



PHARMACOLOGY

PAPER – II

PHARM/D/14/34/II

Time : 3 hours

Max. Marks : 100

Important instructions:

- Attempt all questions in order.
- Each question carries 10 marks.
- Read the question carefully and answer to the point neatly and legibly.
- Do not leave any blank pages between two answers.
- Indicate the question number correctly for the answer in the margin space.
- Answer all the parts of a single question together.
- Start the answer to a question on a fresh page or leave adequate space between two answers.
- Draw table/diagrams/flowcharts wherever appropriate.

1. What are 'Low Molecular Weight Heparins'(LMWHs)? How are they different from regular heparin preparations? Discuss the advantages and therapeutic uses of LMWHs. 1+2+(2+5)
2. Enumerate the different groups of local anaesthetic agents. Discuss briefly the mechanism of action of local anaesthetics. What are the routes of administration and uses of lignocaine? 2+4+4
3. What are the different types of opioid receptors? Discuss their distribution and actions mediated through these receptors. Enumerate the uses and contraindications for the use of morphine. 1+3+(3+3)
4. What is the full form of HAART? Discuss briefly the NACO recommendation for prophylaxis of HIV infections including perinatal prophylaxis. 2+8
5. Enumerate two diuretics each from high efficacy, moderate efficacy and weak efficacy diuretics. Discuss the mechanism of action, therapeutic uses and contraindications for the use of mannitol. 3+(2+3+2)
6. What is Nitric Oxide (NO)? Discuss the effects of NO on vascular system. Discuss briefly the potential role and toxicity profile of NO. 2+4+(2+2)
7. Enumerate the drugs useful in the treatment of migraine. Discuss the pathophysiology and drug treatment of migraine. 2+(3+5)
8. Enumerate drugs used in the treatment of congestive heart failure. What are the limitations of these agents? Discuss the pharmacological basis for the use of β blockers in CHF. How would you monitor β blocker therapy in CHF? 2+2+3+3
9. Discuss the principles and uses of:
a) Positron Emission Tomography (PET)
b) HPLC 5+5
10. Describe briefly the physiology of blood coagulation and fibrinolysis. Enumerate fibrinolytic (thrombolytic) agents. Discuss briefly the clinical uses of fibrinolytic agents. 4+2+4
