

23124

3 Hours / 80 Marks



20112

Seat No.

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- Instructions –*
- (1) All Questions are Compulsory.
 - (2) Answer each next main Question on a new page.
 - (3) Illustrate your answers with neat sketches wherever necessary.
 - (4) Figures to the right indicate full marks.
 - (5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.
 - (6) In case student has attempted sub-question of Question no. 3 more than once, only first attempt should be considered for assessment.

Marks**1. Attempt any SIX of the following :****30**

- a) Define the term Impurity. Discuss any four sources of impurities in pharmaceuticals.
- b) What do you mean by volumetric analysis? Give its classification depending on chemical reactions with one example each.
- c) Define Gastrointestinal agents classify with examples. Give uses of sodium bicarbonate and magnesium hydroxide.
- d) Draw the structure of Haloperidol. Give its chemical name, uses, formulations and popular brand names.
- e) State what are sympathomimetic drugs? Classify and give the structure and uses of Nor-Adrenaline.
- f) Define and classify antimalarial drugs with example. Give structure and uses of chloroquine phosphate.
- g) Define and classify antibiotics giving suitable examples. Give structure and uses of chloramphenicol.

2. Attempt any TEN of the following:**30**

- a) Explain principle and procedure involved in limit test for Iron.
- b) Describe Mohr's method for precipitation titrations with reaction.
- c) Draw the structure from given IUPAC name
 - i) 5, 5-diphenylimidazolidine-2, 4-dione.
 - ii) 3 (2-chloro-10H-phenothiazin-10-yl)-N, N-dimethylpropan-1-amine
 - iii) 7-chloro-1, 3-dihydro-1-methyl-5-phenyl-1, 4-benzodiazepine-2-one.
- d) What are cholinergic antagonists? Give their examples. Name the drug used in Parkinsonism.
- e) Draw the structure of propranolol. Give its uses and popular brand name.
- f) Classify diuretics with example. Write structure of furosemide.
- g) What is Diabetes mellitus? Give structure and chemical name of metformin.
- h) State what are NSAIDs? Give uses and popular brand names of Aspirin.
- i) Define and classify antitubercular drugs. Draw the structure of Isoniazid (INH).
- j) What are β lactam antibiotics? Give the structure and uses of Amoxicillin.
- k) Classify antineoplastic drugs with example. Discuss uses of cisplatin.

P.T.O.

**3. Attempt ALL of the following:**

- a) Guitzet's test apparatus is used to carry out limit test of _____.
 - b) Name the indicator used in the assay of sodium chlorid.
 - c) State the uses of Hydrogen peroxide.
 - d) Use of ferrous sulphate is _____.
 - e) Which one of the following five membered unsaturated heterocycle containing oxygen?
 - i) pyridine
 - ii) Oxazole
 - iii) Pyrrole
 - iv) Furan
 - f) The suffix "ole" is used for -
 - i) Five membered unsaturated ring
 - ii) Six membered unsaturated ring
 - iii) Five membered saturated ring
 - iv) Six membered saturated ring.
 - g) Which of the following is not a five membered ring -
 - i) pyridine
 - ii) Furan
 - iii) Imidazole
 - iv) Oxazole
 - h) The prefix Thia/Thio is used for a heteroatom - _____.
 - i) Write brand name of phenytoin.
 - j) In what dosage form diazepam is given?
 - k) Acetyl-choline is an -
 - i) Cholinergic blocker
 - ii) Adrenergic blocker
 - iii) Adrenergic agent
 - iv) Cholinergic agent
 - l) _____ is an imidazoline derivative and a direct active sympathomimetic amine with vasoconstrictive activity.
 - m) Name the pharmacological category of quinidine sulphate.
 - n) Captopril is used in treatment of _____.
 - o) Which of the following diuretic is a derivative of anthranillic acid -
 - i) Frusemide
 - ii) Urea
 - iii) spironolactone
 - iv) Ethacrynic acid
 - p) Mefenamic acid is used in - _____
 - q) Crocin is a popular brand name of -
 - r) Brand name of Remdesivir is -
 - s) In what dosage form azithromycin is given?
 - t) Name antimetabolites used as antineoplastic agents.
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