

[A]
93

No. of Printed Pages: 2

5C

SARDAR PATEL UNIVERSITY
M.Sc. (Integrated) Biotechnology (IGMBT), Eight Semester Examination
Tuesday, 5th April 2016
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) Which of the following receptor is intracellular
(a) GPCR (b) Voltage gated ion channel (c) Steroid hormone receptor (d) none of the above
- (2) Presence of food stuff retards:
(a) Adsorption of drug (b) absorption of drug (c) excretion of drug
(d) metabolism of drug
- (3) Carbidopa drug inhibit action of :
(a) acetylcholinesterase (b) dopadecarboxylase (c) (a) and (b) both (d) none of the above
- (4) ACh, carbachol, bethanechol are examples of :
(a) direct acting parasympathomimetics (b) indirect acting parasympathomimetics
(c) indirect acting sympathomimetics (d) direct acting sympathomimetics
- (5) Action of salbutamol is
(a) Bronchodilation (b) Bronchoconstriction (c) Increase heart rate (d) none of the Above
- (6) In Diabetic condition there small secretion or total absence of insulin which causes: (a) increase glucose uptake (b) reduced glucose uptake (c) reduce glycogen uptake (d) n of them
- (7) Mechanism of action of tetracycline is:
(a) Inhibit cell wall synthesis (b) inhibit carbohydrate synthesis (c) inhibit protein synthesis (d) none of the above
- (8) Mercaptopurine is a (a) Alkylating agent (b) Purine analogue (c) natural product (d) all of the above

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

- (1) Enlist advantages and disadvantages of IV route
- (2) Define redistribution
- (3) Enlist various factor affects the drug action
- (4) Define parasympathomimetics.

PTO

- (5) Define NMJ blockers.
- (6) How angina pectoris occurs?
- (7) Write brief account on expectorant.
- (8) What are aminoglycosides?
- (9) Give two examples of antihelminthic drugs.

- Q.3 (a)** What are different routes of drug administration? Write in detail about systematic routes. [6]
- (b)** How physical state and chemical properties of drug influence on pharmacodynamic properties of drug? Explain in brief. [6]

OR

- (b)** Write detail account on G protein couple receptor [6]

- Q.4 (a)** Discuss mechanism of action of local anesthesia in detail. [6]
- (b)** Give detail account on cholinergic transmission. [6]

OR

- (b)** Explain mechanism of action of sympathomimetic drug. [6]

- Q.5 (a)** Classify drug acting on CVS write detail note on nitrate [6]
- (b)** Discuss pathophysiology of Bronchial asthma [6]

OR

- (b)** Write a note on cardiac glycosides [6]

- Q.6 (a)** Write detail account on alkylating agents. [6]
- (b)** Write brief account on antihelminthic drugs [6]

OR

- (b)** Write detail note on β -lactam antibiotics. [6]