

Date: 05-01-2023

MCT 7012

Second Year MBBS Examination

II MBBS Pharmacology Paper 2 (New)

Time: 3 hours Max Marks: 100

Instructions:

1. Answer to the points.
2. Figure to the right indicates marks.
3. Use separate answer books for each section.
4. Draw diagrams wherever necessary.
5. Write legibly.

Section 1

1. Structured long questions: Write briefly on:
(any one out of two) (10)
 - a. Classify antitubercular drugs. Describe the mechanism of action and adverse effects of first line antitubercular drugs.
 - b. Classify Penicillins. Describe the mechanism of action, antibacterial spectrum, therapeutic uses and adverse effects of Penicillin-G.
2. Case base scenario/applied short notes: Write

short notes on: (any two out of three) (12)

3. Write short notes: (any three out of four) (18)
 - a. Albendazole.
 - b. Mechanism of action, therapeutic uses and adverse effects of Metronidazole.
 - c. Linezolid.
 - d. Mechanism of action and side effects of aminoglycosides.
4. Answer in 2-3 sentences: Explain briefly with reason: (any five out of six) (10)
 - a. Justify the rationale of combining imipenem with cilastatin.
 - b. Write two therapeutic uses and two adverse effects of amphotericin B.
 - c. Name four antibacterial] drugs that affect bacterial protein synthesis.
 - d. Ethambutol should be used with Precaution in children. Justify.
 - e. Write two drugs causing Disulfiram like reaction.
 - f. What is lepra reaction? How will you treat this reaction?

Section 2

1. Structured long question: Write briefly on: (any one out of two) (10)
 - a. Classify drugs for bronchial asthma. Describe the pharmacological action, mechanism of action, adverse effects and drug interactions of theophylline.
 - b. Describe different insulin preparation, pharmacological action, uses and adverse effects of insulin.
2. 5A.Case base scenario / applied short notes: Write short notes on: (any two out of three) (12)
 - a. A 35-year-old man has come with complaint of acute onset diarrhoea. The stools are relatively small volume, liquid but not watery, frothy and are preceded by griping pain in abdomen. Foul smelling wind, eructation and mild fever are the other complaints. He has passed 4 loose motions in the past 8 hours and there is no appetite. He admits to have eaten spicy snacks last evening at a road side stall. Physical examination reveals body temperature 101Å°F, no signs of dehydration, but diffuse abdominal tenderness: A tentative diagnosis of enteroinvasive diarrhoea is made.(a) Does this patient require rehydration therapy? (b) Should an antibiotic

be prescribed ? If so, which antibiotic would be appropriate ? (c) Should an antimotility-antidiarrhoeal drug be coprescribed to reduce the number of stools ? (d) Should any other symptomatic drug be given to him?

- b. A full term primigravida aged 26 years is brought to the hospital with the complaint of having labour pains for the past 24 hours without making much progress. Two hours ago she had passed meconium stained liquor. The lady is in distress, mildly dehydrated and looks exhausted. The presentation is vertex and head is engaged, but cervix is incompletely dilated and uterine contractions are relatively weak. Foetal tachycardia is noted with irregularity during contractions. (a) What course of action is appropriate? (b) Can she be administered a uterine stimulant to strengthen the contractions? If yes, which drug should be given and how? If no, then why?
- c. A 35 years old male patient is having dry cough since 3 days. Physician prescribed the drug for the relief from cough. Patient complained of constipation after taking the drug. (a) Write two cough suppressant drugs. (b) Mention the mechanism of action and two adverse effects of prescribed drug. (c) Why patient complained of constipation?
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3. 58. Write short notes: (any three out of four) (18)

- a. 5-HT₃ antagonists.
- b. Selective estrogen receptor modulators (SERMs).
- c. Therapeutic uses and side effects of corticosteroids.
- d. Bisphosphonates.

4. 6. Answer in 2-3 sentences: Explain briefly with reason (any five out of six) (10)

- a. Name two tocolytics with their uses.
- b. Write pharmacological basis of ipratropium bromide in COPD.
- c. Write two chelating agents with their uses.
- d. Write the mechanism of action of omalizumab.
- e. Give two examples of osmotic purgative and Stool softener.
- f. Write mechanism of action and two side effects of propylthiouracil.
