

[A-79]

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SARDAR PATEL UNIVERSITY
M.Sc. (Integrated) Biotechnology (IGMBT), Eight Semester Examination
Tuesday, 28th April 2015
2:30 p.m. to 5:30 p.m

PS08CIGMB4: Essentials of Pharmacology.

Total Marks: 70

- Note: (1) Figures to the right indicate marks.
(2) Draw a neat and labeled diagram, wherever necessary.

Q. 1 Choose the most appropriate answer from the four alternatives given: [8]

- (1) Transdermal therapeutic system are part of
(a) Local route of drug Administration (b) parenteral route of drug Administration
(c) subcutaneous route of drug administration (d) Inhalation
- (2) Which of the following is prodrug?
(a) Prontosil (b) Saquinavir (c) stavudine (d) none of them
- (3) Which of the following is local anesthetic drug?
(a) Lidocaine (b) catacholamine (c) succinyl choline (d) barbiturates
- (4) All mAChRs are blocked by
(a) acetylcholine (b) epinephrine (c) dopamine (d) atropine
- (5) In Diabetic condition small secretion or total absence of insulin causes: (a) increase glucose uptake (b) reduced glucose uptake (c) reduce glycogen uptake (d) none of them
- (6) Acarbose is classify in : (a) Glucose inhibitor (b) Glucosidase inhibitor (c) Glucogenic inhibitor (d) all of them
- (7) Which of the following antibacterial drug act on cell membrane integrity ?
(a) vancomycin (b) tetracycline (c) polymaxin B (d) none of them
- (8) Which of the following is antiviral drug?
(a) Acyclovir (b) Polymaxin B (c) Oxazolidinone (d) none of them

Q.2 Answer any SEVEN from the following: [14]

- (1) Define pharmacodynamic.
- (2) What is bioavailability of the drug?
- (3) Discuss advantages and disadvantages of parenteral route of drug administration in brief.
- (4) Give the classification of anti diabetic drug.
- (5) Define parasympatholytics.

- (6) How angina pectoris occurs?
(7) List out cough depressant compounds.
(8) Briefly explain the mechanism of action of Alkylating agents
(9) Write the therapeutic uses of sulphonamides.

- Q.3** (a) Describe parenteral route of drug administration in detail [6]
(b) Discuss the factor affecting absorption of oral drug in detail. [6]

OR

- (b) Write detail account on excretion of drug. [6]

- Q.4** (a) Give the classification of NMJ blocking drugs and explain mechanism of action of non- depolarizing blocking agent in brief. [6]
(b) Give brief account on local anesthetic drug [6]

OR

- (b) Write a detail account on cholinergic transmission. [6]

- Q.5** (a) Classify the drug used in cardiovascular disorders. Discuss mechanism of action of any one in detail. [6]
(b) Write mechanism of action and side effects of thiazide diuretics and betablocker in brief. [6]

OR

- (b) Write detail account on oral antidiabetic drug. [6]

- Q.6** (a) Write detail account on antimetabolites. [6]
(b) Describe mechanism of actions of action of fluoroquinolones and sulfonamides in detail. [6]

OR

- (b) Give classification of antiviral drug according to virus specific action. Write brief account on antiviral drugs against HIV and AIDS. [6]