

MEDICAL SCIENCE
(Paper II)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

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

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

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. (a) A 4-year-old male child is admitted with history of diarrhea, pain abdomen, vomiting off and on since the age of one year. He had taken treatment from various practitioners without significant improvement. On examination, child is malnourished, weight 9 kg, height 90 cm. There are signs of vitamin and mineral deficiency.
 - (a)(i) Enumerate all the probable causes of this condition. 4
 - (a)(ii) What investigations will you advise to diagnose the cause? 4
 - (a)(iii) Describe the management of celiac disease. 4
- (b) A young adult presents with history of headache, fever, vomiting and altered sensorium for five days. On examination, neck rigidity is present.
 - (b)(i) What is your diagnosis? List the common organisms that cause this condition. 4
 - (b)(ii) What findings do you expect on CSF examination? 3
 - (b)(iii) List the drugs that are used to manage this case. 5
- (c) How is scabies transmitted? Mention the complications of scabies. Discuss the clinical features of crusted scabies and its management. 12
- (d) Tabulate the National Immunization Schedule. What are newer vaccines? Give their immunization schedule. 12
- (e) What is panic disorder? Name the drugs commonly used to treat this disorder. 12
2. (a)(i) What are multidrug-resistant tuberculosis (MDR-TB) and extensive drug-resistant tuberculosis (XDR-TB)? 10
- (a)(ii) List the group of drugs used to treat MDR-TB. 10
- (b)(i) What are the symptoms of acute pyelonephritis? 4
- (b)(ii) Name the organisms that commonly cause acute pyelonephritis. 8
- (b)(iii) List the antibiotics commonly used to treat severe pyelonephritis. 8
- (c) Write briefly about 'Baby Friendly Hospital Initiative'. List all the ten steps of its policy. 20
3. (a)(i) What is tetanus neonatorum? 2
- (a)(ii) Describe its clinical features. 5
- (a)(iii) What is its treatment? 5
- (a)(iv) How can this condition be prevented? 3

- (b) Write the WHO classification of undernutrition, and also describe the complications and causes of death in kwashiorkor. 10
- (c) What is unstable angina? How will you manage a patient with unstable angina? 20
- (d) Classify eczema. What is the diagnostic test for allergic contact dermatitis? Discuss in brief the management of atopic dermatitis. 15
4. (a) What is empyema? Discuss the management of a case with empyema. 15
- (b) List the conditions that cause megaloblastic anemia. Discuss the blood picture of this condition. How will you treat this case? 15
- (c) What is IMNCI? Why is it necessary for our country? Write the principles of this approach. 15
- (d) Name the malaria parasites. Mention complications of malaria. How will you confirm and treat malaria? 15

SECTION 'B'

5. (a) How does human milk compare with animal milks? Enumerate three key differences between them. Which micronutrients is natural milk deficient in? 15
- (b) Describe 'polyp' and enumerate the various types of polyps seen in the colorectum. Briefly enumerate how you will assess and manage a patient with familial adenomatous polyposis (FAP). 15
- (c) Name the commonly used IUCDs. What are the indications and contraindications of IUCD? Enumerate the complications associated after IUCD insertion. 15
- (d) Define menorrhagia. How would you manage a case of puberty menorrhagia? 15
6. (a) Enumerate the various causes of chronic ulcers in the leg. Briefly describe how you will assess and treat a patient with varicose veins including newer modalities. 20
- (b) You have just been appointed to the post of District Magistrate. What measures would you take to ensure that the main aims of the 'National Rural Health Mission' are met with? State briefly, citing the thrust areas at each level of the district. 20
- (c) Enumerate the most frequent causes of purulent leukorrhea and describe the management of any two most common vaginal infections. 20
7. (a) Describe the antenatal care in a primigravida from the early pregnancy till term. What investigations will be required during pregnancy? 20
- (b) The increasing use of 'junk food' in the country has distinct negative connotations for the health of its citizens. What do you understand by the term 'junk food'? Cite some common examples. State the ill effects of excessive consumption of junk food on health, outlining the scientific basis. 20
- (c) A 40-year-old male is diagnosed with rectal cancer located 7–8 cm from anal verge. Briefly enumerate how you will assess this patient. What are the treatment options available for this patient who is unwilling for permanent colostomy? 20
8. (a) Which contraceptive is most appropriate for a newly wedded young couple, wherein the husband is allergic towards latex? While making this decision, cite the pros and cons of the specific contraceptive agent, and state its contraindications and its failure rate. 20
- (b) Briefly enumerate the various differential diagnoses in a patient presenting with gastric outlet obstruction. How will you assess and manage such a patient due to gastric carcinoma in pyloric area? 20
- (c) Discuss the differential diagnosis in a 28-year-old woman with two months amenorrhea and acute lower abdominal pain followed by bleeding per vaginam. How would you 20

manage such patient?