

MANIPAL ACADEMY OF HIGHER EDUCATION

MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)

MBBS PHASE – I STAGE – II DEGREE EXAMINATION – SEPTEMBER 2018

SUBJECT : PHARMACOLOGY – PAPER – I (ESSAY)

Monday, September 10, 2018

Time : 9.00 a.m.- 11.00 a.m.

Max. Marks : 60

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- ✓ **Answer all the questions**
 - ✓ **Write the question number clearly in the margin**
 - ✓ **Draw diagrams wherever appropriate**
1. List two drugs each used in acute and chronic gout. (2 marks)
 2. Explain the antiplatelet action of aspirin. (2 marks)
 3. List two endocrinal and two non-endocrinal uses of corticosteroids. (2 marks)
 4. List two drugs each used in the treatment of productive cough and non-productive cough. (2 marks)
 5. Mention two local anesthesia techniques with an example of drug used in each technique. (2 marks)
 6. Four medical students planned a road trip by car to a nearby hill station on a weekend. One of the students was feared of vomiting while travelling. He consulted his medicine professor and the professor prescribed him a drug in the form of transdermal patch to be applied behind the pinna four hours before starting the journey.
 - 6A. Identify the drug and explain how it will help this student.
 - 6B. Mention one more drug that can be used in the above condition and list its two adverse effects.(2.5 + 1.5 = 4 marks)
 7. List two advantages and two disadvantages of intramuscular route of drug administration. List two drugs administered by this route. (3 marks)
 8. Describe the term 'plasma half-life' and mention its four clinical importance. (3 marks)
 9. Explain the mechanism of action of penicillin G and mention its one therapeutic use along with the causative organism. (3 marks)
 10. List two first line antitubercular drugs and explain the mechanism of action of any one of them. (3 marks)

11. Explain the following terms with suitable example:

11A. Redistribution

11B. Enzyme induction

11C. Second gas effect

(3x2 = 6 marks)

12. Explain the pharmacological basis for the following:

12A. Morphine is contraindicated in patients with head injury.

12B. Salbutamol is used in the treatment of bronchial asthma.

(2x2 = 4 marks)

13. List two low molecular weight heparins and mention their two advantages over unfractionated heparin.

(2 marks)

14. Explain the mechanism of action of digoxin.

(2 marks)

15. Describe 'first dose phenomenon' and mention two measures to minimize the same.

(3 marks)

16. Explain the antithyroid action of radioactive iodine and mention its two advantages.

(3 marks)

17. List two oral contraceptive preparations and mention four health benefits of hormonal contraceptives.

(3 marks)

18. List three groups of drugs with an example for each group used in the treatment of peripheral vascular disease.

(3 marks)

19. List two ACEIs and explain their antihypertensive action.

(3 marks)

20. Mention one antimuscarinic agent each used in the treatment of intestinal colic and AV block.

(1 mark)

21. A mother takes her 9-year-old son to a neurologist as he is having learning difficulties at school. She also complains that he stares and exhibits rapid eye blinking every 5–10 min. The neurologist orders for electroencephalogram (EEG). The EEG reports reveal brief 3-Hz spike and wave discharges appearing synchronously in all leads.

21A. Mention one drug which can be used to treat the above patient and explain its mechanism of action.

21B. Mention another drug that can be used in the above condition and mention its two adverse effects.

(2.5+1.5 = 4 marks)

