

{70} SARDAR PATEL UNIVERSITY  
M.Sc. (Integrated) Biotechnology (IGMBT), Eight Semester Examination  
Thursday, 19<sup>th</sup> April 2018  
02:00 p.m. to 5:00 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) Anticancerous drug are given by following route for localized effect  
(a) Arterial supply (b) Deeper tissue (c) Topical (d) None of them.
- (2) Which of the following is prodrug?  
(a) Prontosil (b) Saquinavir (c) stavudine (d) none of them
- (3) 3-hydroxy-4-methoxyphenylglycol form by the action of :  
(a) monoamine oxidase (b) cholinesterase (c) a and b both (d) none of the above
- (4) Visamicol drug is a example of : (a) sympathomimetics (b) parasymphomimetics  
(c) parasympholytic (d) none of the above
- (5) Which of the following drug is improve sensitivity to insulin :  
(a) glitazone (b) Sulphonylureas (c) repaglinide (d) all of them
- (6) Which of the following is false?  
(a) The bronchospasm in asthma results from release of histamine.  
(b) The bronchospasm in asthma results from release of slow reacting substance of anaphylaxis(SRS-A).  
(c) The bronchospasm in asthma results from release of eosinophil chemotactic factor (ECF).  
(d) The bronchospasm in asthma results from necrosis of lungs.
- (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 pyrimidine analogous : (a) Fluorouracil (b) Methotrexate  
(c) mercaptopurine (d) none of the above

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

- (1) Differentiate between Pharmacokinetics and pharmacodynamic.
- (2) Define inverse agonist.
- (3) Define Leptocurares.
- (4) Define vasodilators.
- (5) Give example of drug that prevents mast cell degranulation and use in the treatment
- (6) How angina pectoris occurs?
- (7) How ACE inhibitors helps in the treatment of myocardial infarction
- (8) Write mechanism of action ribavarin.
- (9) Name the drug use to eradicate trematodes.

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Q.3 (a) Describe parenteral route of drug administration in detail. [6]  
(b) Write a detail account on Phase II reactions. [6]

OR

(b) Write detail account on mode of action based on chemical properties and physiological changes. [6]

Q.4 (a) Describe mechanism of action of local anesthetics in detail. [6]  
(b) Write mechanism of action, pharmacological action and adverse effect of choline esters in brief. [6]

OR

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

Q.5 (a) Discuss pathophysiology of Bronchial asthma in detail. [6]

(b) Write classification and mechanism of action of anti diabetic drugs in detail. [6]

OR

(b) Discuss mechanism of action of beta blockers and vasodilators. [6]

Q.6 (a) Give classification of anticancer drugs. Write brief account on alkylating agents. [6]  
(b) Write detail account on anti viral drug. [6]

OR

(b) Classify antihelminthic drug. Write detail note on drugs used to treat infection of *cestodes*. [6]

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