Examrace: Downloaded from examrace.com [https://www.examrace.com/]

For solved question bank visit doorsteptutor.com

[https://www.doorsteptutor.com] and for free video lectures visit Examrace YouTube Channel [https://youtube.com/c/Examrace/]

IAS Mains Medical Science Papers 1994

IAS Prelims & Mains GS and Optional Lectures, Model Answers, and Notes at doorsteptutor.com. [https://www.doorsteptutor.com/Exams/IAS/]

IAS Mains Medical Science 1994

Paper I

Section A

- 1. Answer any three of the following (each in about 200 words):
 - a. Describe the mode of spread of cancer (20).
 - b. Name the viruses which are sexually transmitted. What are the possible mechanisms by which HIV destroys the immune cells of the body (20)?
 - c. Define basal metabolic rate (BMR). Discuss the factors that influence the BMR of a subject (20).
 - a. What are the clinical conditions where morphine or morphine like drugs are used and state two important symptoms/signs for recognition of its overdosage (20)?
 - e. Describe the main events in the development of heart and explain its common cogenital anomalies (20).
 - f. Enumerate the various therapeutically useful penicillins. Write briefly on mode of action, antibacterial spectrum, therapeutic uses and common adverse effects of these antibiotics (20). (Anatomy, Physiology & Biochemistry)
- 2. Answer the following questions
 - a. Define cardiac output. How can it be measured? Discuss the factors controlling it (20).
 - b. What are vitamins? Name the diseases produced by the deficiency of vitamin A, vitamin C, vitamin D, vitamin B, and vitamin B12. What are the functions of vitamin E (20)?
 - c. Draw and label a cross-section (horizontal section) of abdomen passing through both the kidneys (20).
- 3. Answer the following questions
 - a. How is glucose homeostasis maintained in the body (20)?
 - b. What are enzymes? Discuss the factors that affect the enzyme activity (20).
 - c. Define and enumerate broncho-pulmonary segments. What is their clinical significance (20)?

Section B

Pathology & Microbiology

- 1. Answer the following questions
 - a. Define inflammation. Describe the vascular phenomenon of the inflammation (30).
 - b. Name the bacterial diseases which are transmitted by contaminated water. Describe the laboratory diagnosis of typhoid fever and the precautions to be undertaken in the interpretation of laboratory results (30).
- 2. Answer the following questions
 - a. Write in brief about aetiopathogenesis and histopathology of alcoholic cirrhosis (30).
 - b. Define sterilization and mention the various physical methods of sterilization and their applications (30).

Section C

Pharmacology Forensic Medicine & Toxicology

- 1. Discuss in detail the general principles of treatment of barbiturate poisoning (60).
- 2. Answer the following questions
 - a. Write in brief about the significance of DNA fingerprinting in personal identification (20).
 - b. What is the mode of action of beta-blockers in lowering blood pressure (20)?
 - c. What are clinical manifestations of organo-phosphorus poisoning and what antidote will you use in this poisoning (20)?

Paper II

Section A

- 1. Write short notes on any three of the following (each in about 200 words) : $(3 \times 20 = 60)$
 - a. Peripheral blood picture in Chronic Myeloid Leukaemia
 - b. Complications of varicose veins in the lower extremity
 - c. Methods of induction of labour
 - d. Important National Mortality Indicators
 - General Medicine
- 2. Discuss the complications of Diabetes Mellitus (60)?
- *3.* Answer the following questions
 - a. What is the mode of transmittion of Human Immunodeficiency Virus? How will your prevent its spread (20).
 - b. Discuss the etiology and complications of Portal Cirrhosis (20).

c. Describe the treatment of an acute case of Bronchial Asthma (20).

Section B

(General Surgery)

- 4. What are the various causes of retention of urine? Describe the management of a case of retention of urine due to stage II benign hypertrophy of prostate (60).
 - 1. Answer the following questions
 - a. Discuss the complications of Gall bladder disease (20).
 - b. What do you understand by the term 'Adynamic Intestinal Obstruction' Describe the principles of management of such a case (20).
 - What are the broad principles in the management of a case of Fracture Spine (20)

Section C

Obstetric and Gynecology including Family Planning

- 1. Define high risk pregnancy. Discuss the management of a primigravida at 36 weeks of gestation with BP of $\frac{150}{100}$ mm Hg and one plus albuminuria (60).
- 2. Answer the following questions
 - a. How will you investigate the female partner in a couple with primary infertility (20)?
 - b. Enumerate the various sexually transmitted diseases. Discuss the management of Trichomonal vaginalis infection (20).
 - c. Discuss the various methods for medical termination of pregnancy during second trimester (20).

Section D

Preventive and Social Medicine

- 1. Describe the type of epidemiological study you will plan to determine the prevalence of risk factors of Coronary heart disease in the urban adults. 60
- 2. Answer the following questions
 - a. Enumerate the components of Primary Health Gare. Briefly describe the principles underlying the Primary Health Care (20).
 - b. A two year old child has grade II Protein Energy Malnutrition. How will you manage such a case (20)?
 - c. A 35 year old man seeks employment in an Asbestos factory. As the Medical Officer-in charge, how will you assess his suitability for the job? Discuss (20).