

IAS Mains Medical Science 1995

Paper I

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).

Section A

Anatomy, Physiology & Biochemistry

1. Answer the following questions
 - 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).
2. Answer the following questions
 - 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. Answer the questions below
 - 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

Pathology & Microbiology

1. Answer the following questions
 - a. Write pathogenesis and histopathology of bronchogenic carcinoma (30).

2. Answer the following questions

- 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

Pharmacology Forensic Medicine & Toxicology

1. What do you understand by luminal antiamoebic agents? Describe the spectrum of antiamoebic action of metronidazole, its side effects and contraindications (60).
2. Answer the following questions
 - 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)?