

MEDICAL SCIENCE
(Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

Question No. 1 is compulsory.

Candidate has to attempt FIVE questions in all, selecting the remaining questions from the Sections that follow, as directed in the paper.

The number of marks carried by a question/part is indicated against it.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Answer any three of the following (each in about 200 words):
- (a) Give differences between benign and malignant tumors. Discuss in brief about various methods of tumor diagnosis. 20
 - (b) Describe herpes viruses and lesions produced by them. 20
 - (c) Describe various mechanisms present in human body for maintaining the blood pH. Give an account of acid base disorders – their causes and compensatory mechanisms. 20
 - (d) An AB blood group man cannot be the father of a child of blood group O – Comment. 20
 - (e) Describe in brief various therapeutic uses of acetylsalicylic acid. Give its possible mechanism of action as antithrombotic agent. 20
 - (f) Describe in brief the anatomy and applied significance of inguinal canal. Add a note on descent of testis. 20
2. (a) Classify the nuclei of hypothalamus. Describe its relationship to food and water intake. 20
- (b) How is hypercholesterolaemia harmful? Mention the causes for hypercholesterolaemia and enumerate various measures that are used to decrease serum cholesterol level and give their mechanism of action. 20
- (c) Draw and label a transverse section (horizontal section) of thorax through the roots of lungs. 20
3. (a) What are normal EEG waves? How are they generated? Compare EEG between REM and NREM sleep. Add a note on clinical significance of EEG. 20
- (b) Discuss the biochemical basis of different types of vitamin deficient anaemias. 20
- (c) (i) Write a short note on pelvic diaphragm. (ii) Describe briefly the movement of knee joint mentioning the role of various ligaments, menisci and muscles. 20

SECTION 'B'

4. (a) Write pathogenesis and histopathology of bronchogenic carcinoma. 30
- (b) Describe briefly acquired immunity. 30
5. (a) Write pathogenesis and histopathology of Rheumatic heart disease. 30
- (b) Define “Disinfection”, and mention various chemical agents used for disinfection and their applications. 30

SECTION 'C'

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| 6. | What do you understand by luminal antiamoebic agents? Describe the spectrum of antiamoebic action of metronidazole, its side effects and contraindications. | 60 |
| 7. | (a) Write in brief the procedure of identifying an individual from bite marks. | 20 |
| | (b) How will you differentiate an Entry Wound from an Exit Wound? | 20 |
| | (c) Define 'Poison'. What do you mean by "Corrosive Poison"? | 20 |