

**Time: Three Hours****Max. Marks: 100 Marks****PHARMACOLOGY – PAPER I (RS-4)****Q.P. CODE: 1028****(QP contains two pages)**

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

**LONG ESSAYS****2 x 10 = 20 Marks**

1. A 42 years old lady was brought to casualty with symptoms of irritation of eyes, excessive salivation and lacrimation, blurring of vision, breathlessness, involuntary defecation and urination. Based on these symptoms physician made a diagnosis of acute organophosphorous compound poisoning
  - a) Outline the management of Organophosphorous Poisoning
  - b) Discuss the uses of reversible anticholinesterases?
2.
  - a) Classify opioid analgesics with suitable examples
  - b) Discuss the central nervous system actions of Morphine
  - c) Enumerate four contraindications for the use of morphine

**SHORT ESSAYS****8 x 5 = 40 Marks**

3. A 40 year old patient complains of sleep disturbances since 2 weeks. He was prescribed a Benzodiazepine by the physician. Describe the mechanism of action and adverse effects of Diazepam
4. Therapeutic uses of Beta-blockers
5. Explain Drug synergism with suitable examples
6. Advantages and disadvantages of Intravenous route of administration of drugs
7. Mention four second generation antihistaminics. Enumerate their advantages over first generation antihistaminics
8. Methods of prolonging drug action
9. Mechanism of action, therapeutic uses and adverse effect of Proton Pump inhibitors
10. A 28 year old lady presents with complains of episodic breathlessness accompanied by wheezing. A diagnosis of Bronchial asthma was made by the attending physician
  - a) Mention three different group of drugs giving one example for each used in the management of Bronchial asthma
  - b) Describe the mechanism of action of any one group

**SHORT ANSWERS****10 x 3 = 30 Marks**

11. What is therapeutic drug monitoring (TDM)? Mention two drugs that require TDM.
12. Name three centrally acting skeletal muscle relaxants
13. Enumerate three techniques of local anaesthesia with one indication for each
14. Rationale of using Glycopyrrolate for preanaesthetic medication
15. Rationale of using Colchicine in acute gout
16. Name three newer antiepileptic drugs
17. Mention three drugs used as expectorants
18. Mention three uses of Dimercaprol
19. Mention three rational fixed dose combination of drugs
20. Rationale of using Ondansetron in cancer chemotherapy induced vomiting

**Multiple Choice Questions****10 x 1 = 10 Marks**

- 21 i) The feature of a highly plasma protein bound drug is  
A. Biologically very active  
B. Rapidly excreted  
C. Long acting  
D. Short acting
- 21 ii) A 35 year old lady presents with drooping of eyelid, muscle weakness of arms and legs and fatigue. The physician made a diagnosis of the myasthenia gravis. The drug useful in this condition is  
A. Donepezil  
B. Atropine  
C. Neostigmine  
D. Pralidoxime
- 21 iii) A 42 year old woman suffering from trigeminal neuralgia consults a physician for treatment. Which of the following drug is useful in this patient?  
A. Carbamazepine  
B. Ethosuximide  
C. Felbamate  
D. Phenobarbitone
- 21 iv) Which of the following drug is used as nasal decongestant?  
A. Nimesulide  
B. Naphazoline  
C. Norepinephrine  
D. Norethindrone
- 21 v) One cause for Tachyphylaxis is  
A. Up regulation of receptors  
B. Increased neurotransmitter concentration  
C. Sensitization of receptors  
D. Desensitization of receptors
- 22 i) Antiemetic associated with extrapyramidal side effects is  
A. Metoclopramide  
B. Ondansetron  
C. Aprepitant  
D. Dexamethasone
- 22 ii) Lignocaine acts as a local anaesthetic agent by blocking the neuronal  
A. Sodium channels  
B. Potassium channels  
C. Calcium channels  
D. Chloride channels
- 22 iii) Which of the following is used as Antitussive drug?  
A. Etomidate  
B. Dextromethorphan  
C. Bromhexine  
D. Acetylcysteine
- 22 iv) Which of the following antihistaminic drug is highly sedative?  
A. Cetrizine  
B. Ranitidine  
C. Loratidine  
D. Promethazine
- 22 v) Which of the following chelating agents is used in treatment of Copper poisoning  
A. Naloxone  
B. d-penicillamine  
C. Dexamethasone  
D. N acetylcysteine

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