and physiology separately. These topics are already covered in botany. There should be emphasis on agricultural application as well. Ideal books would be Plant Breeding by B D Singh and Plant Physiology by Jain. Horticulture and Plant Pathology and Food Production only need

to be covered separately. Students should always focus on India-specific examples and commercial aspect while writing about agriculture and any plant disease. For example, mention the loss in many terms due to a particular crop disease. There is overlap with GS in the areas like ecology and environment, food security, crop productivity, agricultural economics and sustainable agriculture. Preparation in these subjects should be such that there would be no separate preparation required for these topics in GS.

## **Anthropology**

Anthropology is a popular optional which is being taken by many aspirants from technical academic background. Those who have done their graduation in life sciences can seriously give this a thought as there is a substantial syllabus in Paper-I which deals with concepts like evolution of man, genetics, nutrition, adaptation, etc. However, those who are not acquainted with biology need feel apprehensive as these topics could be easily mastered with sincere efforts. A testimony to this is the fact that numerous engineers have succeeded with Anthropology as one of their optionals.

Paper-I can be broadly divided into Physical Anthropology and Socio-Cultural Anthropology. Physical Anthropology is purely factual and, therefore, highly scoring. However, the aspirants need to work hard and revise regularly to be well versed with the facts. It is advisable to practice diagrams as they are mandatory when an answer from Physical Anthropology is attempted. Different stages of human evolution should be studied comparatively, preferably by making tables, to make it easier to remember. In Genetics, get the basic biological and medical concepts right. Short questions are frequently asked from human evolution and genetics. So prepare these two areas well for short questions. P. Nath's Physical Anthropology is a good book, which covers most of the topics. However, for current topics like Forensic Anthropology, personal identification and reconstruction, Applied human genetics-Paternity diagnosis genetic counselling and eugenics, DNA technology-prevention and cure of diseases, Anthro-po-gentics, Serogenetics and cytogenetics etc refer other sources and keep abreast of the latest developments.

Socio-Cultural Anthropology deals with issues like Family-Marriage-Kinship (FMK), Religion, Political Anthropology, Economic Anthropology, Developmental Anthropology etc. These topics are easy to understand. However, you must learn sufficient number of examples and case studies to attempt essay questions. In addition to this, you should make an effort to add a contemporary touch by quoting recent examples to make your answers better than the average ones. In Developmental Anthropology, you must be conscious that the answers have an anthropological perspective and do not resemble a general essay. Try depicting the impact of development on different institutions of society like FMK, religion, economy, social structure etc.

Anthropological Thought is an important chapter for two reasons. Firstly, it gives you insights and case studies on various social institutions like religion, politics, social structure, economics etc. These could be used when you attempt questions from Socio-Cultural Anthropology. Secondly, often direct questions are asked from this area, which are highly scoring. However, in recent times, the trend is to ask questions comparing different thinkers rather than direct ones. So one should have a holistic view of different streams of thoughts.

Paper- II consists of Indian Anthropology. The first part covers various socio-cultural aspects of the Indian society. The second part focuses mainly on tribals. Conceptually, Paper-II is easy to understand. However, to score well you need to supplement your answers with various case studies and contemporary issues. Nadeem Hasnain's Indian Anthropology and Tribal India give you basic required knowledge. For more information, you may refer to M. N. Srinivas for caste issues, Ram Ahuja for social issues and L. P. Vidhyarthi for Tribal issues. For latest developments, it is advisable to read magazines like Yojana, Kurukshetra, Frontline etc for information on social and tribal issues.

To conclude, the strength of Anthropology as an Optional is the ease in understanding. Only Physical Anthropology demands some efforts to understand the concepts clearly. Since socio-cultural anthropology makes up for a significant part of Paper – I and almost the whole of Paper – II, there is a wide scope to give the answers a contemporary touch with current examples and issues. Its weakness lies in the difficulty in gathering information. Since Anthropology is not offered at graduation level and since the aspirants with Anthropology are not as numerous as those of Public Administration or History, it is a little difficult to get books which have all the required topics at one place. Hence, it is a time-tested practice of many successful candidates to follow the notes / material, particularly that of Prof. Muniratnam. However, caution should be exercised while selecting the material / notes and they should not be solely and blindly relied upon. As with any other optional, it is important to practice writing answers, especially in those areas where the information is not very forthcoming like ethnicity, biological consequences of population control and family welfare, ethnomedicine, etc.

**Book List for reference:**

[Judicious selection of books for preparation is recommended.]

**Paper I  
(Part I)**

1. Beattie : Other Cultures
2. Beals & Hoijer/ : An Introduction to Anthropology
3. Haviland : An Introduction to Anthropology
4. Vaid : Economy and Social Relations
5. U.S. Mishra : An Introduction to Social-Cultural Anthropology (in Hindi)
6. Mishra & Hasnain : Unifying Anthropology
7. Honigman : he World of Man



8. Herskovits : Cultural Anthropology
9. Majumdar & Madan : An Introduction to Social Anthropology
10. Sagar Preet : Basic Concepts in Sociology and Anthropology
11. Abhik Ghosh : Meetings with the Other (on Fieldwork Techniques)
12. Gaya and Pandey : Cultural Anthropology

**(Part II)**

1. Harrison et. al : Human Biology
2. Shukla & Rastogi : Physical Anthropology & Human Genetics
3. Stein & Rowe : An Introduction to Physical Anthropology.
4. Vaid & Pandey : Jaivik Manavshastra (in Hindi)
5. B. Janusch : Origins of Man
6. Virender Kumar : Evolution of Genus Homo
7. Surender Nath : Forensic Anthropology
8. Surender Nath : Nutritional Anthropology
9. M. Harris : Rise of Anthropological Theory
10. U.S. Misra : Anthropological Thought (in Hindi)
11. Herskovits : Cultural Anthropology
12. Booklet published by Jawahar Publishers

**Paper II**

1. NCERT : Indian Society, Social Change
2. Bhattacharya, D.K. : An Outline of Indian Prehistory
3. Srinivas : Caste in India & Other Essays
4. Srinivas : Social Change in Modern India
5. Y. Singh : Modernisation of Indian Tradition
6. Vidyarthi & Rai : Tribal Cultures of India
7. N. Hasnain : Indian Anthropology
8. N. Hasnain : Tribal India
9. R.C. Verma : Indian Tribes
10. Vaid : Who Cares for Tribal Development (Hindi & English)
11. A.L. Basham : The Wonder that was India
12. G.S. Bhatt : Bharatiya Samajik Vichar (in Hindi)
13. Sagar Preet : Reservation for Backward Classes a Perspective

**Topic Wise Reference**

**Paper I (Part I) (Upto Topic 7)**

1. Beattie : Other Cultures
2. Beals & Hoijer/ : An Introduction to Anthropology
3. Haviland : An Introduction to Anthropology
4. Vaid : Economy and Social Relations
5. U.S. Mishra : An Introduction to Social-Cultural Anthropology (in Hindi)
6. Mishra & Hasnain : Unifying Anthropology
7. Honigman : The World of Man
8. Herskovits : Cultural Anthropology
9. Majumdar & Madan : An Introduction to Social Anthropology
10. Sagar Preet :

Basic Concepts in Sociology and Anthropology

11. Abhik Ghosh : Meetings with the Other (on Fieldwork Techniques)

**Paper I (Part II)**

1. Harrison et. al : Human Biology
2. Shukla & Rastogi : Physical Anthropology & Human Genetics
3. Stein & Rowe : An Introduction to Physical Anthropology.
4. Vaid & Pandey : Jaivik Manavshastra (in Hindi)
5. B. Janusch : Origins of Man
6. Virender Kumar : Evolution of Genus Homo
7. Surender Nath : Forensic Anthropology
8. Surender Nath : Nutritional Anthropology
9. M. Harris : Rise of Anthropological Theory
10. U.S. Misra : Anthropological Thought (in Hindi)
11. Herskovits : Cultural Anthropology
12. Booklet published by Jawahar Publishers

**Paper II**

1. NCERT : Indian Society, Social Change
2. Bhattacharya, D.K. : An Outline of Indian Prehistory
3. Srinivas : Caste in India & Other Essays
4. Srinivas : Social Change in Modern India
5. Y. Singh : Modernisation of Indian Tradition
6. Vidyarthi & Rai : Tribal Cultures of India
7. N. Hasnain : Indian Anthropology
8. N. Hasnain : Tribal India
9. R.C. Verma : Indian Tribes
10. Vaid : Who Cares for Tribal Development (Hindi & English)
11. A.L. Basham : The Wonder that was India
12. G.S. Bhatt : Bharatiya Samajik Vichar (in Hindi)
13. Sagar Preet : Reservation for Backward Classes a Perspective

**Botany**

Suggested Reading:

## **Paper-1**

Lower Biology (Algae, Fungi, Bryophyta, Pteridophyta, Gymnosperms): Singh, Pandey & Jain

Bacteria & Virus: H.C.Dubey

Microbiology: Taro & Kapoor

Plant Pathology: 1) P.D. Sharma – “Plant Pathology”; 2) R.S.Sharma – “Principles of Plant Pathology”

Economic Botany: 1) B.P. Pandey – “Economic Botany”; 2) Few topics from Kochar

Plant Taxonomy: O.P.Sharma

Introduction to Botany (for Degree students): A.C.Dutta

## **Paper-2**

Cell Biology: 1) “Cell Biology & Genetics” – P.K.Verma  
2) Plant Physiology – Pandey & Sinha  
3) Genetics – P.K.Gupta (for few topics)

Genetics: 1) B.D.Singh – Genetics  
2) Pudan Singh – Introduction to Genetics  
3) P.K.Gupta – Genetics

Plant Breeding: 1) B.D.Singh  
2)Pudan Singh

Biotechnology: 1) B.D. Singh

Plant Physiology: 1) Pandey & Sinha  
2) V.K. Jain  
3)Taiz & Zeiger (Photosynthesis, Respiration & Stress Physiology)

Ecology: 1) P.D. Singh

## **Chemistry**

Suggested Reading:

### **PHYSICAL CHEMISTRY**

- Gaseous state, Thermodynamics, Phase rule, solutions, Colligative properties, Electro Chemistry, Catalysis, Colloids - Principals of physical chemistry - Puri, Sharma & Pathawa
- Chemical kinetics - Advance physical chemistry - Gurdeep Raj
- Photo chemistry - A text book of physical chemistry (Vol. - IV) - K.L. Kapoor
- Advance physical chemistry - Gurdeep Raj.

## **ORGANIC CHEMISTRY**

- Bonding and shape of organic molecules, Stereo chemistry of carbon compound - Reactions and reagents - O.P. Agarwal
- A guide to mechanism in organic chemistry - Peter Sykes
- Rest of the chapters - A text book of organic chemistry - Bahl & Bahl

## **INORGANIC CHEMISTRY**

- Atomic Structure - Principle of physical chemistry - Puri, Sharma & Pathwa
- Advance inorganic chemistry - J.D. Lee
- Chemical Periodicity, Chemical bonding, Coordination compound - Selected topics in inorganic chemistry - Maden, Malik, Tuli
- Theoretical principles of inorganic chemistry - G.S. Manku,
- Extradiction of metals, Principle of inorganic chemistry - Puri, Sharma, Jauhar.
- Rest all the chapters - An advance inorganic chemistry - J.D. Lee
- Pollution and its control - A text book of environmental chemistry and pollution - S.S. Dara.

### **Paper 1**

Paper-1 has two major branches: Physical Chemistry and Inorganic Chemistry. These two branches are simple as well as scoring. Generally, the main examination question paper Section A contains three questions including compulsory from Physical Chemistry. There is usually one question from Inorganic Chemistry.

The first two topics, Atomic Structure and Chemical Bonding, are conceptual and should be prepared from standard sources. Even though these portions can give you direct questions as well, their importance will be felt in many other sections of the course.

In Solid State Chemistry, you need to prepare separately for numerical and theoretical problems. Gaseous State is a newly added section in Paper 1 and the best thing about this section is that it has a simple mathematical base. Prepare it adequately and it will fetch you good marks.

In Thermodynamics, be careful to maintain an orientation of Chemistry. There is a common tendency among engineers to treat the questions too mathematically. But in Chemistry, you have to treat heat change along with chemical change. For a good score, your derivations must be standard, i.e. as covered in books like S Glasstone's.

You can be somewhat selective in Thermodynamics section, based on past trends. Statistical Thermodynamics is a newly-added part, and it is quite scoring. The section on Phase Equilibria needs good writing practice besides command over numerical problems. The emphasis in electrochemistry should be on numerical problems, as they are relatively easy and make the paper scoring.

Chemical Kinetics and Photochemistry are, once again, predominantly numerical-based areas. So practice will be the key to handle these sections well. Photochemistry is especially important; it has been giving numerical problems of at least 30 marks every year.

Coordination chemistry is a large topic, covering nearly two full-length questions. Students are advised to cover this section thoroughly. The topic of Bio-Inorganic Chemistry requires some good material collection. Bob Buchanan's book on Plant Molecular Biology and Biochemistry will be a useful source.

## **Paper 2**

Paper 2 comprises completely of Organic Chemistry. In the new scheme of the syllabus, it's a highly scoring paper due to several factors: mathematical orientation, straight factual queries, objective nature of most of the question, availability of quality material and emphasis on reaction mechanisms.

The student, while preparing for Paper 2, is required to keep the following things in mind:

- Practice the numerical problems rigorously and you must have a clear knowledge of reaction mechanisms, as the questions are increasingly being asked straight and factual.
- In Pericyclic Reaction section, a greater emphasis has to be on diagrams rather than on theoretical explanation and practice name reactions thoroughly from standard sources.
- The orientation of orbitals and molecular orbital diagrams are necessary.

<b>Civil Engineering</b>
--------------------------

Suggested Reading:

Strength of material-- Gere and Timoshenko

Concrete Technology-- M.S. Shetty

R.C.C. (WSM)-- Shyal and Goyal

R.C.C. (LSM)-- A.K. Jain

Steel Structure-- L.S. Negi

Soil Mechanics-- K.R. Arora

Fluid Mechanics-- Modi & Seth

Theory of Structure (Vol - II)-- Vazirani and Ratwani

Irrigation Engineering-- S.K. Garg

Prestress Concrete-- N. Krishna Rajee  
Engineering Hydrology-- K. Subramanya

1. Selection of books: It is advisable not to go through a lot of books, instead go through one quality book on each topic which clarifies your basic concept. Standard books not only save your precious time but also guide you as a perfect teacher. So always rely on standard good books.
2. Emphasis on Numericals: As the question paper consists of a sizeable number of numericals, due emphasis advisable. Select topics that are frequently asked under the numerical head. Also go through the solved/unsolved numerical examples of any standard book. Needless to say that numericals handled tactfully can pay you high dividends.
3. Importance of related IS-codes: The related IS-codes form an important part of your paper so learn all the IS-codes by heart. One, therefore must follow the related IS codes for design. Some important codes are: For RC.C.- IS - 456 - 1978, For steel - IS . 800 - 1984.
4. Draw neat diagrams to fetch good marks: Neat and clean diagrams at once catches the attention of examiner and it also proves very useful for detailing purposes. So always emphasis on neat and clear diagrams so as to catch hold the attention of the examiner at once and fetch good marks.
5. Prefer you own notes: It is always advisable to make notes of the related topics. A well crafted notes solves two purposes. On the one hand the aspirant goes through the syllabus once and on the other hand it is of immense help on the eve of examination.

## **Commerce**

### **General Study List**

- Company Law: N.D.Kapoor
- Management: Kunj
- Auditing: Dinkar Pagare
- Management Concepts: C.V.Gupta

### **Topics Study List**

- Financial Accounting: Grewal, Monga
- Cost Accounting: Maheshwari & Mittal

- Taxation: Singhanian, Girish Ahuja
- Auditing: Kamal Gupta
- Financial Institution: Anand Jain
- Financial Management: I.M.Panday
- Organisation Theory: L.M.Prasad, Rao Narayanan, R.S.Sharma
- Industrial Relation: Mamoria, Singh & Chabra, Monappa

## **Economics**

Book List for Reference: (Judicious selection of books is recommended)

- Dictionary of Economics - Ghaham Bannock; T.E. Baxter, Ray Rees (Penguin)
- Economics (Read Relevant Chapters) - Paul A. Samuelson
- The Hindu: Survey of Agriculture & Survey of Industry
- An Introduction to Economics - A.W. Stonier and D.C. Hauge
- Monetary Theory and Public Policy - Kenneth Kurihara
- Economic Survey: Eighth Five Year Plan: New Industrial Policy - Government of India
- Outline of Monetary Economics (Read Relevant Chapters) - A.C.I. Day
- Public Finance - H.L. Bhatia
- Modern Banking (Read Relevant Chapters) - R.S. Sayers
- Indian Economy - Mishra and Puri
- Macro Economic Analysis - Edward Shepiro
- Indian Economy - R. Dutt and KPM Sundaram
- Money Supply in India: Concepts, Compilation and Analysis (Sec.1-3 New Series only): Functions and Working (Read Relevant Chapters) - Reserve Bank of India
- Economic Growth and Development - Mayer and Baldwin
- Public Finance - K.K. Andley and Sundaram
- International Economics - Bo Soderston
- National Income Accounting - Bakerman
- Economics Choice - Koutswearnik
- Banking - S.B. Gupta
- International Trade - Bo Soderston
- The Economic Times and Economical and Political Weekly.

## **Electrical Engineering**

### **Suggested Reading**

Paper-I

1. Electrical Circuits
  - a) Electrical Circuits – 1&2by Nasser, Schaum Series

- b) Electrical Circuits by Chakraborty
  - c) Network Analysis by Vanvulkenberg
  - d) Electrical Circuits by Hast & Kimberly, TMH Series.
2. Electromagnetic Theory
    - a) Field Theory by K.A. Gangadhar
    - b) Electromagnetic Waves by Jordan & Balmian
    - c) Electromagnetic Theory by Saddique, Oxford Publications
  3. Microwaves and Antennas
    - a) Microwaves by Kulakarni
    - b) Microwaves by Liu, PHI Publications
    - c) Electromagnetic Theory by Saddique, Oxford Publications.
    - d) Electromagnetic Waves by Jordan & Balmian.
  4. Analog Communication
    - a) Communication Systems, 2<sup>nd</sup> Edition, by Simon Haykins.
    - b) Analog and Digital Communications by K. Sam Sanmugam
    - c) Analog and Digital Communications, Schaum Series
    - d) Communication Systems by Kennedy.
  5. Analog Electronics
    - a) Micro electronics by Milliman and Grabel.
    - b) Integrated Electronics by Milliman and Halkius
    - c) Pulse, Digital & Switching Waveforms by Taub abd Schilling
    - d) Op-amps by Roy Chowdhury
    - e) Op-Amps by Gaykwad
  6. Digital Electronics
    - a) Digital Design by Morris Mano.
    - b) Switching theory and Logical Design by Kohavi.
    - c) Digital Electronics by R P Jain.
  7. Electrical Machines
    - a) Electrical Machines by P.S. Bhimbra
    - b) Generalised theory of Machines by P.S. Bhimbra
    - c) Electrical Machines by Nagrath and Kothari
  8. Power electronics and electrical drives
    - a) Power Elctronics by P.S.Bhimbra
    - b) Power Electronics by Rushid
    - c) Electrical Drives by G.K. Dubey
  9. Signals and Systems
    - a) Signals and Systems by Oppenheim & Schaber
    - b) Digital Signal Processing by Proakis, Maholanakis
    - c) Digital Signal Processing by oppenheim & Willsky
    - d) Signals and Systems, Schaum Series.

## Paper-II

1. Control Systems
  - a) Modern Control Systems by Nagrath and Gopal
  - b) Control Systems by B C Kuo.



2. Electrical Measurements
  - a) Electrical Measurements and Measuring Instruments by A K Sawhney.
  - b) Electronic Measurements by Cooper & etc., PHI Publications.
3. Power System Operation & Control
  - a) Power System Analysis by C L Wadhwa
  - b) Power Systems by Nagrath and Kothari
  - c) Power Systems by Ashfaq Hussein
  - d) Modern Power System Analysis by Nagrath
  - e) Power Systems by Sunil S Rao (for topics like RTU, SCADA, FACTS etc.)
4. Power System Protection
  - a) Power System Protection by Badri Ram and Vishwa Karma, TMH Publications
  - b) Power Systems by C L Wadhwa
  - c) Power Systems by Nagrath and Kothari
5. Non Conventional Energy resources
  - a) Non-conventional Energy Resources by G.D.Rai, Khanna Publications.
6. IC Fabrication and Technology
  - a) Microelectronics by Milliman and Grabel
  - b) Linear Integrated Circuits by Roy Chowdhury.
7. Radar, Satellite and TV
  - a) Microwaves by Kulakarni.
  - b) Communication Systems by Kennedy.
  - c) Satellite Engineering by John Wiley Publications.
8. Microprocessors
  - a) 8085Microprocessor by Ramesh S Goankar
  - b) 8086 Microprocessor by Hall, TMH Publications.
9. Fibre Optic Communication
  - a) Fibre Optic Communications by Senior, PHI Publications
10. Digital Communications
  - a) Analog & Digital Communications by K Sam Sanmugam
  - b) Analog & Digital Communications by Schum Series
  - c) Digital Communications by Simon Haykin
11. Electrical Engineering Materials
  - a) Electrical Engineering Materials by Seth & Gupta
  - b) Electrical Engineering Materials by Dekker.

## Strategy

The syllabus of electrical engineering can be classified into three categories.

- i) Syllabus common to both electrical engineering and electronics engineering
- ii) Electrical engineering subjects
- iii) Electronics engineering subjects

## 1<sup>st</sup> Category

Paper-1: Electrical Circuits; Signals and Systems; Analog Electronics; Digital Electronics

Paper-2: Control Systems; electrical Measurements; Microprocessors; electrical Materials

### 2<sup>nd</sup> Category

Paper-1: Electrical Machines; Power Electronics and Drives

Paper-2: Power Systems Analysis and Control; Power Systems Protection; Non Conventional Energy Sources

### 3<sup>rd</sup> Category

Paper-1: Analog communication; Microwaves and Antennas; EM Theory

Paper-2: Radar, Satellite and TV; IC Fabrication; Fibre Optic Communications; Digital Communications

For Electrical Background Students:

Paper-1: You have to read two electrical engineering subjects mentioned in 2<sup>nd</sup> Category and Common subjects mentioned in 1<sup>st</sup> Category.

Attempt question numbers 1,2,3,5 and 8. Hence you can attempt  $(55+55+60+55+60=)$  285 marks. If you can read EM Theory also, then you can attempt  $(60+60+60+55+60=)$  295 marks. Due to paucity of time in the exam, you may not be able to attempt more than 250 marks. If one is hard pressed for time, one can leave Signals and Systems. Even then one can attempt 265 marks.

Therefore the priority of subjects must be as follows:

- 1) Electrical Circuits
- 2) Electrical Machines
- 3) Power Electronics
- 4) Analog Electronics
- 5) Digital Electronics

If you have time, then read Signals and Systems & EM Theory. If you don't have time, then read the first 3 subjects above and still you can attempt 220 marks.

### Paper-2

We have to read three Electrical Engineering subjects mentioned in 2<sup>nd</sup> Category and four subjects mentioned in 1<sup>st</sup> Category. In addition read IC Fabrication as it is a small subject.

Attempt questions numbers 1,2,3,5 and 8. You can attempt  $(60+60+60+60+60=)$  300 marks. If you are hard pressed for time, read only 4 subjects (Control Systems, Power Systems Analysis and Control, Power Systems Protection and Non Conventional Energy Sources) and you can attempt  $(40+60+40+20+60=)$  220 marks. If possible then read electrical materials, IC Fabrication and Electrical Measurements. Then you

can attempt (60+60+60+60+60=) 300 marks. Therefore the priority of subjects must be as follows:

- 1) Control Systems
- 2) Power Systems Analysis and Control
- 3) Power Systems Protection
- 4) Non Conventional Energy Sources
- 5) Electrical Materials
- 6) IC Fabrication
- 7) Electrical Measurements
- 8) Microprocessors

#### My Experience

2005 Attempt: I attempted around 219 marks in paper 1 and I got 180 marks. I attempted around 270 marks in Paper 2 and I got 188 marks.

2006 attempt: I attempted around 253 marks in paper 1 and I got 200 marks. I attempted around 260 marks in Paper 2 and I got 195 Marks.

For Electronics Engineering Background Students:

Paper 1: We have to read three Electronics Engineering subjects mentioned in 3<sup>rd</sup> Category (Analog Communication, Microwaves and Antennas and EM Theory) and Common subjects mentioned in 1<sup>st</sup> Category (Electrical Circuits, Signals and Systems, Analog Electronics and Digital Electronics).

Attempt question numbers 1,4,5,6 and 7. We can attempt (60+60+60+60+60=) 300 marks. If one is hard pressed for time, one can leave Signals and Systems & EM Theory. Even then one can attempt 265 marks.

Therefore the priority of subjects must be as follows:

- 1) Electrical Circuits
- 2) Analog Communication
- 3) Microwaves and Antennas
- 4) Analog Electronics
- 5) Digital Electronics
- 6) EM Theory and
- 7) Signals and Systems

If one doesn't have much time, prepare only 4 subjects (Electrical Circuits, Analog Communication, Microwaves and Antennas and EM Theory) and still can attempt 220 marks.

Paper -2:

We have to read four Electronic engineering subjects mentioned in 3<sup>rd</sup> Category (Radar, Satellite and TV, IC Fabrication, Fibre Optic Communications and Digital

Communications) and three subjects mentioned in 1<sup>st</sup> Category (Microprocessors, Electrical Measurements and Electrical Materials).

Attempt question numbers 1,4,5,6 and 7. The n you can attempt (40+60+60+60+60=) 280 marks. Therefore the priority of subjects must be as follows:

- 1) Radar, Satellite and TV
- 2) Digital Communications
- 3) IC Fabrication
- 4) Fibre Optic Communications
- 5) Electrical Materials
- 6) Electrical Measurements and
- 7) Microprocessors

For preliminary exam, practice previous question papers.

## **Geography**

Geography has become a very popular optional for the Civil Service Exam. The scores have also been good enough and many became successful with this optional.

The main advantages of Geography as an optional are:

- Availability of good material and guidance. There are many successful candidates with this optional, which makes easy access to strategy required.
- Geography is helpful for the GS prelims & mains, essay, interview and even for some other optionals.
- The map questions make it a very scoring subject.
- There is enormous scope for innovations in writing which can boost the scores.
- Students from science background find it easy to tune to this subject.

There are certain points, which should be kept in mind while preparing for geography:

- Read the basics well and then think on your own about how to make innovative answers.
- Because of availability of much material, there is a tendency to do a research-kind of preparation. This is highly counter productive.
- Prepare basics well with good clarity. You may refer the standard book for this. Then if required just scan through other books for any different dimension. Do not start mugging each and every book from end-to-end.
- Take the topic, do intense questioning to get clarity. Then in a logical manner prepare a structure for the notes.
- Use lot of maps, diagrams, flow charts, graphs, etc. Be as innovative as possible.

**World Map:** This question is highly scoring. The aspirant should spend good amount of time in mastering the world map. The examiner is only interested in testing the basics and important places. But some times very difficult map points are asked as

done in 2003. But the preparation should not be based on that year's question. In general, focus should be on preparing the basic points, which are more likely to be asked. If preparation is based on 2003 paper, then it is not possible to master all small and insignificant map points. Finally it will be counter productive, as there is a chance of forgetting even the basics.

While writing the 10 words, you need not put a sentence. Just put down as much info as possible using “;”. Also, underline the most significant fact.

For example - Reykjavik: Iceland; capital city; northernmost capital; very cold climate; midnight sun; geological studies; Mid-Atlantic ridge;

### **India Map:**

This question is highly scoring and the candidate should prepare well. Here also only the basics and important points are being asked. So, first analyse the previous questions and prepare accordingly.

In writing the answer, try to put as much as you know.

Eg. Kaveri: Karnataka-Kerala-TN; Source-Talakaveri; Western Ghats; Delta in TN; major river; highly used for irrigation; Inter-state river water dispute; Mettur dam; Krishnasagar dam; Tiruchi; hydroelectricity; .....

Suggested Reading:

Old NCERT books are better than the new ones for basic clarity. You should also go through the new books for the latest data and analysis.

- Savindra Singh- Geomorphology, Physical geography, Environmental Geography
- Majid Hussain- Physical geography, Human Geography, General Geography and geography of India.
- Climatology by Lal
- Oceanography by Vittal
- Rupa publications on Physical and human geography- vol 1&2
- Regional geography - Rai Choudhary, Puri
- India- Khullar
- Certified physical and human geography- Goh Cheng Leong , its very good for the basics.
- Spectrum Geography guide- it is quite a good compilation with lots of diagrams. It can be depended upon for many areas. Keep reading this for every topic. The only problem is lack of clarity, otherwise it is a helpful source.
- Urban geography- Ramachandran

Maps:

- NCERT - prepare notes as you come across various points in the maps.
- Atlas- Ttk, Orient Longman

**REFERENCE BOOKS FOR PRELIMINARY EXAMINATION :**

1. 6th to 12th NCERT Books for Geography.
2. Certificate of Physical Geography - Goh Cheng Leong.
3. Physical Geography - Savindra Singh
4. Physical Geography - Made simple series - Rupa Publications
5. Economic & Commercial Geography - Made Simple Series - Rupa Publications.
6. Human and Economic Geography - Leong & Norgan
7. Human Geography - Majid Hussain.
8. Geographical thoughts - Majid Hussain.
9. Field Work - 11 th NCERT.
10. Cartography - R.L. Singh
11. Geography of India - Gopal Singh
12. Economic & Commercial Geography of India - C.B. Memoria
13. Orient longman - Atlas.
14. TTK - Atlas
15. Dictionary of Geography - Penguin
16. Spectrum guide for Geography.
17. Siddhartha - Preliminary Question Bank.
18. Geography Guide - Narmadeshwar Prasad.

**REFERENCE BOOKS FOR MAINS EXAMINATION :****Paper - I**

- Physical geography - Savinder Singh
- The Earth's dynamic surface - K. Sidhartha
- Physical geography - Strahler & Strahler
- Climatology - D.S. Lal
- Physical geography made simple - Rupa
- Oceanography - Sharma & Vital
- Biogeography - Savinder Singh
- Evolution of geographical thoughts - Majid Hussain and Adhikari
- Economic geography - K. Sidhartha
- Economic and social geography made simple - Rupa
- Urban geography - K. Sidhartha
- Human geography - Majid Hussain
- Geography of population - R.C. Chandra
- Regional Planning in India - hand & Puri
- Political geography - Dixit

**Paper - II**

- Physical environment - NCERT
- NCERT Class XII
- India: Physical aspects - K Sidhartha
- Geography of India - Mamoria

- Agricultural geography - Majid Hussain
- Agricultural problems in India - Sadhu and Singh
- Economic & Commercial geography of India - Mamoria
- India's urbanisation and urban systems - R. Ramachandran
- Regional planning in India - Chand and Puri
- Political geography - Dixit
- India: political aspects - K. Sidhartha

**REFERENCE BOOKS OVERALL :  
PHYSICAL GEOGRAPHY**

- NCERT Vol -1
- Physical Geography - Bunnett
- Certificate physical and human geography - Goh, Cheng Leong
- Physical Geography made simple

**HUMAN AND ECONOMIC GEOGRAPHY**

- Human and Economic Geography - NCERT
- Economic Geography, Economic and Social Geography made simple
- Penguin masters studies on geography
- The Cultural Landscape - Rubeistein

**INDIAN GEOGRAPHY**

- Indian geography - Rammorthy Gopalakrishnan
- Physical geography of India - S.M. Mathur
- General geography - NCERT
- Mineral of India - NBT (Wadia)
- Resources and regional development - NCERT
- Catography - R.L. Singh
- World regional geography - Fellnan
- Work book - K. Siddhartha and S. Mukherjee
- Question Bank - Surendra Singh, 1000
- Geography quiz - Muthiah

<b>Geology</b>
----------------

**Suggested Reading**

- Geology: An Introduction - Kronaris and Krambine
- Text Book of Geology - P.K. Mukherjee
- Text Book of Physical Geology - Mahapatra
- Geomorphology - Woolridge or Tharnbury
- Principles of Petrology - G.W. Turrel

- Petrography - Williams
- Mineral and Crystal Science - V.C. Jesh
- Sedimentary Rocks - Petti John
- Underground Hydrology - David Keith Toad
- Igneous Rocks and Metromorphic Petrology - Turner
- Ocean - Squaredrop, Johnson and Bliming
- Simple Geological Structure - Plate and Charlincr
- Soil Minerology - I. E. Grim
- A Dictionary of Geology - Morrison

History
---------

Suggested Reading:

**Basic Material:** NCERT and Agnihotri.\*

### **Ancient History**

1. Early India – Romilla Thaper\*
2. Ashoka and Decline of Mauryan Empire – Romilla Thaper
3. Ancient India – D.N. Jha\*
4. Ancient India – V.D.Mahajan
5. South Indian History – Nilakanta Sastry\*
6. The wonder that was India- AL Basham\*
7. Ancient India – R.C.Mazumdar

### **Medieval India**

1. Advanced study in the history of Medieval India – JL Mehta ( 3 parts)\*
2. Medieval India- Satish Chandra ( 2 Parts)\*
3. The Sultanate of Delhi – A L Srivastava\*
4. The Mughal Empire - A L Srivastava\*
5. The wonder that was India- Rizvi

### **Modern India**

1. Modern India – Grover & Grover
2. Indias Struggle for freedom – Bipin Chandra\*
3. Modern India – Sumit Sarkar\*
4. Social background of Indian History – A R Desai

### **World History**

1. Europe since the French Revolution – L. Mukherjee\*
2. IGNOU material



The books with star mark are standard and must. Other books are supplementary.

## **Strategy**

History has been one of the 'most popular' optional subjects for mains. If you are not intimidated by a big syllabus, this subject has following advantages:

- Easier to grasp,
- No dearth of study material and
- Covers an important segment of General Studies paper on account of overlapping themes.

In contrast to the Prelim Exam, which seeks to stress more on facts and extensive coverage of themes, the Main Exam stresses on conceptualization behind the facts of historical happenings. Listed below is the 'right strategy' for the mains.

### **Ancient Indian history**

In the new syllabus, there is greater emphasis on sources of early Indian history. In archaeology, one has to keep oneself abreast with the latest findings. The politico-administrative history from pre-Mauryan period - rise of Mahajanapadas, to post-Gupta period-beginning of feudalism and centrifugal trends has been given more significance in the revised syllabus. You should start from Indus civilisation and trace the evolution upto the post-Gupta period; Major Philosophical thinkers and schools, wherein you should take into account Brahmanical, Buddhist and Jain philosophical schools. In science and mathematics, you can start from the contribution of the Harappans to Aryabhata.

### **Medieval Indian History**

To make it simple, you should categorise this section into five subsections: This part of the syllabus gives greater emphasis on contemporary historians and sources of the medieval Indian history. Prepare them for short questions; whereas study the Delhi sultanate in totality. Likewise treat the Mughals holistically, giving special emphasis on the age of Akbar; in this unit, include all the provincial dynasties while the Cholas, the Vijayanagar and the Marathas should be prepared for a major question and for the last which is perhaps the most important unit from the examination point of view, you must have a comparative and evolutionary approach.

### **Modern Indian History**

Modern Indian history requires a chronological study.

British conquests and Indian reactions: The syllabus mentions Mysore, Punjab, the Marathas and their resistance against the colonial power. You should study the political, social and economic circumstances leading to the 1857 revolt and other uprisings, such as tribal, civil and peasants.

British economic policy: An important aspect of British colonisation was economic

exploitation of India and its ruinous impact on Indian society. In this regard pro-nationalistic and Leftist ideological viewpoints must be taken into account.

Socio-cultural aspects: It can include sub-topics like Indian Renaissance, Christian missionary activities, evolution of educational and social policies and its role in rise of nationalism in India. Other sub-topics, such as on literary personalities like Tagore, Premchand, S Bharati and others; film and theatre are important as well. It reflects a shift towards cultural evolution of modern India.

Freedom struggle: A thorough and in-depth study of history of Indian nationalism from 1885-foundation of Congress to 1947 - partition and freedom is a must. This section accounts for 90-100 marks in Main General Studies paper too. Sub-divide the particular unit into following section: 1885 to 1916, which includes early Indian nationalism upto 'Home Rule' movement; 1916 to 1945, which is the 'Gandhian era'. You can start from 'Champaran experiment' to 'Quit India movement'. The Gandhian thought and methods of mass mobilisation should be given special emphasis; 1945 to 1947 - a chronological study of this portion will be the right approach. Analyse how and why Indian nationalism, at the end yielded a paradoxical result, which is partition and freedom together; other strands of national movement, which ran parallel to the Congress movement; rise and growth of the revolutionary terrorism; Swarajist movement; social and communist movements; Indian National Army - role of Subhash Chandra Bose and rise and growth of communalism.

Independence to 1964: This unit includes the Nehruvian era and development of an independent Indian polity, Constitution, planned economy and foreign policy.

### **World history**

There has been a shift towards conceptualisation and generalisation of events than factual study of individual events themselves. You can start with Renaissance, enlightenment and socialist ideas. Similarly undertake a study of all the major revolutions that shaped the modern world history. Moreover, the two World Wars have to be studied as total wars. Going through the new syllabus, one can safely conclude that mastering the European history can fetch more marks now. The second half of this section makes world history more contemporary and relevant. This section now covers important portions of General Studies' paper too.

A good book on international politics or contemporary history will suffice for this portion. You are now expected to have detailed and in-depth understanding of the post-World War II developments, such as the 'Cold War' and division of world into two military blocs, NATO and Warsaw pact; emergence of the 'Third World' and their decision to remain nonaligned; United Nations; decolonisation and factors constraining development of the newly-independent Latin American and African countries.

At the same time you should study the circumstances leading to the end of the 'Cold War' and the US ascendancy in the world, as well as the disintegration of Soviet

Union, fall of Berlin wall and the US and the UN victory in the Gulf war. Another important strand of contemporary history is process of integration deciding fate of nations across the globe, which is 'Globalisation'. Continent-wise, Europe has already achieved a major success in this regard in the form of the European Union.

## Law

### **Suggested Reading:**

#### **Indian Penal Code**

- Atchuthen Pillai
- Ratanlal Dhiraj Lal

#### **Law of Tort**

- Atchuthen Pillai
- R.K. Bangia
- Winfield

#### **Constitutional Law**

- V.N. Shukla
- S.K. Kapoor
- J.N. Pandey

#### **Merchantile Law**

- R.K. Bangia
- Avatar Singh
- Pollack and Mulla

#### **Jurisprudence**

- P.K. Tripathi
- Dias

## Management

### **Paper I**

1. Organisational Design: Khandwala; Madhukar Shukla (both)
2. Organisational Behaviour: Luthans and Robbins- for some portions Blanchart is also good.
3. Strategic Cost Management: Business Today supplements
4. Economics: Any good economics book
5. Management: Terry and Franklin; Koontz and Donnel ; Koontz and weihrich (any one)
6. Strategic Management: Michael Porter

### **Paper II**

1. Marketing: Kotler and any one Indian author book(Saxena/Ramaswami etc.)
2. Financial: Pandey/Chandra/Khan & Jain/Bearley - Any two

3. Information Technology: Any good book which gives holistic view covering all the topics along with Internet based notes.
4. International: Business Media and Government Rules on export procedures, transfer pricing etc.
5. Operations: Adams/Taha
6. HRD: Mammoria/Monappa/Prasad/Flippo - Any two.

### **Suggested Strategy for Management**

- Its better to cover the full syllabus.
- Prepare short notes on each topic
- Write crisply and focus on the operational part of the question
- Do gives examples as and when required
- Maintain a list of cases related to each topic
- Theoretical reference should be given in a pointed and directed manner.
- Prepare with special focus: Organization Design and chapter one topics: key areas like nature and functions of management, organizational goals and newer organizational formats in 21st century.
- Attempt finance question only if conceptually very clear about that question.
- If possible, write at least one question from international trade.

<b>Mathematics</b>
--------------------

#### Book List

#### Paper-I

#### Part- A

1. Linear Algebra
  - a) Linear Algebra by Sharma and Vashishta
  - b) Theory of Matrices by Sharma and Vashishta, Krishna Series.
  - c) B.Sc Text Books by S. Chand Publications
2. Calculus
  - a) Differential Calculus by Sharma and Vashishta, Krishna Series.
  - b) Integral Calculus by Sharma and Vashishta, Krishna Series
3. Analytical Geometry
  - a) Two Dimensional Geometry by S.Chand Publications, Simplified Series
  - b) Analytical Geometry by P.N.Chatterjee

#### Part – B

1. Ordinary Differential Equations
  - a) Ordinary Differential Equations by Rai Singhania
2. Statics, Dynamics and Hydrostatics

- a) Statics by S. Chand Publications
  - b) Dynamics by P.N.Chatterjee.
  - c) Hydrostatics by S. Chand Publications.
3. Vector Calculus
- a) Vector Algebra by M.L.Khanna
  - b) Vector Analysis by M.L.Khanna
  - c) B.Sc. 1<sup>st</sup> year Mathematics Textbook by S.Chand Publications

## Paper – II

### Part – A

- 1. Algebra
  - a) Modern Algebra by Sharma and Vashishta. Krishna Series
  - b) Algebra by Herstein, John Wiley Publications
- 2. Real Analysis
  - a) B.Sc. 2<sup>nd</sup> & 3<sup>rd</sup> year Mathematics Books by S. Chand Publications
  - b) Real Analysis by Sharma and Vashishta, Krishna Series.
  - c) Real Analysis by M.L. Khanna
- 3. Linear Programming
  - a) Linear Programming by S.D.Sharma
- 4. Complex Analysis
  - a) Complex Analysis by S.P.Tyagi
  - b) Complex Analysis by M.L.Khanna

### Part – B

- 1. Partial Differential Equations
  - a) Boundary Value Problems by Rai Singhanian
  - b) Partial Differential Equations by Ion Sneddon
- 2. Numerical Methods
  - a) Numerical Analysis by S S Sastry, TMH Publications
  - b) Numerical Methods by V.Rajaramn
  - c) Programming in Basic by E.Balguruswamy, TMH Publications
  - d) Brilliant Tutorials Material set No.10.
- 3. Mechanics and Hydrodynamics
  - a) Mechanics by S.Chand Publications
  - b) Mechanics by M.L.Khanna
  - c) Hydrodynamics by Rai Singhanian.

## Strategy – Mathematics

### Paper – I

<b>Part – A</b>	
Question No.	Topic
1(a)	Linear Algebra
1(b)	
1(c)	Calculus
1(d)	
1(e)	Geometry
1(f)	
2(a)-(d)	Linear Algebra
3(a)-(d)	Calculus
4(a)-(d)	Geometry
<b>Part – B</b>	
5(a)	Ordinary Differential Equations
5(b)	
5(c)	Statics, Dynamics, Hydrostatics
5(d)	
5(e)	
5(f)	Vector Calculus
6(a)-(d)	Ordinary Differential Equations
7(a)-(d)	Statics, Dynamics, Hydrostatics
8(a)-(d)	Vector Calculus

### Strategy for Paper-I

Question 1 & 5 are compulsory. Out of remaining 5 questions, 3 needs to be answered choosing at least one from each part. So, in total 22 problems (5+5 from compulsory questions and  $3 \times 4 = 12$  from other 3 questions.) needs to be answered. Ordinary Differential Equations, Vector Calculus, Linear Algebra and Calculus are relatively easy topics. If one prepares for these topics, 3 full questions and 7 sub questions from Question No. 1 & 5 can be answered. In total one can solve 19 problems and attempt  $3 \times 60 + 7 \times 12 = 264$  Marks. Even if one prepares all the topics, it will be difficult to solve more than 19 problems in the examination due to lack of time. Even if one attempts all the problems, it is difficult to get answers for all the problems. Hence, selective preparation is the best preparation. Those who have Physics or Mechanical Engineering as second optional can prepare for Statics, Dynamics & Hydrostatics.

### Paper – II

<b>Part – A</b>	
Question No.	Topic

1(a)	Algebra
1(b)	
1(c)	Real Analysis
1(d)	
1(e)	Linear Programming & Complex Analysis
1(f)	
2(a)-(d)	Algebra
3(a)-(d)	Real Analysis
4(a)-(b)	Linear Programming
4(c)-(d)	Complex Analysis
<b>Part – B</b>	
5(a)	Partial Differential Equations
5(b)	
5(c)	Numerical Methods
5(d)	
5(e)	Mechanics & Hydrodynamics
5(f)	
6(a)-(c)	Partial Differential Equations
7(a)-(d)	Numerical Methods
8(a)-(b)	Mechanics & Hydrodynamics

Partial Differential Equations, Numerical Methods, Linear Programming, Complex Analysis and Real Analysis are relatively easy topics. If one prepares for these topics, 3 full questions and 8 sub questions from Question No. 1 & 5 can be answered. In total one can attempt  $3 \times 60 + 8 \times 12 = 276$  Marks. Even if one prepares all the topics, it will be difficult to attempt for 300 marks due to lack of time. Even if one attempts all the problems, it is difficult to get answers for all the problems. Those who have Physics or Mechanical Engineering as second optional can prepare for Mechanics & Hydrodynamics.

Finally you can attempt  $264+276=540$  marks. Even if you get answers around 490 marks, you can expect around 350 marks after considerably tough normalization.

Don't think that knowing the method is sufficient to answer the problem in the examination hall. One should practice as many problems as possible. Do all the papers of CSE & IFS. Take as many practice tests as possible.

Practice, Practice and Practice. Go through the unsolved papers of the previous years and solve them. Try to monitor your speed. Speed is of utmost importance in this examination

For preliminary examination, just practice all the available previous year question papers. You can refer to individual books for each subject. Brilliant Material for prelims is sufficient for all basics. But for algebra, refer to a separate book.

## **Mechanical Engineering**

- Theory of Mechanics - S S Rattan
- Theory of Mechanism and Mechanics - Jagdish Lal.
- Mechanic of Solids - Popru
- Manufacturing Science - Ghosh and Malik
- Manufacturing Technology - P N Rao
- Production Manangement - R K Jain
- Principals of Manufacturing Material & Process - Campbeu
- Fundamentals of Classed Thermodynamics - Van Wylen
- Heat Transfer - Gupta Prakash
- Heat and Mass Transfer - R. Yadav
- Energy Conversion - Sukhalmoy
- Environmental Pollution Central Engineering C S Rao
- Surveying and Levelling - T P Kanetakar
- Heat Conversion - Arora & Kundwar
- Manufacturing Science - R K Jain
- Thermodynamics - R Yadav

## **Medical Sciences**

### **Topicwise Suggested Reading**

- Anatomy - Megraper or Snell
- Human Anatomy (3 Vol.) - Chaurasia
- Medical Physiology - Gyston
- Human Physiology - Chatterjee
- Pathology - Muirs or Robbins
- Microbiology - Anand Narayan or Chatterjee
- Principal and Practice of Medicines - Davidson
- Social and Preventive Medicine - Park & Park
- Surgery - Love and Bailey
- Essentials of Bio-chemistry - M C Pant
- Review in Bio-chemistry - Harper
- Heinmann Medical Dictionary - Janife
- Heinmann Dental Dictionary - Lennox

### **Suggested Reading for Prelims**

- Human anatomy: Chaurasia (III Volumes) and Histology (Inderbir Singh) - Basic Gray and Neuroanatomy (Inderbir Singh) for selected topics.
- Physiology: Ganong



- BioChemistry: Harper
- Microbiology: Anantha Narayan (Introduction to Microbiology), Parasitology (Jayaram Panikkar)
- Pathology: Robbins (Big Robbins)
- Medicine: Harrison (No other book may be useful)
- Surgery: Bailey (No other book may be useful)
- SPM: Park (No other book may be useful)

### **Miscellaneous:**

Question Banks: Question banks without keys are available across the market. Bhatia has published a book, with keys. But it contains questions till 1999 only, also keys are often wrong. The III volume Bhatia series also have UPSC questions spread over the entire series.

AIIMS question bank will be also useful for solving MCQS. Books that are published (like Mudit Khanna) for AIIMS entrance will be also useful for revision.

### **Suggested Reading for Mains**

Go back to those old MBBS days. If you could get hold of any old notes from medical colleges of those rough professors, it will serve you better than any texts. Also, apply the old logic, draw pictures as far as possible. Go back to selections, and read the topic carefully.

- Human anatomy: Chaurasia (III Volumes) and Histology (Inderbir Singh)
- Physiology: Ganong
- BioChemistry: Harper
- Microbiology: Anantha Narayan (Introduction to Microbiology), Parasitology (Jayaram Panikkar)
- Pathology: Robbins (Big Robbins)
- Medicine: George Mathew (Notes in medicine), Harrison if needed
- Surgery: Bailey (Das will be also useful for some areas)
- SPM: Park

Years back when a medical student took up the civil services exams, he had no option but to change his subject. But seeing the growing numbers the UPSC added Medical Science as a subject in the civil services. Ever since many students have taken up the subject and even topped the exams. Do not allow people to convince you that the subject is too tough and not scoring as these are the topics you have studied and practiced for five years. 80% of the questions are from what you have studied and like every other subject there are extra portions that are not covered in the graduation syllabus. So you are at as much disadvantage as any other person.

## Strategy

- 1) Follow the syllabus, that's your best guide. Also keep your options open for the out of syllabus questions. Complete analysis of previous years questions should be done.
- 2) It is better to form groups to study and interact with other medicos who have already appeared for the exams.
- 3) Being a medical student you are probably used to working hard but remember your competition is only with the hard working and serious lot. So, your answers should stand out from others.

## Pali Literature

- Origin of Pali Literature (Vol. I & II) - B.C. Lal
- History of Indian Literature (Vol. II) - Winternitz
- Compendium of Abidhamma Philosophy - B. Jagdish Kashyap
- Pali Essays - Hari Shanker Shukia
- Pali Grammar - L.N. Tiwari

## Philosophy

### Prelims

Reference Book List:

[Judicious selection of books is recommended as more than two books are given for each topic]

Section- A Problem of Philosophy:

1. Dr. C.D. Sharma (Indian Philosophy)
2. Dr. Deo Raj (Indian Philosophy)
3. Dr. Y.Masiaha (Western Philosophy)
4. Dr. Daya Krishna (Western Philosophy)
5. Dr. Franckena Thilly (Western Philosophy)
6. Dr. B.K. Lal (Contemporary Western Philosophy)

Section- B Logic:

1. Dr. Irvin M. Copi
2. Ashok Verma (Symbolic logic)

Section- C Ethics:

1. Dr. Divakar Pathak (Indian Ethic)
2. Dr. V.P. Verma (Western Ethic)
3. Dr. B.N. Singh (Ethics)
4. Lilly (Ethics)

## **Strategy for Prelims**

General perception of many about philosophy is that it is abstract and has no practical relevance. But this is not fully correct. Philosophy is very analytical and speculative that makes it very interesting.

The syllabus for 'Preliminary examination has three sections : Section A, B and C. Section A is Problem of philosophy'. Here we are concerned with Indian Philosophy and Western Philosophy. So we have to read them thoroughly. The questions are generally asked on terminology and theories like 'What is Pratitya Samutpada?'. We must have understanding of terms and theories. In Indian Philosophy there are nine schools. Six schools are orthodox (Samkhya Yoga, Nyaya, Vaisheshika Mimansa and Vedanta) and two are heterodox (Jainism and Buddhism). One other school is Materialism. UPSC generally asks questions in Indian philosophy on some specific points like substance, attributes. In western philosophy there is no precise syllabus. Generally questions are asked from Thales to Sartre.

Section B deals with Logic. Here we have to read only seven topics from Irwin M. Copi. Plus we have to study Symbolic Logic by Dr. Ashok Verma. Generally 30-35 questions are asked from logic in Prelims. 20 questions are just theoretical : they do not need any explanation. 5-8 questions are on Quantification, which also can be answered at first sight if you have already practised. Remaining 5-8 questions are from Deduction which need explanation: this depends upon your practice and even these are not decisive.

Section C deals with Ethics. It consists of Indian Ethics and Western Ethics. In Indian Ethics questions are from Charvaka to Vedanta. Dr. Divakar Pathak's book on Indian Ethics is essential for this section. In Western Ethics, questions are from Thales' to Advanced Ethics. Here we have to study Thilly and another book by Dr. V.P. Verma. The questions in this section are generally factual so we have to collect facts and memorize them.

## **Mains**

Reference Book List:

[Judicious selection of books is recommended as more than two books are given for each topic]

Section- A Western Philosophy

1. By Franckena Thilly
2. Dr. C.D. Sharma
3. Dr. Dayakrishna
4. Dr. Y.Masiaha
5. Dr. B.K. Lal
6. Dr. Lakshmi Saxena
7. D.M.Dutt

Section- B Indian Philosophy

1. Dr. C.D. Sharma
2. Dr. Deo Raj
3. Dr. Hiriyanna
4. Dr. Radha Krishnan
5. D.M.Dutt

#### Section- C Socio Political Philosophy

1. Dr. J.P. Sood Vol IV
2. Dr. Shiv Bhanu Singh
3. Dr. O.P.Gauba
4. NCERT Books

#### Sec. B Philosophy of Religion

1. Dr. Y.Masiaha
2. John Hick
3. Dr. V.P. Verma

### **Strategy**

There are no exam-oriented books for Philosophy. So, it is advisable to prepare notes from various sources and mug that notes thoroughly. Read Bhagavad-Gita Chapter-2, it is useful in paper-2. Viveka Chudamani of sankaracharya is very helpful to understand his philosophy. Reading such original books makes your answers stand out from others. Try to mug some standard quotations and use in your answers at relevant positions.

<b>Physics</b>
----------------

#### Suggested Reading:

- Physics Vol I&II by David Haliday and Resnick (for basic concepts)
- Any practice book for objective questions. Any IIT/Engineering entrance type objective questions book in physics will do
- Mechanics - D.S. Mathur, B.S. Agarwal
- Waves and Oscillations - Brijlal & Subramanyam, B.S. Agarwal
- Optics - Brijlal & Subramanyam, B.S. Agarwal, Ajoy & Ghatak
- Thermal Physics - Singal, Agarwal & Prakash, B.S. Agarwal, Shah & Srivastava
- Electricity & Magnetism: D.C. TAYal, B.S. Agarwal, Griffith
- Any fundamental book on electrical engineering like B.L Thareja (Vol 1) or Vincent Del Tero
- Modern Physics - A Beiser (Concepts of modern physics), S.L. Gupta, B.S. Agarwal, J.B. Rajan
- Electronics - Milman & Halkias, S. Ramnam, Ryder or Bolstead, Malvina
- Properties of Matter - B. Aggarwal
- Atomic Physics - J. B. Rajan
- Fundamental of Magnetism electricity - B.N. Basudeva

- A Text Book of Sound - Khanna & Bedi
- Nuclear Physics - D.C. Tayal
- Introduction of Electrodynamics - Griffith
- Advanced Level Physics - Nelkon & Parkar
- University Physics - Zeemasky
- Numerical Problems - B. Lal & Subrahmanyam
- Quantum Mechanics - A Ghatak
- A Dictionary of Physics - Goldstein

#### Paper 1

- Classical Mechanism -Gupta, Kumar & Sharma  
- Takewale & Puranik  
-H.Goldstein
- Mechanics - Kleppner & Kolenkov  
-D.S. Mathur
- Wave/Spl.Relatively - D.S. Mathur/Kleppner&Kolenkov
- Special Relativity-R.Resnic  
-Gupta & Goyal
- Optics-Ajay Ghatak  
-B.S. Agarwal
- Electrodynamicism - David Griffiths
- EM Theory -Chopra&Agarwal/Satya Prakash
- Thermal Physics - P.K Chakraborty  
- Satya Prakash, Singhal & Agarawal  
-Statistical Physics -B.B laud

#### Paper 2

- Quantum Physics- Resnick & Eisberg
- Concept of Modern Physics - Arthur Beveser
- Quantum Mechanics -Ghatak & Loknathan  
-Chatwal & Anand/Satya Prakash
- Atomic & Molecular Spectra -Rajkumar
- Nuclear Physics -S.B Patel
- Solid State Physics -Kittel
- Electronics -Allon Mottershed
- Objective Physics -H.C. Verma/TMH

#### **Paper 1**

Section A has three important areas: Classical Mechanics, Special Relativity, Waves and Geometrical Optics and Physical Optics. Since all these three sections have compulsory questions, it's better not to avoid any one. Yet, if you are hard pressed for time, you can be selective about any one section. But it's important that before getting selective you should have identified the essential areas based on past trend

analysis.

It's better not to be selective at all in Classical Mechanics. Moreover, there is no dearth of good material on this section. Most of the students find this section rather simple to handle. In Special Relativity, the older topics are more important than the newly added ones. So, the students should design the preparation strategy accordingly. In the Waves section, Damped and Forced Vibrations, Phase and Group Velocity should be given priority.

Section B contains: Electricity and Magnetism, EM Theory and Black Body radiation and Thermal and Statistical Physics. All the above three sections carry compulsory questions, hence none can be completely ignored. Questions which come on EM Theory are very simple and scoring. Hence this area should be well prepared and the students should not miss the question on this area.

### **Paper 2**

All of the second paper except Electronics can be prepared from two sources, i.e. Quantum Physics by Resnick and Eisberg, and Modern Physics by Arthur Beiser. For value addition, you may require to undertake some extra reading from other standard books.

Electronics is now a prominent part in the course. Students coming from non-electronics background must make some extra effort to master this section thoroughly. Once prepared well, this part is scoring.

### Tips

- Do not leave any part of the course completely, be only smartly selective
- Thoroughly analyze the past trends before you decide on your focus areas
- There is no need to give derivation of equation, until you are specifically asked for it. It does not fetch you any extra credit
- Read the question carefully, identify focus area and answer to the point
- Clearly explain the units and terms used in the formula
- Finally, practice a lot of problems before going to the examination hall.

<b>Political Science</b>
--------------------------

### **SOME SUGGESTED READINGS FOR YOU :**

**by Subhash C Kashyap ---**

1. Our Constitution
2. Our Parliament
3. Perspective on Constitution (ED)

**by P.M Bakshi --**

1. Constitution

**by D.D. Basu --**

1. Introduction to the Constitution

**Others**

IIPA Journal

The Hindu

Frontline

**Reference Book List topic wise:**

**Political Theory and Indian Politics**

- George H. Sabine ( Western political theory)
- Eddy Ashrivatham (Political theory)
- C.L. Wayper (Political thought)
- O.P. Gauba (An introduction to political thought)
- R.M. Bhagat (Western political thought)
- Amal Roy and Mohit Bhattacharya (political theory, ideas and institutions)
- S.P. Varma (Modern political theory)
- J.C. Jauhary (Comparative politics)
- A.S. Sandhu (Political theory)
- Pukharaj Jain (Political thought)

**Indian Constitution And Politics**

- M.V. Paylee (Indian Constitution)
- D.D Basu (An introduction to Indian constitution)
- V.N. Shukla (Constitution of India, couple of chapters are really relevant)
- A.C. Kapoor (Comparative Governments)
- V.P. Varma (Indian political theory)
- K.R. Bombwal (Comparative constitutions)
- Bipin Chandra (Freedom struggle)
- Simit Sarkar (Modern India)
- A.R. Desai (Social background of Indian Nationalism)
- Paul Brass (Politics in India since independence)
- Independent India : First Fifty Years - Hiranyamay Kelkar
- Indian foreign policy agenda for 21st century (1998 Foreign service institute) - Lalit Mansingh
- India's foreign policy in a changing world (1999) - V.P. Dutt
- People's right and the state in the third world - Manjooran Mohanty & Partha Mukherjee
- World politics in the twentieth century - Paul Kenedy
- Nuclear India (1998) Jasjit Singh

## **Suggested Readings For Prelims**

### **Section A:**

Political Theory —Eddy Ashirvatham  
Political Theory —O.P. Gauba  
Political Theory —Amal Ray, Mohit Bhattacharya.  
Comparative Politics —R. Chilkote

### **Section B:**

Political Theory —Amal Ray & Mohit Bhattacharya.  
Introduction to Indian Constitution —D.D. Basu  
India's Struggle for Independence —Bipan Chandra.  
Introduction to Indian constitution —D.D. Basu.  
Our Parliament —S.C. Kashyap  
Our Constitution —S.C. Kashyap  
Comparative Govt. & Politics — V.N. Khanna  
Comparative Govt. & Politics —K.R. Bombwal

## **Suggested Readings For Mains**

### **Paper I Section A**

A History of Political thought—Subrata Mukherjee, Susheela Ramaswamy  
A History of Political thought —J.P. Suda  
For Manu & Kautilya : Foundations of Indian Political thought — V.R. Mehta  
Modern Political Theory —S.P. Verma  
Modern Political Theory —Madan Gandhi  
Political Theory —Eddy Ashirvatham  
Political Theory —J.C. Johri  
Political Theory —Ray & Bhattacharya  
Political Theory —O.P. Gauba

### **Paper I Section B**

Comparative Govt. & Politics —J.C. Johri  
Comparative Govt. & Politics —Ronald Chilkote  
Modern Indian Political Thinkers —V.P. Verma  
Foundations of Indian Political Thought —V.R. Mehta  
Indian Govt. and Politics —A.S. Narang  
Indian Govt. and Politics —J.R. Siwach  
Indian Govt and Politics —M.P. Singh, Himanshu Roy  
Politics in India —Rajani Kothari  
Govt. and Politics of India —W.H. Morris Jones

### **Paper II Section A**

Theoretical aspects of International Politics —Mahendra Kumar  
Politics among Nations —Morganthu  
International Politics —Schuman

### **Paper II Section B**



International Politics —Bookhives

Regular subscription of Frontline & World Focus (magazine)

Political Science is a dynamic and ever-changing subject. Candidates aspiring to opt for it should be more aware of the shift in focus than the skeletal changes in the revised syllabus. Opting for Aristotle's Master science, the aspirant should master the techniques to make best use of these changes like a crafty politician. The advantages of picking political science as a favourite optional are manifold. It helps candidates in updating their knowledge of the current events and provides a fresh perspective on the burning domestic and foreign policy issues. About half of the general studies paper is vitally related to the two papers of political science for the main examination. Besides, that is the best subject to ensure a sound sleep during the interview days simply because you have readymade answer for virtually all the question being asked by the board members.

The recent years' trend also reveals that the candidates with political science as an optional have fared better in many respects. The rate of success is going higher and higher. The purpose of this write- up, however, is to make you w armed about the subject in the context of revised syllabus.

A cursory view of the changed syllabus indicates towards the modification at two levels: (a) new addition, and (b) shift in focus. Interestingly, what appear to be additions are really the extended and focused parts of the existing topics. This means that students will have to prepare for the same old themes but in a changed context. This sounds appropriate as much water has flown down the Gangas since the previous paper was set up. More so in the context of political science where changes start reflecting realities, both at the domestic and external planes. The centralised polity of India has finally given way to coalition politics, and now it seems the coalition culture is here to stay in one way or the other. The rehearsing of International relations paper was highly imperative in the context of Collapse of Soviet Union, the end of cold war, and the emergence of a new world order shaped and designed by the United States-led Unipolar World.

We have seen a lot of face lifting and reading, real changes are not drastic and metamorphic. The topics that were included as subtopics in the old syllabus have been given a separate and independent status in the revised course. Yet, a few substantial changes are the additions like Nationalism and Internationalism and the theories of international relations, primarily corresponding with the international relations paper in the Mains. So far freshers opting for political science used to get abruptly exposed to the strangers zone called international politics. Now, they will have some idea about the world political scenario with the help of the new topics.

A brief survey of the significant additions in the section (A) of the political science paper reveals that a couple of unexplored areas have been taken in. The meaning, nature and scope of political science and its relations with other subjects; concepts of

nationalism and internationalism, major theories of International Relations; .Social movements; and the bureaucracy are the major themes brought under focus in the revised syllabus.

Section (B) of the prelims has also registered a few additions signifying both structural and spiritual shift. Approaches to the study of governments; classification of political systems; the constituent assembly, the party system in India, the interaction of government and the local-self governments; bureaucracy and development, and the challenges to the Indian Democracy are major additions. The students should specifically focus on the themes like 73rd constitutional amendment, the political parties and the bureaucracy. It would be advisable to tell about the clarity of concepts and the grasp of knowledge both in vertical and horizontal dimensions to qualify the prelims. More you have read, more facts will strike your memory while searching for the right answer through the process of examination. That is why, a serious and hard working student proves better in answering the objective type test questions than an ill-organised and poor in knowledge candidate.

## **Psychology**

Psychology is one optional, which can be scoring if prepared well. The average time taken to prepare for this optional is 4 to 5 months because of the lengthy syllabus (28 chapters in all). But the advantage is most of the chapters are interlinking and the reader will find them interesting because they relate to our day-to-day understanding of others and ourselves. The advantage of preparing for psychology is it helps to understand ourselves better. And after completing the course one can really appreciate the individual differences. Most of the aspirants take it as their second optional so, only the mains preparation is discussed.

### **Sources/Material for psychology optional:**

- 1.NCERT XI- two books
2. Introduction to psychology by Morgan and King
3. Psychology by Baron
4. Mr. Mukul Pathak's class notes (his notes is followed by most of the aspirants and is available almost everywhere. He teaches in Vajiram and Ravi institute. If the notes are not available and anyone is interested, mail Bayyapu Sandeep Kumar at [Kumarbayyapu@yahoo.com](mailto:Kumarbayyapu@yahoo.com)).

There are other books also like Social Psychology by Baron & Byrne, Inner World by Sudhir Kakar, The Psychology of Small Groups by Shaw, Achieving Society by David McClelland, Theories of Personality by Hall & Lindzey, Systems & Theories of Psychology by Krawiec & Chaplin, Abnormal Psychology & Modern Life by James.C.

Coleman. But too many books may not be covered because of paucity of time. The above-mentioned four should suffice.

The strategy to prepare is first complete the whole syllabus once. Now a days the pattern of the question paper is such leaving out some chapters is not suggested. Then in the second reading one is able to interlink the topics. For example the concepts of learning and memory (paper-I) will come to use at learning styles of the gifted, retarded and learning disabled (paper-II). Then analyze the old question papers and practice writing them within the word limit (20 markers in about 200 to 230 words and 60 markers in about 600 to 700 words) and correct yourselves. This process will make you prepared for the final examination.

Book List for your reference/interest:

1. Atkinson
2. Eysenck - "Psychology-Ashrden's Handbook"
3. Chaplin and Kraweik - Systems and theories of psychology

Reference Books for specific topics:

1. Theories of personality - Hall and Lindxy
2. Abnormal psychology and modern life - Cokman Vead, well being & Mental disorders, therapeutic approaches and coping mechanisms.
3. Community psychology - Pande
4. Organisational behaviour - Stephen P. Robbins
5. Educational psychology - Matur
6. Social psychology - Baros & Bryne
7. Psychological testing - A.K. Singh
8. Statistical Analysis Garette
9. Development psychology - Hurlock

### **Suggested Important Portions in Paper I Section A**

Introduction: Psychology as a Science: Definitions and perspective. Psychology in relation to other social and natural sciences. Use of interdisciplinary approach

Methods of Psychology: Characteristics and components of methods in psychology (induction, deduction and introspection). Observation, survey, laboratory and field experiments. Clinical and case study.

Development of Human Behaviour: The nature, origin and development. Role of genetic and environmental factors in determining human behaviour. Influence of cultural factors and socialisation. Life span development-the critical periods and their handling, Mastery of the developmental tasks.

Learning: Concepts and theories of learning (Pavlov, Skinner and Piaget). The processes of extinction, discrimination and generalisation. Programmed learning,

probability learning, self-instructional learning, concepts, types and the schedules of reinforcement.

Memory: Concepts and definition of memory and forgetting, 7+/-2 concept and chunking encoding, storage and retrieval. Factors influencing retention and forgetting. Theories of forgetting (Repression, Decay and Interference theories). The concept of reminiscence

### **Paper I Section B**

Thinking and Problem Solving : Concept formation processes. Reasoning and problem solving. Creative thinking and fostering creativity. Information processing. Decision making and judgement

Intelligence and Aptitude: Concept and definition of Intelligence and aptitude, Nature and theories of intelligence. Measurement of Intelligence and aptitude.

Attitudes, Values and Interests: Definitions, concepts of attitudes, values and interests. Components of attitudes, values and interests. Formation and maintenance of attitudes. Measurement of attitudes, values and interests.

### **Paper II Section A**

Psychological Measurement of Individual Difference: The nature of individual differences. Characteristics and construction of standardised psychological tests. Types of psychological tests.

Therapeutic Approaches: Psychodynamic therapies. Behaviour therapies. Clientcentered therapy. Cognitive therapies. Indigenous therapies (Yoga, Reiki, Meditation) Biofeedback therapy.

Work Psychology and Organisational Behaviour: Personnel selection and training. Use of psychological tests in the industry. Training and human resource development. Theories of work motivation.

Community Psychology: Definition and concept of Community Psychology. Role of community psychologists in social change. Use of small groups in social action. Arousing community consciousness and action for handling social problems. Group decision making and leadership for social change

### **Paper II Section B**

Application of Psychology to disadvantaged groups: The concepts of disadvantaged, deprivation and socially deprived. Social, physical, cultural and economic consequences of disadvantaged and deprived groups. Educating and motivating the disadvantaged towards development.

Psychological and the problem of social integration: The concept of social integration. The problem of caste, class, religion and language conflicts and prejudice. Nature and manifestation of prejudice between the ingroup and outgroup. Casual factors of such

conflicts and prejudices.

Other applications of psychology: Sports psychology - improving performance of sports, personnel, psychology and understanding of political behaviour, Voting behaviours.

## **Writing**

- Don't exceed limit in short answer questions
- Try to make the introduction catchy while answering short and long questions. Students should use real-life examples to make the answers lively
- Make a framework of the answer in mind like what would you write in the lead paragraph, body text and the conclusion before you proceed with writing the answer
- Time management is key and candidates should ensure that they have atleast 25 minutes in hand before they attempt the last question

## **Public Administration**

### **Prelims**

This subject has become very popular as a prelims optional. The main reasons are:

- Availability of good coaching and study material
- Guidance is easy since many seniors opt for it
- Subject matter is easy to understand
- Syllabus is quite manageable

However, a very good score is required as the competition is tough.

The main source for the prelims is the TMH guide by Laxmikanth(But don't rely completely on it as this proved undependable from 2006 on wards). It is, of course, a very good compilation from various sources in exam orientation. The preparation should be such that any question based on the material in this book should be answered. The study should be thorough including the various questions given in the book.

Since the questions can be factual and can be asked from anywhere, there is need for wide study. But the first effort should be to study TMH thoroughly and the main standard books to gain basic clarity. After that, some time can be spent every day in scanning various material for the additional study matter. Here, you should not spend too much time and also should not read from end to end, but only scan for areas that you have not done before or some new facts.

Books:

- Awasthi and Maheshwari- Public Administration
- Prasad and Prasad - Thinkers
- Ramesh Arora - Indian Administration
- Mohit Bhattacharya - New Horizons in Public Administration.

- Maheshwari - Indian Administration
- IGNOU books.

Practise lots of tests from anywhere you get. Identify the weak areas and focus accordingly.

Note:

- Make a note of the mistakes that you make in the tests and try to rectify them
- If you do not understand the question, look at the Hindi translation and see if you can gain clarity on what's being asked.
- Prepare mnemonics sheets to remember various facts. Read them again and again, especially before the exam date.

### **Main Examination:**

The advantage and disadvantage of this optional is the huge availability of material. Aspirants waste most of their time searching for the books and material. The secret for success in this optional is writing practice. Unless well practiced, it is not possible to score good marks. So writing skills matter a lot in securing good marks. But with practice it is always possible to improve.

Note:

- The questions might seem indirect and vague, but with good basic clarity any question can be attempted. In recent times, the long questions are being asked directly. The examiner only expects you to write a simple logical answer with clarity.
- Do not try to remember too many quotations as it is difficult to reproduce.
- The introduction and conclusions should be written well
- Do not read all the books from end-to-end. Prepare topic wise in a comprehensive manner. The main priority should be given to gain the basic clarity.
- Practise the previous years' papers.
- Use examples, contemporary relevance, case studies, flow diagrams etc.
- Read case studies from The Hindu, Frontline, Kurukshetra, Yojana and EPW.
- While answering Indian Administration questions, answer with respect to Constitution, Preamble, etc and how the issue is in conformity with basic structure.

Introduction chapter is to be studied well as it deals with the basic evolution of the subject and the trends. The questions might seem difficult. But with good understanding it can be very scoring. The concepts can be used elsewhere also. The material is available on most topics.

The Theories chapter should be done well. This is a very scoring and with well-defined syllabus preparation can also be comprehensive. The material availability is good.

The Structure chapter is easy and can be covered quickly. But questions may not be asked every year. The material availability is good.

The Behaviour chapter is very scoring. The questions are also asked regularly. The material is also good.

The chapter on Accountability is scoring. This area is important in the contemporary trend. So questions are asked regularly. There is also scope for lot of innovation. The material is deficient for some areas. There is also a need to prepare from current affairs.

The Administrative Law is very short chapter with limited scope. The questions may not be asked regularly. But it should be attempted if given in exam. It is scoring and the material is also available.

The administrative reforms chapter is short and easy. It can be scoring with innovations. The material is also standard. Be open to any information that appears in the newspapers.

The CPA chapter is scoring. It can be attempted in the exam. But questions may not come every year. The material availability is problem in some aspects.

The DA chapter is relevant to Indian context. So prepare well for this area. The questions are asked almost every year. The material availability is a problem for some areas. Lot of innovation and contemporary relevance can be included.

The Public policy chapter is not asked every year. The material availability is also a problem.

The personnel chapter is very scoring and should be attempted. The questions are also asked every year. The material is good. So, do well in this chapter. Check out for latest information in newspapers.

The Financial chapter is scoring in some areas. There is problem of material in some topics.

In Indian administration, the scoring areas are: evolution, framework, union, state govt., reforms, law and order, welfare.

Though a lot of books can be mentioned for this optional but I will mention the standard ones which should suffice.

## **PAPER-I BOOKS**

1. New Horizons of public administration by Mohit Bhattacharya
2. Administrative thinkers by Prasad and Prasad (Theories part)
3. Public Administration by Sharma and Sadana (read administrative law, personnel administration, financial administration, development administration, comparative administration and other paper-I topics)
4. IGNOU material (read public policy)
5. Public Administration by Avasthi and Maheshwari (read administrative law and administrative reforms)

## **PAPER-II BOOKS**

1. Indian Administration by Rajini Goyal and Arora (covers most of the topics of paper II)
2. Public Administration by Avasthi and Maheshwari (read public sector)
3. Indian Administration by Avasthi and Avasthi (read administrative reforms, administration of law and order)
4. Introduction to the constitution of India by D.D. Basu and last but not least
5. Articles from IIPA Journals (aspirants can get Mr. Minocha's collection of articles from IIPA Journals which is sufficient)

Some topics like welfare administration, administration of law and order should be collected while reading newspapers, India yearbook etc.

Other Books for your interest/reference:

- Ramesh Arora - Indian Public Administration Comparative Public Administration
- Sachdeva - Social welfare administration
- Public Policy - Sapru
- Rumki Basu - Public Administration
- Maheshwari - Indian Administration
- NCERT books
- IJPA special edition in 1998 on the occasion of Golden Jubilee
- Social Theory & Development Administration – Mohit
- CPA – Ramesh Arora

<b>Sociology</b>
------------------

REFERENCE BOOKS FOR PRELIMINARY EXAMINATION:

1. IGNOU Material
2. Sociology - Sachideva & Vidhya Bushan.
3. Sociology - T.B. Bottomore.
4. Sociology Themes & Perspectives - Moralambose & R.M. Heald.
5. Unique Guide.
6. Dhilion Guide.



7. Spectrum Guide.
8. Sociology Dictionary - William P. Scott.
9. Social Demography - Asha & Bandhi.
10. Social Anthropology - Madan & Majumdar.
11. Political System - Smelser.
11. Cultural Anthropology - Madan and Majumdar
12. Sociology - Horton and Hunt
13. Harlambus - Introduction to Sociology
14. Tribal India - L.P. Vidhyarthi
15. Modernisation of Indian Tradition - Y. Singh
16. NCERT tests on sociology
17. Oxford Dictionary / Collins
18. Chapters from a good book on Demography and Urban geography

#### REFERENCE BOOKS FOR MAINS EXAMINATION :

1. Ram Ahuja: Society in India
2. Ram Ahuja: Social problems in India
3. IGNOU notes (especially for thinkers and topic on Indian system)
4. Caste its 20th Century Avatar - M.N. Srinivas
5. participation as freedom - Amartya Sen and Jean Dreze
6. Y. Singh - Modernisation of Indian Tradition
7. Y. Singh - Social tradition in India
8. L.P. Vidhyarthi - Tribal India
9. Yojana (Independence day special 2001 on population)
10. Y. Singh - Social Change in India
11. Niel J. Smelser for Economy and Society
12. Abraham and Francis - Sociological theory

#### REFERENCE BOOKS OVERALL :

- Sociology - T.B. Bottomore
- Sociology - Harry M. Johnson
- Sociology: An introduction and analysis - Maclver and Page
- Handbook of sociology - Ogburn and Ninkoff
- Social anthropology - Madan and Majumdar
- Social Thought - Abraham and Morgan
- Social structure - M.N. Srinivas
- Dictionary of sociology - Dunean and Mitchel or Penguin

#### TOPICWISE SUGGESTED BOOKS

- Introductory Sociology: T.B. Bottmore
- Basic contribution of sociological and anthropological thinkers: dictionary of sociology, Social and cultural process: Maclver and Page and Madan & Majumdar

- Deviance and central: Social stratification - Harlambos and T.B. Bottomore
- Illustrations - Johnson
- Political institutions - Bottomore
- Religious and social institutions - Madan & Majumdar
- Basic Concepts of Indian sociology - Y Singh (Modernization of Indian Tradition), Villavge, Town, City, Maclver & Page

### **Paper I**

For short questions, these are the important sections in paper I:

- Sociology - The Discipline
- Scientific Study of Social Phenomena
- Techniques of data collection and analysis
- Economic System
- Political System
- Educational System
- Science & Technology

To prepare for the long questions in paper I, students are required to thoroughly prepare Pioneering contributions to Sociology. This includes

- Karl Marx: Historical materialism, mode of production, alienation and class struggle.
- Emile Durham: Division of labour, social fact, religion and society.
- Max Weber: Social action, ideal types, authority, bureaucracy, protestant ethic and the spirit of capitalism.
- Talcott Parsons: Social system, pattern variables.
- Robert K Merton: Latent and manifest functions, anomie, conformity and deviance, reference groups.

While revising Pioneering contributions to Sociology', students need to focus on areas like socio-economic and political background, views of thinkers, their analysis, contemporary perspective and evolution. The section on 'Pioneering contributions to Sociology' is the most important part of paper I. It helps to understand the theoretical inferences of paper II. So, if you are thorough with this section, it will be easier for candidates to get a gist of sections like Social Stratification, Economic System, Political System, Educational System, Social Movements and Social Change and Development.

Candidates are required to understand argumentative aspect of thinkers like Karl Marx, Emile Durham, Max Weber, Talcott Parsons, Robert K Merton, with an eye to use their arguments in other sections of paper I. The theoretical inference of these thinkers need to be carried forward in paper II wherever required.

For long questions, students need to focus on topics such as Pioneering Contributions to Sociology, Marriage and Family, Social Stratification and Mobility,

Political System, Social Movements and Social Change and Development. Students who can thoroughly focus on these sections are expected to answer 70% of queries in paper I. They should, however, have an overall view of the paper with focus on emerging trends like education, religion and economic developments.

## **Paper II**

While preparing for this paper, students should ensure that they should not confine their preparation in terms of different sections. They need to focus on interrelation between different topics. Students need to have an analytical eye with focus on continuity and change. Like, despite so many changes, why caste system is still prevalent in our country. Or, despite the break-up of the joint family system, the mentality of joint family still exists among Indians.

For short questions, the important sections are:

- Historical Moorings of the Indian Society
- Class Structure
- Marriage, Family and Kinship
- Education
- Political System
- Population Dynamics
- Social Movements
- Social Problems

For long questions, the important sections are:

- Caste System
- Class Structure
- Agrarian Social Structure
- Industry and Society
- Political Processes
- Tribal Societies
- Social Change
- Social Movements
- Women and Society

Apart from these, students need to keep an eye on sections like Caste System, Agrarian Social Structure and Tribal Societies. You can always have short or long questions from these three sections. Paper II actually works like mathematics and it is a high-scoring paper.

There are many topics in paper II, which seem to be essay-type. But in Sociology, they need to be approached through sociological perspectives. Suppose you are asked a question on poverty, this can have theoretical inferences. You need to give empirical or sociological or case studies examples to analyse the topics.

Writing Short questions:

You need to directly start answering the question. Avoid flowery language with an eye on all perspectives while answering the question

Long questions:

Perspectives, which have been asked needs to be kept in view while answering the question. Theoretical dimension are to be substantiated with analysis.

## Statistics

- Introductory Probability and Statistical Applications - Paul Meyer
- An Introduction to Probability Theory & Mathematical Statistics -V K Rohtagi
- Fundamentals of Statistics (2 Vol.)- A M Goon, M K Gupta and B Dass Gupta
- An Outline of Statistical Theory (2 Vol.) -A M Goon, M K Gupta and B .Dass Gupta
- Fundamentals of Mathematical Statistics-A C Gupta and V K Kapoor
- Fundamentals of Applied Statistics-S C Gupta and V K Kapoor
- Sampling Techniques-William G. Cochran
- Sampling Theory of Surveys with applications - B. V Sukhatme & B V Sukhatme.

## Urdu Literature

### Paper I

- Urdu ki Lisani Tashkil - Mirza Khalil Ahmad Beg [Educational Book House, Aligarh]
- Mokqadwa; Tarikh-e-Zuban-e-Urdu - Prof. Maswood Husain Khan [Educational Book House, Aligarh]
- Ansaf-e-SuKhan aur Sher Haiyyaten - Shamian Ahmed

### Paper II

- Urdu Shairi ka Tauqidi Mutala - Suenbul Nigar [Educational Book House, Aligarh]
- Urdu Nasr ka Tauqidi Mutala - Suenbul Nigar [Educational Book House, Aligarh]
- Urdu Adab Ki Tarikh - Noorul Hasan Naqvi [Educational Book House, Aligarh]

## Zoology

### Suggested Reading List

- Cell and Molecular Biology - De Robertis, C.B. Powar
- Genetics - P.K. Gupta, Gardner, Ahluwalia, Vir Bala Rastogi
- Invertebrates - R.L. Kotpal, Nigam, Jordan
- Vertebrates - R.L. Kotpal, Nigam, Jordan and Varma

- Comparative anatomy of vertebrate zoology - Kent
- Animal physiology - H.R. Singh, Vander
- Biochemistry - Harper, Leninger, Stryer, Rao
- Embryology - Balinsky, A.K. Berry, Vir Bala Rastogi
- Organic evolution - Veer Bala Rastogi
- Ecology - P.D. Sharma, Odum, Vir Bala Rastogi and M.S. Jayaraj, Kotpal and Bali
- Economic Zoology - Shukla and Upadhaya, Kotpal Series, Kotpal- Khetrapal - Agarwal
- Ethology - Reena Mathur, Magazines like Science Reporter, Nature etc.
- General Zoology - Storer and Usurger
- Physiology - H.R. Singh
- Evolution - Vir Bala Rastogi
- A Dictionary of Entomology - Leftwich

It's better to keep answers diagrammatic and less verbose. Students should also not hesitate in drawing colour diagrams.

## **Paper I**

### **Section A**

#### **Non-chordata and chordata:**

- Classification should be done thoroughly as it's given in Barnes' textbook
- Pay attention to general essays rather than type studies
- Always correlate things from evolutionary viewpoint -Draw as many diagrams and flow charts as possible
- Students should cover all theories.
- In chordate description, compare the phyla phylogenetically and anatomically. Comparative anatomy diagrams should be coloured.

### **Section B**

The most scoring parts are Economic Zoology, Bio Stats and Bio Instrumentation. Students need to focus on topics related to developments in India in Economic Zoology.

## **Paper II**

### **Section A**

To prepare Cell Biology and Genetics, students need to follow the same advice as provided for these two topics in Botany. However, you need to correlate cellular processes with human physiology and human disease conditions. In Genetics, student should also mention the possible human welfare applications. Peripheral questions are generally not asked.

### **Section B**

#### **Biochemistry and Physiology**

Practical Bio-chemical pathway with structural formula of molecules are important.

Prepare from medical bio-chemistry and physiology books. Represent most information through flow charts. Always draw relevant anatomical diagrams.

### **Development Biology**

If physiology and biochemistry are prepared thoroughly, then this part can be prepared only for short notes. Colored drawings are a must. Students need to practice them properly.

## **Telugu Literature**

Telugu Literature is a popular optional for all the aspirants who are well-versed in this language. That does not mean that one has to be a literature graduate (B.A or M.A in Telugu). The success rate of many engineering graduates, who have liking for the subject, indicates that the subject is easy, provided one has the aptitude for the subject.

### **Paper – I**

This is the easiest paper of Telugu Literature and very easy to read and doesn't require any coaching. You can pick up the books suggested and start reading even before you join any coaching. In section – A, if one is comfortable with telugu grammar, the subject becomes very easy. But on the negative side, you need to remember lots of names of authors and books in Section – B. As the subject is easy, care should be taken in presentation and art of writing good answers with sub-heading and nice examples.

Paper – 1 (Sec A): 1, 4 – 8 sections of the syllabus can be chosen to prepare, ignoring others in choice.

Suggested Reading:

- 1 Nagaraju Sir's notes (available in the Srinivasa Xerox Center near Ashok nagar X roads, Hyderabad)
- 2 Andhra Bhasha Charithra (by Badriraju Krishnamurty) (only if you have time to read)
- 3 Vakyam (by Chekuri Ramarao) (only if you have time to read)

Paper – 1 (Sec B): 1 – 4 (ancient) sections of the syllabus, 5 – 8 (medieval) sections, 9 – 12 (modern) sections, Janapada sahityam. You can either pick ancient (1 – 4) **or** medieval (5 – 8) sections,..... and reading Modern (9 – 12) and Janapada sahityam compulsorily.

Suggested Reading:

- 1 Nagaraju Sir's notes (available in the Srinivasa Xerox Center near Ashok nagar X roads, Hyderabad)
- 2 Andhra Sahitya Charitra (by Nagayya) (very big book. Read only if you have time).

## **Paper – 2**

This is a difficult paper compared to Paper – I, but also very scoring. For this paper, I feel coaching is necessary, especially for the ones who don't understand Kavya style of writing. Also, this paper includes writing Vyakhyanas for different padyalu both ancient and modern.

Paper – 2 (Sec A): You can read (Dushyanta Charitra) Nannayya, (Sri Krishna Rayabaram) Tikkana, (Gunanidhi katha) Srinathudu, (Sugatri Saleenula Katha) Pingali Soorana. You can ignore Molla Ramayanam and last notes.

Suggested Reading:

- 1 Syllabus and text notes of all the chapters (from Navodaya Book House, Koti or Sree Book Square, Kachiguda X Road).
- 2 Nagaraju Sir's notes
- 3 Akella Raghavendra book on Telugu Literature Paper – II.
- 4 They are commentaries available on each syllabus chapter in Navodaya Book House. But read this, after you get sufficient time and after completion of syllabus.

Paper - 2 (Sec B): There are two ways to read this section. Read the poetry syllabus of 5 chapters for both Vyakhyanas and Long Answers. Or read poetry syllabus for Vyakhyanas and read prose sections of Gurajada kathalu, Alpajeevi and NGO for Long answers. The choice will be yours. Its better to read Sri Sri - Maha Prastanam and Jashuva - Gabbilam for both Vyakhyanas and Long answers.

Suggested Reading:

- 1 Syllabus and text notes of all the chapters (from Navodaya Book House, Koti or Sree Book Square, Kachiguda X Road).
- 2 Nagaraju Sir's notes
- 3 Akella Raghavendra book on Telugu Literature Paper – II.
- 4 They are commentaries available on each syllabus chapter in Navodaya Book House. But read this, after you get sufficient time and after completion of syllabus.

## **Important Points to Note:**

### **Long Answers:**

- First look at the previous question papers and write down all the questions per topic one after other, so that you can get an idea of questions asked.
- All the topics can be related to - Kala Soundarya Drukpatham, Charithraka Samajaka Drukpatham, Manastatatva Drukpatham, Tatvika Drukpatham, Vyaktitvam (character - sketch), Relevance and importance of the topic in literature and so on.
- So, prepare points on each topic rather than answers for each topic. These points you can use to write answers depending on the question asked.
- Prepare nice introductions and nice endings for each general topic.

- Read the text number of times. especially poetry so that you get command of the subject and also to write quotes in the exam.
- Quotations will surely enhance your answers..

**Vyakhyanas:**

- All the topics can be related to - Kala Soundarya Drukpatham, Charithraka Samajaka Drukpatham, Manastatatva Drukpatham, Tatvika Drukpatham
- You have to develop a base in all the above topics, so that you can write easily for any poem asked.
- Give introduction, Sandarbham, bhavam and start the vyakhyanam and then ending.
- For kala soundarya Drukpatham, one has to know all about the Rasam, Dhvani, Vakrokti etc.
- Develop important points for all the Vrutha poems (4 lined poems) and then write important points for all the other poems if you have time.
- Do write at least 5 vyakhyanas for all the 4 drukpathams before the exam so that you are sufficiently confident.



## 9. MISCELLANEOUS

### Health

The importance of good health should be understood very clearly. This exam is of very long duration, under severe psychological stress. If suppose you become sick at any stage, you will have to write the exam again and lose out an another year and half. So, it is very important to take care of the health throughout the exam preparation period. Remember - Healthy mind in a healthy body.

Please note the following points:

- Get up early in the morning. It is the best time to make the body vibrations in tune with that of the natures’.
- Spend the first few hours in fitness activities. This is not a waste of time, but an investment. It ensures that the whole day is active and focused.
- Take care of the water and the food that you eat. Do not eat junk food, which will not help in anyway.
- Learn and practice Yoga, Pranayama and Meditation. They will develop the mental fitness, which is most essential in studying for long with concentration, to excel in the exam.

An important dimension in life, which is grossly ignored, is the breath. A person can live for a few days without food or water, but cannot exist for a few minutes without air. We take unnecessary care about food and water, but ignore the breath. The more oxygen we take the better will be the burning efficiency of carbohydrates in the cells. With more energy, the cells perform to their maximum capacity and the body becomes very active. This is also important to have good focus on whatever we do. However, we use only 25% of the lung capacity. That is the reason why we do not function to our potential. In India, there were ancient techniques, which have been developed to increase the capacity of the lungs and to use them to their full potential. They are called the Pranayama techniques.

In fact, the breath can be used to control the emotions in the mind, like using a thread to control the kite. There is a direct relation between the breath and the emotions in the mind. Observe the breath as the emotions change. If you are angry or depressed, the breath is shallow, short and rapid. If you are in a cool and happy serene mood, then observe that the breath is deep and of long duration. Normally, the breath is involuntary and its rhythm depends on the emotions. But through some techniques, you can reverse the process. That is by controlling the rhythm of breath, you can control the emotions in the mind. It is important to learn these techniques since they help a lot in preparation for the exam. You will have to sit and study for long durations throughout the year. Above that there will be lot of pressures both social and psychological. To face them all, it is important to manage the emotions in the mind.

## **Hobbies**

While filling up the mains application form, there is a column for the hobbies and other interests. It is better to cultivate some hobby rather than leaving it blank. So be prepared for this aspect from the initial stages itself. It helps a lot in the interview if the questions are asked from your interest areas. You can also think of some peculiar hobbies to attract the interviewer. But be careful that you have a genuine interest in that area and do gather good information so as to answer any question.

Some of the hobbies of candidates are:

- reading books
- listening to music, even some specific variety say telugu old songs.
- reading short stories
- Gandhism
- Introspection
- Philately and numismatics
- bird watching
- cooking
- conducting alcohol de-addiction camps
- social work
- teaching
- Learn and practice yoga and meditation
- weapon systems
- physical fitness, etc.

## **Internet Surfing**

Those who have Internet access at home or office, make complete use of it. Internet is an ever-bulging ocean of information. All the NCERT Books are now available on it's net. You can get India Year Book, Complete Budget and Economic Survey Book and Summary of all bilateral meetings. You can get almost any information from wikipedia website. For example complete information regarding India's space program is available on it.

Addresses of Some Useful Websites:

[www.upsc.gov.in](http://www.upsc.gov.in) - For all official information regarding the exam at any stage.

[www.upscportal.com](http://www.upscportal.com) - For tips, Book list, suggestions, coaching information, etc.

[www.civilserviceindia.com](http://www.civilserviceindia.com) - For tips, Book list, suggestions, coaching info, etc.

[www.visionias.cfsites.org](http://www.visionias.cfsites.org)- For tips, Book list, suggestions, coaching info, etc.

[www.persmin.nic.in](http://www.persmin.nic.in) - Useful after selection

<http://www.ncert.nic.in/textbooks/testing/Index.htm> - To download all NCERT Books

[www.goidirectory.nic.in/](http://www.goidirectory.nic.in/) - It connects to official websites of all Ministries and departments.

[www.meaindia.nic.in/](http://www.meaindia.nic.in/) - External Affairs Ministry website useful for India-World relations

[www.indiacode.nic.in/](http://www.indiacode.nic.in/) - Constitution of India, Central Acts, Supreme Court, etc.

[www.indiabudget.nic.in/](http://www.indiabudget.nic.in/) - For latest budget and Economic Survey

<http://publicationsdivision.nic.in/> - For latest India Year Book

### **Ideal Timetable**

Many candidates give their first attempt without even properly choosing the optionals or completing the syllabus. This is a wrong step, which will have severe consequences later on. This exam can be cleared in the first attempt itself with focused preparation and solid approach. Mainly, the thought that the exam requires multiple attempts should be removed from the mind. With right information and proper material, and sustained hard work for and year, there is no reason why someone should not clear the exam in the first attempt.

The preparation with full momentum should start at least one year before the prelims. Ideally, the preparation should be started in May and by December the mains syllabus should be completed to a large extent. Then from January, prelims preparation should be made, while consolidating the mains knowledge. After the prelims, the preparation should be continued with out any break. The next 5 months will be very crucial and the preparation should be at full momentum. The syllabus in any case should be completed by July. At least two months are required for the revisions.

After the mains exam, interview preparation should be started. Simultaneously, prelims preparation should also be made. This is important since the final result will be given only 4-5 days before next prelims. In case of failure, you should be in a position to give next prelims. So, from the beginning it is better to be prepared for this possibility.

After the mains result, more focus should be made on interview preparation.

### **Studying while doing a job**

Civil Services demand at least one and half year full time preparation. It is obviously difficult to prepare for Civil services while doing a job. It is even more difficult if you are doing a private job like software job. But, It is not impossible. There are many examples who have secured top ranks while doing job. Those who have financial constraints can definitely prepare while doing their job by following tips below.

Tips for those who are preparing while working:

1. Make sure that you get leave for at least 1 month before Preliminary exam and 3 months before Mains Exam.
2. Make complete use of Internet at office. Simply exploit.
3. Evenings shall completely be devoted for preparation.

4. It is very important to have constant contacts with those who are preparing full time. Interact with them regularly.
5. Don't get sentimental about Company if your boss motivates you to work more or when any job challenge is thrown at you. There is a danger of deviation if you get too much involved in the work. Never bring work home.
6. Your work for company should be impassionate.
7. Always remember that you are working only for financial support not for building a career in that company. If you eye for building a career in the company you will definitely be deviated from your cherished goal of Civil Services.

### **How to Study**

The main requirement when you sit for studying is total concentration. Without 100% focus, whatever time you spent on study will only be a waste. You should not do things, which will be distracting when studying. The room should also be neat as it has an impact on the mental conditions. So you should always ensure that the situation should be tuned to have a concentrated study. Even what you do when not studying is also quite important. Suppose you go for a movie because of boredom, then after coming back when you sit for studying then there is every possibility of not focusing completely as all the scenes from the movie starts flowing in your thoughts. Thats why its important to ensure that you don't do distracting things even when you are not studying. If you feel tired, you can go for a walk or listen to some lecture or calm music. You should go very slow while reading trying to understand the core concepts.

### **How to prepare notes?**

It is always better to prepare notes for every topic in the syllabus, especially for the topics, which you prepare from various sources. This aspect is the most crucial stage in the preparation. Finally what you write in the exam only matters. You write only what you remember. You remember only that which you revise before the exam. Note that you will have to revise as many as 1000 topics including all the sub-parts in GS and optionals. Therefore your efficiency in revision matters a lot for your performance in the exam. The revision efficiency depends on the notes that you prepare. So you should always be aware of this practical aspect while you prepare notes for the exam.

The notes should not be prepared as if writing a thesis paper. For any topic, you should have a brief synopsis. Do not even use sentences while writing notes. Note down the key terms and the logical structure with side headings. Also note down the figures and diagrams in a simple manner, which can be reproduced in the exam within time limit.

For most topics, one or two pages of notes are sufficient. Write them down in a logical framework using different inks, so that your efficiency in revision increases. Finally, when revising just before the exam, you cannot spend more than 5-10 minutes for each topic. So keep that in mind always.

Do not spend days together on any topic. The exam only requires a basic clarity which can be obtained by studying one or two standard books and spending more time on thinking. Usually, 3-4 hrs sufficient for each topic. Just be cautious if you are spending more time on any topic inspite of availability of good material.

### **Revision**

Revision is very important for the performance in the exam. The efficiency with which you do revision determines the grip on the subject matter. It should not be postponed till the last phase. As you keep preparing, some time should be spent in revising and consolidating what you read. Otherwise, when you start revision in the end, everything will appear new and lot of time has to be spent in deciphering the notes made. This will be very counter productive and all the hard work will be a waste.

So, revision should also become a part of your everyday schedule. Don't think it's a waste of time, since finally you will save a lot and the pressure will also reduce. Therefore, revise what you read next day. Then keep coming back to it at regular intervals.

Finally, before the exam you should keep two months for the revision. It has to be done again and again, as many times as possible.

Be very careful while preparing notes, keeping in view the requirements of the revision.

### **Where to prepare?**

In any complex situation, the right information at the right time plays a very key role. Similarly, for this complex exam, information has a role. So, you should have the information channels throughout the exam preparation period. This will ensure that you are on the right track.

In this context, the place of preparation becomes important. It is better to be close to where many aspirants are preparing. The main places of exam preparation are Hyderabad, Delhi, etc. There will lot of study material and information circulating in these areas. Also, psychologically it is better if you have co-aspirants with whom you can share your experiences and the mistakes.

In case you are not in a position to do so, do not worry. But ensure that you are getting the right information. So try to establish some contacts with persons in those areas.

### **How to write answers?**

Your answer is the medium through which you are communicating with the examiner. Your final marks depend on how best you can convey to the examiner. Otherwise, all you study and hard work is irrelevant. So ensure that you perform the best while presenting the answer.

The important points to note:

- The pen that you use. Please spent some time in identifying the right pen using which your efficiency increases and the written matter looks like a print.
- The handwriting can influence the marks by 5-10%. It is the first impression on the examiner and matters a lot. It not just sufficient to have a mere legible hand writing.
- Next the matter that we write in the answer is important. It is about how logically we present the answer. You will have to structure the answer in such a way that it becomes easy for the examiner to identify the various dimensions in the answer.
- Concentrate on the introduction and the conclusions.
- Underline the important terms that you use.
- Make innovations like diagrams etc to impress the examiner and to convey the concept better.
- For analysis type use the paragraph form, while for the factual answers you can use point form. But remember that the examiner is not interested in your memory, but in your analytical and intellectual abilities. So try to include them in your answer.
- You can use different colours for the diagrams.

### **How to remember?**

This is the common question before a Civils aspirant. There is such a huge syllabus and so many facts to memorise that some times it seems impossible. Anyhow, remembering is some thing that has to be done well for good performance in the exam.

Information is to be stored as done in a computer. You will have to direct the information to store it in your brain system. Do not merely mug and memorise facts. You will have to develop inter linkages based on what you already know.

Do not try to remember unnecessary numerical facts.

Use mnemonics for remembering facts or some points. The popular mnemonic is the VIBGYOR to remember the colours sequence in a rainbow. Prepare similar mnemonics based on innovations. Your real intelligence depends on how efficient you become in this area.

Regular revision is essential to ensure that what you remember stays in your mind till the exam date. So keep a regular revision schedule.

### **Stress Management**

The Civil Services Examination is highly stressful and pressurizing. It is in fact testing the mental strength of the candidate. The administrator in the Indian context has to deal with very complex and testing situations. So the exam structure and the

process is aimed at preparing the candidates for the real administration. Therefore, take the process as a learning experience.

The stress cannot be avoided, you will have to learn how to manage stress. There are no hard and fast rules for stress management. It is individual specific and has to be developed on your own based on observation.

Some of the following points may be helpful:

- Stress means a disharmony between the mind and the body. The body is in the present moment while the mind keeps fluctuating. It is either regretting the past, anxious about future or dreaming an imaginary situation. This disharmony between the mind and the body is the main reason for the accumulation of stress. So, it is important to live in the present moment, i.e, concentrate 100% on what you do.
- Take deep slow breaths whenever you feel stressed or tensed. Close your eyes and observe the breath. Keep doing this till you feel light and focused.
- Go out for a long walk.
- If you feel agitated in the mind, don't do things, which will aggravate the agitation. For e.g. don't go to a movie. That will only worsen the situation. The idea is to calm down the mind, so do things, which will reduce the agitation. In fact, these are the critical moments, which have a major impact on your preparation. So, be very careful during these phases.
- Talk to some one with whom you can share your emotions without any inhibition.
- Meet people who can give you inspiration and motivation.
- Listen to good music or lectures by great people.
- Practice meditation. This is a very effective way of improving the energy flow.

### **For aspirants in the long term**

There are many undergraduate students who have the target of joining the Civil Services. At this stage there is not much to be done for the exam. However they can note the following points:

- Build a good academic record
- Chose such subjects, which will be helpful for the exam later on.
- If interested and if there are good reputed colleges then join the arts courses. However, even if you have to join the professional courses, do not worry. They will act as an alternative, since this exam has less vacancies and is often risky. But, do concentrate on your courses and excel in the field.
- Read the newspapers and good magazines like the Frontline regularly. You should have a good awareness of whats going on around you.
- Cultivate a habit of participating in extra-curricular activities especially those involving organizing abilities, GK, quizzes, etc.
- Develop some good hobbies
- Improve your personality traits

- Learn to spend lots of time reading books and studying because this is what you will have to be doing while preparing for this exam.
- You should read the life stories of great people as an inspiration. Also, meet the successful people in various fields.
- Listen to good programs on radio and TV.



## APPENDIX - I

### SAMPLE INTERVIEWS

**Name:** Vineel Krishna

**Interview:** CS 2004

**Date:** 11.4.05

**Chairman of the Interview panel:** Gurubachan Singh Jagat

The following interview proceedings are as far as could be recollected. It should be having 90% accuracy with respect to the questions asked and the answers given. The interview proceeded in a very cordial and smooth manner. The members were relaxed and smiling all the time. The interview was the first in the afternoon session.

Vineel Krishna: May I come in ,sir.

GSJ: Yes, Please come in.

VK: Thank You Sir, and Good Afternoon to you all.

GSJ: Good Afternoon Mr. Vineel Krishna, Please be seated.

VK: Thank You, Sir.

GSJ: Mr. Vineel, I see that you are from IIT Madras. Did you not get any campus placement?

VK: Sir, I got placement as Systems Engineer in WIPRO Technologies. But, I did not join the job.

GSJ: What is the reason?

VK: Sir, I had already chosen Civil services as my career. I wanted to have a single focus on the exam. If I had joined the job, neither would I have satisfied the job nor the exam. So, I did not join the job, sir.

GSJ: Why do you want to join the Civil Services?

VK: Sir, I want to be part of the developmental activities. I am also attracted by the challenging and diverse nature of the job. The opportunity provided to make a positive impact on the society, is unparalleled by any other job.

GSJ: But don't you think the scope of bureaucrats has reduced. Your friends must be in good jobs and some must have gone abroad. They must be doing well there. Why do you want to swim against the current?

VK: Sir, I am just listening to my inner voice, which says that this is the area where I must be and doing which I would realize my potential. Regarding the scope of bureaucrats, sir, I agree that there is reduction. But I feel that the govt. is finally concentrating on the core areas.

GSJ: Can you explain it?

VK: Sir, previously, the govt. expanded into unnecessary areas like running hotels, where its presence is not really required. Now, the govt. is focusing on the core areas like social sector – education, health, etc.

GSJ: I see that you played cricket. Are you still involved?

VK: No Sir, I used to play it during school and University days.

GSJ: Why are you not playing it now?

VK: Sir, I don't have the opportunity now. To play cricket we need a team and presently, I don't have one.

GSJ: So, you don't do anything for physical fitness?!

VK: Sir, I go for jogging every day and also I practice yoga and pranayama.

GSJ: Is it Art of Living or...

VK: Yes sir, I practice the Sudarshana Kriya of Art of Living.

GSJ: How much distance do you run every day?

VK: Well sir, I go to the ground and then decide upon the rounds and ensure that I complete it, come what may. Usually it is around 8-9 rounds sir, approx. 3-4 km.

GSJ: Interestingly, you worked as Sub-editor of a magazine. Can you explain this?

VK: Sir, I worked for this Telugu youth magazine. It caters to the educational and career requirements of the rural youth sir. I was contributing for their Science and technology section. Since I was following the current affairs part and since it also helps me in exam preparation, I joined the job.

GSJ: What is its circulation?

VK: It is around 12000, sir.

GSJ: Mr. Vineel, you come from Hyderabad, which had been doing well in many areas and been constantly in news...

VK: Yes sir, the previous govt. under Chandrababu Naidu, had special focus on Hyderabad and developed it in many ways. There was expansion of the roads, improving the infrastructure like the MMTS, parks, water supply and sanitation. Also there was development of tourist locations. The IT sector was particularly developed e.g. the Cyber towers. Recently, the construction of international airport has also started.

GSJ: Is there any problem with respect to housing?

VK: Yes sir, there is a problem, especially for the lower income group to find low cost accommodation. There has also been a concern regarding slum growth in recent times.

GSJ: What do you know about "Women Empowerment"?

VK: Sir, Women empowerment is about providing the necessary tools to the women so that they can overcome the discrimination against them. So that, they can stand on their own and realize their potential. It involves various dimensions like social empowerment, political empowerment and economic empowerment. There are various measures like providing education and job reservations, as done in our state, then providing legal framework, say against dowry, sexual harassment etc, then providing inheritance right to property etc.

GSJ: You said discrimination, how?

VK: Sir, woman is subjected to discrimination right from the birth. In many families, there are no celebrations when a girl child is born. Then with respect to provision of nutritious food, the male child is given preference. Also, the education of girl is a lesser priority. Then, after puberty, the sole concern of the parents is to marry her off

some how. The further education of girl is highly discouraged and she is not allowed to stand on her feet. She is made dependent forever and therefore, the discrimination continues lifelong.

GSJ: In fact the discrimination starts in the womb itself, you must have heard of female foeticide...

VK: Yes sir, unfortunately in many places they conduct pre-natal tests and the female foetus is killed.

GSJ: What do you know about women's reservation?

VK: Sir, there is a bill pending in the Parliament which provides for one-third reservation to the women in the Parliament and the State legislatures. But there is no consensus among the political parties.

GSJ: We have already provided for reservations in the PRIs. But there seems to be some problem...

VK: Yes sir, it has been observed that in many cases her husband or brother or relatives influence the woman member. There is a proxy rule.

1st member: Mr. Vineel, do you have any understanding about rural areas?

VK: Yes sir, I often go to my grand parent's place.

1m: Where is it situated?

VK: Sir, it is a village near Tenali, near Vijayawada.

1m: Which geographical region does it fall under?

VK: Sir, it is in the central part of coastal Andhra.

1m: Can you name the geographical regions in AP and the cropping patterns?

VK: Sir, we have three regions, namely, telengana, coastal andhra and rayalseema. The coastal andhra grows mainly rice. The irrigation facilities are good and therefore, they have 2-3 crops per year. While, the Telengana and the Rayalseema regions are rainfed, depending on the monsoons and are in the rain shadow zone. The irrigation facilities are also less, so mainly there are some dry crops. In rayalseema, they grow groundnuts, and in Telengana, they grow Jowar and cotton.

1m: You said your parents live in Coastal...

VK: Excuse me sir, my father works in BHEL, its actually my grand parents who stay in village.

1m: ok, so coastal area is affected by cyclones. How are they formed?

VK: Sir, the cyclones are weather disturbances formed in tropical seas like the Bay of Bengal. It forms when some conditions are fulfilled like continues availability of warm moist air, some low pressure, the influence of the upper air atmosphere etc.

1m: Which part of the year do they occur?

VK: Sir, during the Oct-Nov and also during May.

1m: Are you sure they occur in May?

VK: Sir, I remember that in 1991 they occurred during the month of May.

1m: What measures would you take for cyclone prevention?

VK: Sir, actually my B. Tech project was in AP cyclone hazard mitigation project (APCHMP). In that we were using the GIS – geographical information system, for cyclone warning and prevention of loss to life. The system is installed at all the coastal district head quarters. The network is integrated with the Indian Meteorological Department(IMD). The IMD gives information about the cyclone, its

intensity and possible direction. Then, the district administration can get specific details of the villages that would be affected by storm surges. Immediately, evacuation orders can be given and suitable measures can be taken.

1m: What measures would you take as Head of the district?

VK: Sir, firstly the complete picture should be understood with the available information. The field level officials should be contacted and asked to take steps for evacuation to cyclone shelters. Then, the disciplined forces like police and the army should be alerted. Also, the state road transport buses should be kept ready. The health department should be prepared for any eventuality. In the long term, sir, the constructions along the coast should be regulated and proper standards should be maintained to withstand high wind speeds.

1m: What do you know about the disaster management in India?

VK: Sir, in India we have a disaster management structure from the centre right upto the district administration. The Central govt. has the Disaster management division in Home Ministry, the Crisis Management Committee consisting of the various Secretaries and ,also, the Centre for disaster management. Similar structures exist at state level and there are detailed manuals for the District administration. The finances are provided by National calamity and contingency relief fund and the PM's relief fund.

1m: Are you aware of any recent developments?

VK: Sir, in the wake of the recent Tsunami disaster, a need was felt for a comprehensive review as to how we should tackle disasters. So, there has been a decision to set up a National disaster management agency with centres at various strategic locations to tackle both natural and manmade disasters.

2member: Why is transparency in administration being given so much importance?

VK: Sir, there is a quotation that "corruption thrives in secret places". The power of the corrupt people comes from the information that they possess and not available with the citizen. The transparency is about providing the citizen with the information about the services of the department and the processes involved. There are many tools being advocated like the Right to information, citizen's charter, e-governance etc. This will help the citizen to be more clear about the quality of services to expect and how to deal in case of a grievance. The pressure will be there on the officials and the effectiveness of the administration will improve.

2m: what is the difference between Freedom and Right to Information?

VK: The NDA govt. is actually accused of diluting the original demand and instead giving a Freedom to Information Act. Now, the NCMP promises to introduce Right to Information Act. The basic difference is that if it is a right then the citizen will have more power and can initiate legal proceedings also. Otherwise, the official will have discretion in case it is a Freedom.

2m: In S&T, which area do you like the most?

VK: Sir, I like the Space technology.

2m:Can you explain the launch vehicle technology of India?

VK: Sir, India started developing the launch vehicles during 1970s. The first vehicle was the SLV. The initial test was a failure in 1980. Then the SLVs became a success

and the programme was upgraded to the next stage, ie, Augmented Satellite Launch Vehicle (ASLV). Later, the commercial vehicles like the PSLV and the GSLVs were developed during the 1990s. Presently, the ISRO has capacity to launch 2 ton satellites into geo-synchronous orbit. It is in the process of developing GSLV mark 3 which will carry the INSAT systems.

2m: Can you explain why the SLV 3 was a failure. What exactly went wrong?

VK: Sorry sir, I don't know the technical details.

2m: Who led the team of SLV?

VK: Sir, it was led by the Honourable President APJ Abdul Kalam ji.

2m: What is the latest technology used in GSLV?

VK: Sir, the GSLV uses the cryogenic engine in its last stage. Presently, we are using Russian engines, but in near future our cryogenic engines will be ready.

2m: Why do we use cryogenics?

VK: Sir, with present technology only cryogenic engine can be used to place heavy satellites like INSAT in a high geo-stationary orbit. They use low temperatures and the liquid hydrogen and liquid oxygen. It is a complicated technology.

2m: Do you know about Hyderabad Central University?

VK: Yes sir, its quite near to my place.

2m: What special things happen there?

VK: Sir, the university is known for its high standards. They have a very good social sciences department, then the management course is also good and the computer science department also has good reputation...

2m: What about the basic sciences?

VK: Yes sir, the basic science is also quite strong in HCU.

2m: What is the difference between Sudarshana Kriya and Kapala Bhati?

VK: Sorry sir, I don't know.

2m: What technology developments take place in Hyderabad?

VK: Sir, Hyderabad is main centre for many technological developments. Especially, in defence technology, the complete development of missiles takes place here. Also...

2m: Can name the specific labs of DRDO here?

VK: Sorry sir, I don't know the names.

2m: Any other area of defence tech, say, don't you know about electronics and metallurgy...

VK: Yes sir, the metallurgy related developments are done in MIDHANI.

2m:MIDHANI?!

VK: Sir, I am not sure if it is only for production or if there is research lab attached to it.

2m: Can name some CSIR labs in Hyd.?

VK: Sir, we have the CCMB and the IICT, as far as my knowledge goes.

2m: can you name the research that takes place in IICT?

VK: sir, the Chemical related aspects are dealt in this lab. I don't know the specific technologies, but I am aware that IICT is involved in developing alternatives to ozone depleting substances like CFCs, so as to comply with the Montreal Protocol.

2m: But that does not involve India , it is only for the developed nations...

VK: Sir, the IICT is involved in the development of the alternative technology...

2m: Can you name the products developed?

VK: Sorry sir, I don't know the exact technical names.

2m: Mr.Vineel, as a technologist, you must have thought about using creativity and innovation in improving the administration. Can you explain?

VK: Sir, I always believe that the technology can be used to improve administration to be more efficient and citizen friendly. To take a specific example, the biometric systems can be used. They can be applied in ensuring the attendance of the staff. In rural areas, often the staff is absent from their work. The biometric system can be used to ensure compliance. Also, it can be used in identifying the loan beneficiaries. Often, the same group in a village corners all the loans under different schemes. Using biometric systems, this can be avoided. Also...

2m: But these things are already being used. Tell me something more innovative?

VK: (pause for a couple of seconds to think)...

2m: ok ok,

3member: Mr.Vineel, are you proud to be an Indian?

VK: Of course sir, I am proud to be an Indian.

3m: Can you say why, some important factor...

VK: Sir , I particularly like the composite culture of India. If we look at the world, even small nations with hardly one or two communities are not able to exist peacefully. There is so much of conflict. Whereas, in India, every 500 km the language changes, the culture changes. But still we exist as a nation. I believe we have an important message for the world, we are a role model...

3m: What about the achievements in S&T, say in space technology?

VK: Yes sir, we are among handful nations who have the complete technology to manufacture and send satellites into space. Our remote sensing data is of high quality that even the USA is purchasing it from us. It has been a remarkable achievement for India considering the financial and other constraints...

3m: Why do you think India was able to do this?

VK: Sir, I think the visionary leadership of Vikram Sarabhai played a major role. He created leaders at various levels, which ensured the continuity of the programme...

3m: Don't you think Nehru contributed...

VK: Yes sir, Nehru had a great role. He believed that technology can elevate the nation and provided the necessary resources and autonomy to the scientists like Homi Bhabha and Vikram Sarabhai. The foundation was really quite strong.

3m: How will your technological background help you as an administrator?

VK: Sir, firstly I think the problem solving techniques learnt in engineering can as well be applied in administration. The technological background helps in a structured and logical framework of mind, which is useful in any problem-solving situation. Then, the tech orientation will always be at the back of the mind. So whenever any new technology comes, we tend to think how it can be applied in improving the administration. Also, sir, I have the contacts with my college friends who are now working in various technology areas and management. We keep discussing the

developments on our e-groups. This gives me awareness in latest developments and how they can be applied in administration.

4m: Mr.Vineel, you are having a background in Telugu. I will ask you a question – “Thinte garele thinali, vinte bharatame vinali” (telugu) who said this?

VK: ...(pause) .. Sir, I think it is said by character in Gurajada’s play – “Kanyashulkam”.. (actually, a wrong answer)

4m: Who wrote Andhra mahabharatam?

VK: Sir, by Nannaya, Tikkana and Yerrapragada.

4m: Do you know about the Civil society- its characteristics and the status in India?

VK: Sir, Civil society is a broad term which includes ngos, pressure groups, trade unions etc. In fact, it is not properly defined and therefore can include any organisation, which is not related to govt., working on some area of public interest etc. The civil society organisations have developed well in the recent past in India, but there is good potential for improvement. In USA, the civil society is really quite strong.

4m: Can you name some civil society groups?

VK: Sir, we have Sulabh international, Human rights watch, PUCL, CSE, CRY etc.

4m. What do you understand by Third sector?

VK: It is other than the Public and the private sector, sir. In recent times, the Third sector has been given a major role.

4m: Can you specifically tell me the Maoists talks in AP?

VK: Sir, the previous elections had Maoist as the main issue. In fact, there was an assassination of the previous CM...

4m: Assassination or assassination attempt?!...

VK: Sorry sir, I meant assassination attempt. Then the early elections were called out on the issue. The Congress promised in its manifesto that peace talks will be initiated. Therefore after coming to power, the Congress govt initiated the talks and the ...

4m: ok ok. Then, can you tell me about the Telengana movement. Not about TRS or recent elections, but specifically about the movement.

VK: Sir, the Telengana was part of the Hyderabad state under Nizam. After independence, when the Andhra state was formed, the Telengana area was merged with the Andhra. At that time promises were made regarding Telengana’s interests. But, by late 1960s, there was growing discontentment and a feeling of betrayal among the people of Telengana. There started a “Jai Telengana” movement for the separate statehood, and ...

4m: Ok Ok. Do you think small states will lead to development?

Vk: Sir, we have many small states which are backward, at the same time there are big states like Maharashtra which are ...

4m: But even in Maharashtra there is demand for Vidharba...

VK: Yes sir, there are some relative differences in development. In fact, we cannot have a general rule that only a small state will lead to development. It really depends on the political and administrative skill as to how they use the resources optimally.

GSJ: You have a hobby of reading books. What kind of books do you read?

VK: Sir, I read all types –both fiction and non-fiction, in general. But I like reading about the life stories of great people.

GSJ: Whose biography did you read recently?

VK: Sir, I was reading about Marie Curie, written by her daughter Eve Curie.

GSJ: Which is your favourite fiction?

VK: Sir, I like reading the novels of R. K. Narayan.

GSJ: Ok Mr.Vineel. Thank You.

VK: Thank You sir.

Finally, 201 marks were awarded for this interview. Rank-28



**Name:** Mutyalaraju Revu

**Interview:** CS 2006

**Date:** 17.4.07

**Time:** 10:00 am

**Chairman of the Interview panel:** Shri. Subir Datta (Retd. IAS)

Raju: May I come in Sir?

Chairman: Yes, please.

Raju: Good morning, Sir. Good morning, Madam. Good morning, Sirs.

Chairman: You are Mr...??

Raju: (Still in standing position), Matyalaraju Revu Sir.

(Chairman is writing something. Other members are keenly watching the candidate.)

Member 2: Please take your seat.

Raju: Thank you, sir.

Chairman: Mr. Revu, You did B.Tech from REC Warangal, ME from IISc, Bangalore. But why did you do diploma?

Raju: Sir, After completion of my 10th class, based on my financial background, my father joined me in polytechnic. After completion of polytechnic, we do get jobs. Also, since I will get scholarship, the amount of money spent on me is less.

Chairman: That means you will get job after diploma.

Raju: Yes Sir, I got a private job. Company is Cain energy limited.

Chairman: Then, why did you join B.Tech?

Raju: Sir, After completion of my diploma, I wrote ECET and I got state 1st rank. So I convinced my father that I will join REC which is a premier Engineering institute in our state.

Chairman: Then, you joined ME because your father insisted on that?

Raju: No Sir, It is based on my project guide's suggestion.

Sir, in fact there are two streams to enter into B.Tech. One through EAMCET after Intermediate and other is through ECET. After ECET...

Chairman: What question I have asked?

Raju: Sorry Sir, you have asked me why I joined ME after B.Tech.

Chairman: OK. Then stick on to the question.

Raju: Sir, I am explaining it.

Chairman: Be specific.

Raju: OK sir, during my final year I got all India rank 3 in Gate. My guide on knowing this result suggested me to join IISc. He further told that this is the golden opportunity for me. Then, I informed about my career option as civil services. He then convinced me by saying that I can write civil services after M.E. also.

Chairman: That means you are preparing for civil services while you are in IISc?

Raju: I beg to differ with you sir. I started my preparation only after completion of M.E.

Chairman: You have written that you joined Railways in September 2004. That is of

which exam?

Raju: Sir, This is based on IES-2003.

Chairman: That means you are in IISc.

Raju: Sir, I completed my second semester at that time.

Chairman: That means you have prepared for IES in IISc.

Raju: Sir, I have given IES in my own background i.e., Electrical Engineering. Hence I need not prepare much for this exam. I just gave the exam.

Chairman: For how many years you are in Railways?

Raju: Sir, I joined Railways on September 2004. Then I took leave for 1 year, i.e., leave on loss of pay.

Chairman: What did you do in that year?

Raju: Sir, I have prepared for this exam.

Chairman: How many months you are in Railways?

Raju: Sir, roughly 5 months.

Chairman: That means you are in Railways till February.

Raju: Sir, I am in Railways till the result of civil services exam 2005 was out. I was given leave for interview preparation in March.

Chairman: Then what did you do after the declaration of the result?

Raju: Sir, Once the results were out, I came to know that I would get IPS. So, I convinced my director for leave to appear civil services again. My director gave me leave.

Chairman: When did you join IPS?

Raju: Sir, I joined IPS on December 18, 2006.

Chairman: Which part of training you missed?

Raju: Sir, I missed foundation training in Mussorie. At SVPNPA, training started on December 18, 2006. So, I haven't missed any training at Hyderabad.

Chairman: How many days you have taken leave for interview?

Raju: Sir, 4 days.

Member 2: How was your IPS training?

Raju: Sir, training is good and we are enjoying every aspect of training.

member 2: What are you learning in training?

Raju: Sir, our training is divided into two parts. Indoor and outdoor. In indoor, we have subjects like police in modern India, criminology and law subjects like IE Act, CrPC, IPC and other subjects.

Member 2: You are in IPS for 4 months. So I can ask some questions.

Raju: Yes, sir.

Member 2: Do you aware that the confession admitted to police is not allowed as witness. Why?

Raju: Yes sir. Confession admitted to police is not allowed as witness. Since there is always a possibility of getting the confession in the way the police like, law doesn't allow it.

Member 2: What is Res gestae?

Raju: Sir, All the circumstances leading to the same transaction are allowable as evidence.

Member 2: You are on the line. Could you explain more?

Raju: (after 2-3 seconds), If some people wanted to commit dacoity and in the process if they theft a vehicle, even though theft of vehicle is not connected with dacoity but it is admissible as it forms the circumstance leading to dacoity.

Member 2: Could you tell me the section, which deals with Res gestae?

Raju: Sorry sir, I could not remember the exact section.

Member 2: Then how sections you were taught in IE Act?

Raju: Sir, In our academy our sirs are not teaching according to sections. They are teaching the sections which are more useful for the police at first.

Member 2: Do you aware of RTI?

Raju: Yes. Sir. It is Right to Information Act.

Member 2: What are the provisions in RTI?

Raju: Sir, According to provisions of RTI, every government department has to nominate one officer as information commissioner to give information about duties, responsibilities and functions of various officers working in those departments...

Member 2: Then what is the benefit to common man?

Raju: Sir, Common man can know the functions, duties & responsibilities of various officers. They can know the status of their applications. This also increases transparency and accountability of officers. Hence reduces corruption.

Member 2: How can you say that people will get required information?

Raju: Sir, There is a provision in RTI that any one who refuses to give information or delays 30 days for giving information, they are liable for cut in salary.

Member 2: How much salary cut?

Raju: Sir, I think it is 250 Rs./ day.

Member 2: It is not cut from salary. It is separately cut.

Raju: Thank you Sir.

Member 2: Can you tell me what is the maximum limit?

Raju: Sorry sir, I don't know.

Chairman: Your hobbies are meditation, motivating others and Indian Mythology. Don't you think that all are inward looking?

Raju: Sir, whenever possible I play cricket in addition my hobbies, which is a team game.

Member 2: Tell me which countries will reach final in the present world cup?

Raju: Sir, I think Australia and Srilanka.

Member 2: Already two countries reached semifinals i.e., Sri Lanka & Newzealand. What do you think about other two?

Raju: Sir, I beg to differ with you. Actually three countries i.e., Srilanka, New Zealand and Australia reached semifinals. 4th team depends on the outcome of the today's match between England & South Africa.

Member 2: Do you know about fly ash?

Raju: Sir, Thermal power stations produce fly ash while generating electrical power.

Member 2: Which state is using it more? Definitely it is not Haryana, My own state.

Raju: Sorry Sir, I don't know.

Member 3 : (X-A) (X-B) has highest X power of 2. Do you agree?

Raju: Yes, Sir.

Member 3: (X-A) (X-B) (X-C) has highest X power...

Raju: 3, Sir.

Member 3: Then, tell me. What is the answer for (X-A) (X-B)... (X-Z).

Raju: (after 3-4 seconds), It must be Zero. Sir, because of the presence of the term (X-X).

Member 3: Whom do you think a greatest mathematician of all times?

Raju: Sir, Srinivasa Ramanujan, because even though he lived for only 33 years, he contributed more to mathematics in the areas like Numerical methods, Solution of algebraic equations, number theory like prime numbers etc.

Member 3: Can you tell me the formula for prime numbers?

Raju: Sir, exactly I don't know but recently IIT Kanpur professor along with his students wrote a software program that gives whether a number is prime or not within less time.

Member 3: You are an electrical engineer. Tell me where prime numbers are used?

Raju: Sir, they are used in coding.

Member 3: I am asking a question in your engineering only. Tell me how prime numbers are used in coding?

Raju: Sir, exactly I don't know. But to the best of my knowledge, if the code length is prime, decoding and encoding are easy.

Member 3: You are on the line, but not exact answer.

Member 1: Your hobbies are meditation, motivating others and Indian Mythology. What you do in motivation?

Raju: Madam, many of classmates and Juniors came to me for clearing their doubts in subjects as I am the toper of my class. I usually listen to their problems regarding their understanding of concepts as many have problems either in one or many subjects. I tell them that every subject is easy if knew the concepts clear and we should like the subject what we are studying...

Madam: Do your respond same for all?

Raju: Madam, I usually spend more time with those who are very much lagging. I take classes to clear their doubts.

Madam: Then do you call it motivation or strategic learning?

Raju: Madam, strategic learning may be the correct term.

Madam: What is the difference between these two?

Raju: Madam, motivation is a general term which includes not only academic motivation but also others like psychological, etc., Madam, I don't know exactly the meaning of strategic learning.

Madam: Which books you read in Indian Mythology?

Raju: Madam, I read Ramayana and Mahabharata.

Madam: Since your hobbies are motivating others and Indian Mythology, tell me how Krishna motivated Arjuna?

Raju: Madam, When Arjuna refused to fight with friends, teachers, Krishna told him

that it is the duty of the king to protect Dharma and fight wars for protecting it. We should not move away from our duty. Since soul is immortal and of which is born, death is certain, of which death happened, birth is certain. Hence you should not think that you are committing crime. Also he motivated him by saying that we should do our work only. We should not think about the results of our actions. Otherwise, attachment to the results will occur which is a major reason for unhappiness.

Madam: Do you practise it?

Raju: Madam, It is very difficult to practise.

Madam: Why?

Raju: Madam, for example, if we are about to play a cricket match, we will think about the winning of the match, which is actually the result of the playing that match.

Madam: One last question. What kind of training our team got during our last year world cup?

Raju: Madam, exactly I am not able to recollect it. But it is like “we can do it this time”

Madam: Sorry, It is not last year world cup but it is 2003 world cup. The team was given psychological training.

Raju: Yes, Madam

Member 4: You studied your B.Tech. from REC Warangal and M.E. from IISc Bangalore. Are you proud of your institutions like IISc?

Raju: Sir, I am proud that I have studied in a great institution like IISc, which according UNESCO survey conducted in 1997 was in 18th place among world universities. Recently a Chinese university conducted a survey in which IISc was placed at around 250th position.

Member 4: Do you think that 250th position is a good position?

Raju: Sir, even though it is not a good position, the position depended on the parameters they have taken into consideration like no. of nobel laureates present, no. of research papers presented, etc.

Member 4: Who are nobel laureate present in IISc?

Raju: Sir, now there is no nobel laureate in IISc. Earlier Sir C.V.Raman worked in IISc. Now, there are two internationally reputed professors working there.

Member 4: Last year government proposed to stop B.Tech entry into IITs. Do you support that?

Raju: Sir, I support it. Sir, due to hectic schedule, the professors of IITs are not able to concentrate much on research. Once the B.Tech entry is stopped, they will get more time for research and quality of research will increase.

Member 4: Don't you think the quality of B.Tech students will reduce as IITs are known for better professors?

Raju: Sir, those students who are earlier eligible for entry into IITs, they will join NITs. Since they are the core students I don't think the quality will reduce. But the professors in other institutes should get sufficient training to reach the level of IIT professors.

Member 4: You agree to that proposal. But the government has withdrawn the proposal due to very good argument against it. Can you tell me?

Raju: Sorry sir, I don't know.

Member 4: What do you think is responsible for reduction in research?

Raju: Sir, IISc is not able to retain those students who completed M.E. and other courses there. One reason is brain drain, Sir. Second one is that research is not attractive in India, Sir. For example, in our batch out of 230 students who completed M.E. only 2 joined for Ph.D. in IISc. At the end of our M.E. we got campus placements. The minimum salary is around 6 Lakhs/ annum. It is attracting most of us. Those who are really interested in research, they are going abroad as they will get more money and research is attractive there. Here, a Ph.D. student gets 12,000 - 15,000 Rs per month. Also material considerations have risen these days, sir. We have to include some compulsory courses in morals & ethics to stop this.

Member 4: Instead of choosing job or research, why did you choose services as career option?

Raju: Sir, The incident that took place in my village in November 2000, when I am in 3rd year of B.Tech, has changed my career options. Nearby Engineering college students came to our village for picnic as our village has excellent beach. 7 of them drowned in the Bay of Bengal and all of them has taken sand into their lungs in addition to water. Since our village is an island, there are no transportation, medical & educational facilities, it took 2 hours to reach nearest town which is 16 Km away from my village. By that time, 6 out 7 were died, Sir.

Chairman: You are telling about an incident in your village. In that case who will respond first?

Raju: (3-4 seconds silence)

Chairman: Whether it is Block development officer, Doctor, or Police.

Raju: Sir, It is the police to respond first.

Chairman: Then, you are in IPS. Why did you come?

Raju: Sir, even for police it took 2 hours to reach that place as there is not enough transportation facilities.

Chairman: Thank you.

Raju: Thank you, Sir. Thank you, Madam. Thank you, Sirs.

---

Finally, 195 marks were awarded for this interview.

**Name:** Vijay Kumar Mantri

**Roll. No:** 61511

**Interview:** CS 2006

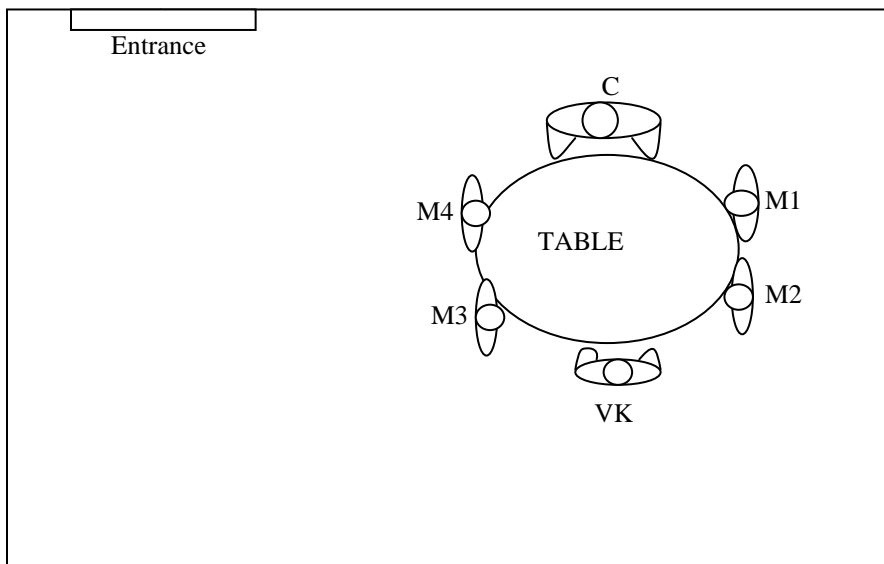
**Date:** 12.4.07

**Time:** 4:00 pm

**Chairman of the Interview panel:** Shri. Subir Datta (Retd. IAS)

Description: There were 7 panels (1.Shri. Subir Datta, 2.Prof. D.P. Agarwal, 3. Air Marshal (Retd.) Satish Govind Inamdar, 4. Ms. Parveen Talha, 5. Dr. Bhure Lal, 6. Ms. Chokila Iyer, 7. K. Roy Paul). Each panel was interviewing 9 candidates per day (5 in the morning and 4 in the afternoon). After entering UPSC and finishing all the formalities, we were very curious to know whose panel we had got. Then came the news that ours was Subir Datta's panel. I was the last person to be interviewed. When my turn came at around 4:00pm, there were only 3 people left in the waiting hall. I was guided to the Subir Datta's room and asked to wait outside for 5 minutes. After 5 minutes, bell rang and the person told me to go inside.

As I entered I could see a lady member, hence I wished her first. Then I went to my chair and wished the chairman and other male members. The member to my left (M3) asked me to sit. I took the chair and thanked him.



C – Chairman (Subir Datta)

M1 – Member 1 (Lady), M2 – Member 2, M3 – Member 3, M4 – Member 4.

VK – Vijay Kumar Mantri

C: (Looking at me and the photo – photos of all the candidates of that panel will be collected and sent to the panel) You are Mr. Vijay Kumar Mantri,.....working in BHEL since Aug 2003,....done B. Tech in Mechanical Engineering from IIT Madras.

VK: Yes Sir (after each detail)

C: You are from Parkal, Is it a coastal area?

VK: Sir, it is a land locked area. It is in Warangal district, which is in northern part of Andhra Pradesh.

C: It is a Naxal area...very dangerous place....

VK: Sir, it is not very dangerous for common people.

C: If you become IAS or IPS, then it will be dangerous for you?

VK: Sir, I will take that as an opportunity to eliminate the Naxal problem.

C: What opportunity??@#\$\$?, it is very dangerous.... (he was talking to himself....I just smiled)

C: You are working in BHEL...which area are you working?

VK: Sir, I am working in Heat Exchangers Engineering department at BHEL Hyderabad. My job is to design Heat Exchangers.

C: Heat Exchangers??

VK: Sir, Heat Exchangers are auxiliaries in power plant, like Oil Cooler, Generator Air Coolers and Exciter Air Coolers....

C: How do you design Heat Exchangers?

VK: Sir, this Heat Exchanger is a Shell & Tube Heat Exchanger and the oil will be cooled....

C: (interrupted) Explain to me as if you explain to a layman?

VK: Sir, there will be oil in bearings for cooling and lubricating purpose. This is like grease and ...

C: (interrupted) By what is it cooled?

VK: Sir it is cooled using water.

C: Grease cant flow...!!

VK: Yes Sir, grease cant flow. But to make it clear, I have taken the example of grease.

C: But you shouldn't make wrong statements in order to make it clear..(Actually I didn't make a wrong statement; I just compared oil with grease. I thought it was a trap and didn't argue further.)

VK: Yes Sir,...(ready to proceed with explaining, but he asked the next question)

C: OK, you participated in Athletics. What are the events you have participated?

VK: Sir, I participated in 100m running and road race from my hostel in B.Tech.

C: Road Race?

VK: Sir, it is 7.5km marathon race around our campus.



C: But 100m and road race are not compatible!!

VK: Sir, there was no better participation from our hostel. So, I participated.

C: Then you must have lost.

VK: Sir I could finish....

C: (Interrupted) Did you finish in first three places?

VK: No Sir. (...Participation is more important than winning...)

C: I don't know your philosophy, Mathematics and Mythology.....so, let me ask you in Current Affairs....You must have been reading news paper since you started preparing Civil Services...So, you must have read about inflation in recent news...what is inflation?

VK: Sir, inflation is the increase in rates of commodities comparing to the rates last year same week.

C: what are its indicators?

VK: Sir CPI and WPI.

C: What is the difference between CPI and WPI? Is it the basket or method of measurement?

VK: Sir, it is the basket.

C: What causes inflation?

VK: Sir, there are two causes for inflation, one is on supply side and other is on demand side?

C: What is the demand side reason?

VK: Sir, demand is growing up due to increase in living standards.

C: But, there are still 25 crores of people living below poverty line???

VK: Sir, there is an overall increase in living standards.

C: OK, what is the supply side reason?

VK: Sir, Supply is not meeting to the increase in demand and there are also crop failures.

C: What are the steps that government has taken?

VK: Sir, recently government has increased CRR, but that only can solve the problem on demand side....

C: (interrupted) What is it doing on supply side?

VK: Sir, government is concentrating on agriculture to increase output. It is also curtailing exports of sugar to meet domestic needs...

C: Is it curtailing exports of sugars?

VK: Yes sir, logically it should curtail exports to alleviate inflation...

C: OK, take example of wheat, what is that government doing?

VK: Sir, we are importing wheat to meet domestic shortage.

Then, he made eye contact with next member (M1) to proceed.

M1: There is a relation between philosophy and mathematics....(pause)

VK: Ma'am, Philosophy and Mathematics are both fundamental and widely applicable....

M1: OK, let me finish my question....blah .....blah....what is the relation between mathematics and philosophy that can be implied from ancient literature?

VK: Ma'am, there is a sloka in one of the upanisads (actually from Isavasyopanisad....but I couldn't recollect there). It says:

*Om*

*purnamadah purnamidam purnat purnmudachchate I*  
*Purnasya purnamadaya purnmevavasisyate II*

Ma'am from mathematical point of view it means: purnam means infinity. So, when infinity is subtracted from infinity still infinity remains.

From philosophical point of view it means: when infinite Brahman manifests as infinite atman and jagat still Brahman remains infinite.

Thus philosophy and mathematics inspired each other and drew inspiration from same source.

M1: blah...blah....(she was further discussing about it.)...What is the relation between mythology and philosophy? What are their sources? Can you explain?

VK: Ma'am, mythology is body of literature, which explains about the lives of divine personalities and divine incarnations. This body of literature consists of 4 vedas, 18 Puranas, Ramayana & Mahabharata. Philosophy mainly derives its source from upanisads and gita which are parts of Vedas and Mahabharata respectively. So, Ma'am, I believe that Indian Mythology and Philosophy drew from same source and always had relationship.

M1: In ancient days, we observe that lot of importance was being given to humanities than the sciences. Now the priorities changed and the arts subjects are being looked down.....blah....blah...why?

VK: Ma'am, I believe that there is a growth of materialism. Industrialisation has science subjects as its base. Materialism requires science subjects to prosper. Humanities subjects caters to metaphysical aspirations of a person which are losing value (and further explained about it).

M1: This is my last question,...you said you listen to music....what music?

VK: Ma'am, when I was in IIT, I used to listen to lot of english pop songs, but now I listen to Old telugu and Kishore kumar songs.

M1: What do you like in music?

VK: Ma'am, I like melody and .... Lyrics.

M1: OK, you actually listen to the song.

VK: yes Ma'am.

M2: Mr. Mantri! You read mythology....so, you must have read Ramayana and Mahabharata. Which one you think is more relevant to present society?

VK: Sir, I think Mahabharata is more relevant to present society. Ramayana depicts about dharma. But, Mahabharata depicts about dharma, artha, kama and moksa.

M2: Mr. Mantri! Do you think kurukshetra war could have been avoided?

VK: Sir, I think Kurukshetra war couldn't have been avoided. Because, the very purpose of Krishnavatara was punishing dushta, that is killing of Kauravas and their vicked allies. Krishna plotted everything in such a way that war happens and all the Kauravas are killed.

M2: Mr. Mantri! What is your opinion about Bhishma?

VK: Sir, I think he is a great personality in Mahabharata.

M2: Do you support him not doing anything to stop Draupathi vastrapaharana.

VK: Sir, not actually. But, he is very strict to vows and he vowed to his father that he would protect and support the king of Hasthinapura. I think that is why he couldn't do anything to stop Draupathi vastrapahara.

M2:Mr. Mantri! Do you support BCCI's decision of capping endorsements of players?

VK:Sir, I don't support BCCI's decision of capping endorsements of players. These endorsements have been there for long time. Two bad matches threw india out of world cup. This shouldn't make BCCI take such decision. Moreover, if you take sachin as example, he spends just one day for each advirtisement and he doesn't even do dubbing. He has a separate manager to take care of his endorsements. I think they should have freedom.

M2: You said that you will consider civil servant job as an opportunity to alleviate naxal problem. How do you approach to that problem?

VK: Sir, The philosophy of naxalism is based on Mao philosophy. Mao asks them to do guerilla war by fish swimming. As a fish swims in water, naxal swim through villages and wage guerilla war. If we remove this support, then we can succeed in alleviating in naxal problem.

M2: All the terrorists, militents and naxalites do fish swimming only. But how do you arrest this fish swimming?

VK: Sir, we should get people's support. There is a fear of police in people's minds. The Police should try to remove that by more contacts with people through social service.

M3: Mr. Vijay! You seem to be a serious guy with philosophy and mythology so on. Apart from this have you read about western philosophy?

VK: Sir, I read Western Philosophy as part of Civil Service preparation.

M3: So, which philosophers you liked most?

VK: Sir, I like Spinoza's theory of substance.

M3: Why?

VK: Sir, Spinoza's philosophy of Substance is very much similar to the Advaita philosophy of Sankaracharya.

M3: Have you read the philosophy of Bertrand Russel, who is a great philosopher and mathematician.

VK: Yes Sir, I read his philosophy 'Linguistic Analysis' as part of my Civil Services preparation.

M3: Can you explain his philosophy?

VK: Sir, he says that all the earlier philosophers used such a language which always had ambiguous meaning. He says philosophical language should be a common language which is used daily by common people and should convey single meaning. By this method he says that many philosophical problems could be solved.

M3: Can you explain Dialectic theory?

VK: Dialectic theory....yes sir.....Dialectic theory says that for every concept there is counter concept, and these two give rise to a new concept, which always has a counter concept and so on goes....

M3: Two great philosophers used it. Can you name them?

VK: Yes sir,.....(not able to recollect).....

M3: Carl Marx has used it.

VK: Yes sir, Carl Marx has used it for Materialism and called it Dialectic Materialism.

M3: Do you do any other light reading like novels?

VK: No Sir.

M3: What music you listen to?

VK: Sir, I used to listen to english pop music during my IIT days. But now I listen to Old Telugu songs and Kishore Kumar songs.

M3: Why change?

VK: Sir,during my last days in IIT, I picked up this Kishore Kumar songs and Old telugu songs from a nearby room. And I grew interest....(They actually laughed at it...it was a releif for me)

M4: Mr. Vijay! Recently there was a comment on IITs that “IITs are good at conducting Joint Entrance Examination”, there is a negative connotation about it. Can you get it.

VK: ...uhhnn...no sir.

M4: think.

VK: ....I think it means that IITs are good only at conducting Exams not at academics..

M4: Is that really so...

VK: Not exactly sir,...for example...Before entering IIT, I new nothing but solving few mathematical problems. But after coming out of IIT, I am a confident man.

M4:....blah...blah...Government is spending so much on IITs.....IITs are main source of intellectuals....Many IITians leave country.....blah...blah...What do you suggest to stop this brain drain?

VK: Sir, I feel that there should be compulsory course on Ethics and Social responsibility. All my friends who had gone abroad have gone with academic zeal...they don't know that 25 crores of their fellow Indians are below poverty line.

M4: You were saying that infinity minus infinity is equal to infinity. Can you give an example?

VK: ...(thought for some time)....Sir, not getting any examples....its so simple to understand that iam not able to get example....(I thought...I shouldn't have said this)

M4: Ok, I will you a hint...take set of natural numbers.

VK: Yes sir, (I actually jumped at the answer with that hint). Set of Natural numbers minus set of even number is equal to set of odd numbers, which is infinity minus infinity is equal to infinity.

C: Ok, Vijay Thank You.

VK: (I thanked all and left the room without looking back)

I saw the time...My interview lasted 37 minutes.

Finally, 195 marks were awarded for this interview.

----x-----

## Appendix – II

### MARKS OF SUCCESSFUL CANDIDATES IN CSE-06

The following list of marks has been prepared through voluntary contributions by candidates appeared for Mains Exam.

Rank	Name	Essay	GS		Optional-1			Optional-2			Interview*		Total
			I	II	Name	I	II	Name	I	II	Board	Mark	
1	Mutayala Revu	135	173	147	Elec. Engg	200	195	Maths	179	172	1	195	1396
2	Amit Saini	88	177	174	Zoology	187	192	Medical Sc.	174	170		210	1372
8	Anandita Mitra	110	168	153	Geography	179	134	PubAd	208	181		190	1323
10	juhi mukherjee	130	143	141	Economics	183	191	Geography	163	179	5	185	1315
16	Shammi Abidi	131	183	184	Anthro	125	168	PubAd	186	172		156	1305
17	Remya Mohan	125	181	146	PubAd	173	161	Others	155	174		185	1300
18	Sriman Shukla	120	170	114	PubAd	198	156	Others	185	180		174	1297
19	Sheetal Verma	112	175	162	Economics	191	150	Geography	145	172		189	1296
24	Anurag Tiwari	115	126	179	PubAd	160	152	Geography	165	170	7	225	1292
25	Udit Prakash	120	189	149	Physics	178	184	Hindi	168	152		150	1290
27	Anurag Srivastava	140	171	164	History	174	170	PubAd	154	166	1	150	1289
28	Vijay Kumar Mantri	101	168	162	Maths	155	166	Philosophy	153	188	1	195	1288
37	Swatantra Singh	107	164	126	Geography	188	157	Mech. Engg	202	171		165	1280
41	Ardra Agrawal	143	190	138	Political Sc.	177	133	Hindi	170	168		156	1275
46	Satwant Khanlia	140	192	168	Psychology	140	158	Sociology	154	171		147	1270
47	Adarsh Singh	108	179	161	Psychology	156	175	Sociology	196	127	1	168	1270
54	Avula Ramesh	83	172	185	Anthro	168	182	PubAd	186	133		159	1268
59	Jawahar P	120	163	141	Agri	172	155	Botany	167	172		174	1264
65	Sandep Kumar	110	165	161	Psychology	148	143	PubAd	158	191		180	1256
75	Shatrughna Sinha	125	192	143	Geography	155	148	PubAd	172	151	3	165	1251
81	Veera Raghava	70	175	136	Geography	175	157	PubAd	180	179		177	1249
86	Nitin Tiwari	107	172	171	Physics	180	132	Chemistry	183	132	3	171	1248
89	Vikramjit Singh	128	183	147	Geography	179	153	Psychology	134	170		150	1244
90	Deepak K Jha	100	134	175	Maths	149	184	Mech. Engg	157	150		195	1244
94	Rana Dilip	110	199	149	Geography	156	153	History	171	156		149	1243
98	Prabhu N Singh	90	173	161	Geography	151	164	Law	167	168	2	168	1242
105	Dhrubajyoti De	148	134	181	Geography	180	150	PubAd	116	165		165	1239
114	deepak	145	167	147	History	145	114	Commerce	178	198	5	145	1239
112	ruchika jain	131	123	175	Anthro	181	160	Anthro	92	180	5	195	1237
122	C Venkata S Reddy	122	179	118	Geography	187	182	Anthro	186	171	3	90	1235
121	Syed Waquar Raza	115	165	105	Geography	190	159	Maths	150	181		170	1235
123	Abhishek Prabhat	116	150	136	Chemistry	125	168	Philosophy	180	179	2	180	1234
143	Rajiv Jain	119	160	132	Physics	176	158	Maths	177	151	1	156	1229
156	Anup Kumar Sahoo	94	178	140	Economics	153	126	Oriya Lit.	181	178		174	1224

158	samriti goel	134	117	148	Commerce	180	171	PubAd	178	146	2	150	1224
159	Avinash Kumar	119	147	137	Maths	182	189	Physics	145	165		140	1224
172	Naveen A S	116	171	125	Others	181	167	Political Sc.	155	165	5	140	1220
183	prashant mishra	100	116	125	Maths	187	126	Physics	195	174	6	195	1218
193	Sudhanshu	120	174	64	Maths	178	176	Mech. Engg	149	157	4	198	1216
189	Niti Shekhar	122	186	142	Maths	138	197	Physics	169	117	5	145	1216
192	Dusmanta Kumar	108	173	95	Geography	169	164	PubAd	157	164		186	1216
198	K P Mohan Raj	130	188	87	Psychology	163	155	PubAd	167	166		159	1215
199	C Sudhakar	104	148	128	Geography	194	168	Tamil Lit.	148	145		180	1215
202	Sridharbabu	110	188	183	PubAd	124	164	Telugu	176	155		114	1214
208	Subash K R	100	153	141	Psychology	160	145	Kanada	167	170		177	1213
215	Abhishek Chandra	130	151	148	Geography	159	153	Psychology	162	121		186	1210
217	Amarinder Singh	100	167	158	Psychology	182	149	Sociology	161	113	5	180	1210
223	Vishwas Munde	124	124	152	Geography	184	174	Others	156	155	5	140	1209
231	Mukesh	136	182	125	Medical Sc.	174	136	Psychology	141	139	5	175	1208
230	Saurabh kr. Rai	132	168	122	History	137	158	Hindi	160	121	6	210	1208
244	Kesonyu Yhome	128	174	66	Anthro	165	163	PubAd	143	172		195	1206
248	R S Arvindhakshan	101	152	137	Anthro	126	164	PubAd	174	141		210	1205
249	khushboo goel	122	108	157	Commerce	188	102	PubAd	178	140	6	210	1205
252	Sunil Bhaskar	118	186	139	Chemistry	135	128	Anthro	156	132		210	1204
254	Vinod Janardhan	105	168	171	History	156	186	Philosophy	121	150		147	1204
256	Simardeep Singh	108	152	120	Geography	178	166	Psychology	134	157		189	1204
271	Ashish Tripathi	132	169	169	Geography	121	136	PubAd	168	161	4	144	1200
272	Pandey Santosh	79	132	164	Psychology	168	119	PubAd	162	151		225	1200
274	Rajesh Mahajan	91	167	138	Psychology	185	175	Sociology	123	147		174	1200
281	Arun Richard Elisha	129	181	119	History	137	159	Political Sc.	165	144		165	1199
284	Abhinav Agrawal	116	183	136	Geography	171	126	Psychology	165	158	3	144	1199
285	Kale Sanketh	125	121	149	Geography	157	146	PubAd	187	164		150	1199
291	Satyadeep	95	141	152	Political Sc.	152	162	Sociology	187	137		171	1197
307	Krishna Raj	112	156	108	Geography	149	158	PubAd	175	165		171	1194
311	Vaishali	85	134	178	Geography	130	122	Psychology	187	162	2	195	1193
313	Abhinav Diliprao	120	113	149	History	140	179	Political Sc.	161	145		186	1193
318	P Bala Kiran	122	89	136	Geography	170	149	Telugu	133	162		231	1192
324	Justin	100	148	133	Zoology	150	156	Animal Hus	172	181		150	1190
327	Samrat Rahi	102	135	156	Political Sc.	148	167	Hindi	130	162		189	1189
	Neha Bansal	110	141	131	History	143	159	Others	162	138	7	204	1188
330	Tarundeep	120	142	142	Psychology	129	154	Sociology	145	170		186	1188
339	Ramanjaneyulu	100	174	118	Geography	170	154	Anthro	134	149		186	1185
357	M Arun Kanth	96	124	158	Geography	163	153	PubAd	161	144		180	1179
360	Narendra K Naik	90	147	125	PubAd	199	153	Kanada	157	166		141	1178
	Udit Agrawal	89	159	144	Geography	163	137	Law	157	164		165	1178
372	P Vimaladitya	87	172	146	Geography	133	134	PubAd	180	136		186	1174

381	Sushil Chandra	125	129	118	History	136	176	Pali	138	161		189	1172
392	Kranthi Kumar G	110	141	118	Agri	111	188	Botany	147	173		180	1168
394	Mohammed Navfal	102	156	126	Geography	155	185	Tamil	154	143		147	1168
412	Vijayalakshmi	112	133	104	History	158	181	Telugu	143	163		168	1162
426	Thirugnanasambadan	97	126	180	Agri	122	147	Botany	154	151		180	1157
430	Sujit Mallick	102	161	120	Psychology	128	157	PubAd	171	153		165	1157
	Amit Shukla	103	171	93	Political Sc.	172	154	Psychology	138	148		174	1153
437	Mukesh Kumar	105	143	120	Psychology	156	172	PubAd	176	147		135	1154
439	Suleman Choudhary	106	169	125	Geography	146	133	PubAd	173	166		135	1153
448	Ahmed Kohli	94	151	99	Geography	161	158	Sociology	177	148		150	1138
	k v tirumala	116	152	151	Mech. Engg	148	117	Psychology	169	138	3	180	1171
	S.A. Mathivanan	100	149	140	Psychology	122	161	PubAd	174	159		156	1161
	puneet nayar	110	132	105	Psychology	153	147	Physics	190	162	1	156	1155
	Amit Shukla	103	171	93	Political Sc.	171	154	Psychology	138	148	7	174	1152
	Subba Reddy	87	148	134	Geography	171	158	Telugu	138	161		150	1147
	manisha	92	125	155	Psychology	175	136	Sociology	153	170	3	141	1147
	Venkatesh S	92	148	180	Psychology	130	98	Others	186	146	3	165	1145
	vinod kumar	135	147	105	Geography	126	161	Psychology	166	163	2	141	1144
	Srinivasa Rao	113	156	113	Elec. Engg	158	209	Geography	104	149	1	141	1143
	Vikas Chavan	120	165	119	Commerce	141	180	Psychology	168	114	2	135	1142
	Ravi Kuamr Jain	116	113	122	History	130	180	Hindi	159	161	7	150	1131
	Boralingaiah M B	103	157	149	Geography	170	153	Zoology	128	134	7	135	1129
	Varun Singla	132	135	138	Sociology	170	150	Psychology	109	149	2	141	1124
	Gangadhara Rao	83	128	137	Geography	177	152	Telugu	162	147		135	1121
	Anuj Kr Singh	108	104	150	Geography	174	144	PubAd	173	141	4	123	1117
	Samant Rohan	123	142	108	Geography	144	166	Political Sc.	158	134	6	105	1080
	tanvir	124	74	78	Philosophy	175	180	Economics	170	173		0	974
	kumar.s	140	170	174	Animal Hus	115	125	Statistics	138	112		0	974
	manish chandra	96	137	123	Law	142	140	PubAd	168	166		0	972
	lingaraj Nayak	95	149	132	Sociology	159	114	PubAd	177	146		0	972
	suresh	110	122	178	Medical Sc.	145	155	Philosophy	125	135		0	970
	Abhijeet Agarwal	116	152	98	Physics	179	116	Chemistry	171	134		0	966
	Shrish K.Singh	111	133	119	Maths	153	157	Hindi	154	134		0	961
	Navin Kumar	136	134	94	Mech. Engg	134	163	Hindi	152	145		0	958
	Vivek Agarwal	105	137	84	Physics	163	162	Geography	149	158		0	958
	R. Prakash	92	163	128	Law	118	163	Political Sc.	157	136		0	957
	Santosh K Ojha	110	152	98	Geography	162	144	Hindi	157	132		0	955
	Prashant Agrawal	115	140	133	Chemistry	152	143	Physics	140	132		0	955
	Ritesh Kr Shah	110	101	75	History	149	157	Philosophy	183	176		0	951
	Ritubhan	109	142	142	Philosophy	99	171	Anthro	170	118		0	951
	Abhishek kumar	100	155	112	Maths	186	147	Physics	125	122		0	947
	Atul Kr Verma	78	98	159	Maths	158	175	PubAd	148	126		0	942



Shanti Bhusan	126	185	125	Psychology	73	164	Sociology	132	135		0	940
Kuldeep Singh	112	163	111	Physics	135	103	Geography	173	137		0	934
Piyush Yadav	92	134	151	Geography	130	139	Zoology	171	114		0	931
Manish	90	79	101	History	143	159	Philosophy	184	172		0	928
Gaurav Sharma	110	130	128	Chemistry	146	130	Geography	137	145		0	926
Sameer Verma	130	92	142	Sociology	149	150	Psychology	113	139		0	915
Abhishek	106	173	100	History	147	168	Psychology	61	157		0	912
Amrendra	108	94	110	History	115	161	Hindi	160	162		0	910
Ram K Chaturvedi	112	118	50	History	159	137	Philosophy	153	179		0	908
Barinder	107	125	171	Physics	124	131	Geography	116	129		0	903
Navin	110	126	107	Political Sc.	152	140	History	140	126		0	901
Rajeev Kumar	107	172	83	Philosophy	120	128	PubAd	152	138		0	900
Amit Ranjan	107	115	156	Mech. Engg	175	146	Physics	121	80		0	900
Deepak Yadav	95	115	112	History	151	148	Philosophy	136	140		0	897
Sushil Kumar	124	123	109	History	153	167	PubAd	100	111		0	887
Anuranjan Kumar	130	138	84	Geography	132	130	Sociology	102	163		0	879
p.singh	75	125	108	Law	126	129	PubAd	166	142		0	871
Uthara Narayanan	124	94	97	PubAd	172	118	Sociology	129	133		0	867
D.S. Singh	106	103	49	Geography	164	138	Psychology	149	153		0	862
Abhishek Kr Singh	88	169	106	Maths	135	153	Physics	116	94		0	861
sumit nandan	92	137	118	Philosophy	177	147	Psychology	80	79		0	830
Sanjay Kr Yadav	117	78	77	History	137	130	Philosophy	156	124		0	819
Manish K. Singh	108	61	64	Geography	163	128	PubAd	159	133		0	816
Gautam Anand	87	113	115	Philosophy	93	163	Sociology	95	145		0	811

\* - 1. Shri. Subir Datta, 2. Prof. D.P. Agarwal, 3. Air Marshal (Retd.) Satish Govind Inamdar, 4. Ms. Parveen Talha, 5. Dr. Bhure Lal, 6. Ms. Chokila Iyer, 7. K. Roy Paul