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SEAT No. _____

No. of printed pages : 02

SARDAR PATEL UNIVERSITY

M. Sc. Pharmaceutical Chemistry, Second Semester Examination

Wednesday, 20th March

2019

10.00 a.m. to 1.00 p.m.

Medicinal Chemistry : PS02CPCH22

Total Marks : 70

Note : (i) All questions are to be attempted. (ii) Figures to the right indicate marks.

- Q.1 Choose the correct option for the following :** **8x1=08**
- (i) Macroloid class of drug havingas basic component.
(a) Lacton ring (b) Keto & hydroxy group (c) Amino sugars (d) All
- (ii) Penicillin is an example of
(a) β -lactum (b) Aminoglycosides (c) Cephalosporins (d) None
- (iii) Texol is natural product used as agent.
(a) Anticancer (b) Sulphonamide (c) Antiviral (d) Anti fungal
- (iv) Cocci infection can be cure by drugs.
(a) antiviral drugs (b) antibacterial (c) anti-TB (d) antifungal drugs
- (v) Identify anti malarial agent from the following.
(a) Quinacrine (b) Pamaquine (c) Primaquine (d) All
- (vi) Mycobacteria are causative agent of
(a) Tuberculosis (b) Cancer (c) both 'a' & 'b' (d) None
- (vii) Azoles are used for
(a) Dermatophytoses (b) Aspergiosis (c) Histoplasmosis (d) Pneumocytosis
- (viii) Which one is DNA virus from the following?
(a) Herpes virus (b) Reo virus (c) Arena virus (d) Retro virus

- Q.2 Answer the following : (Attempt any seven)** **7x2=14**
- (i) Describe the term antibiotics and write adverse effect of it.
(ii) Draw the general structure of tetracyclines.
(iii) Classify sulpha drugs according to their mode of action.
(iv) Write synthesis of sulphanilamide drug.
(v) Define cancer and write about different type of tumors.
(vi) What is malaria? Write common symptoms and type of malarial disease.
(vii) What is Tuberculin test?

(1)

(P.T.O.)

- (viii) Explain the mode of action of antifungal agents.
(ix) Define DNA and RNA viruses with an example.

Q.3

- A. What are penicillins? Write SAR of Penicillin's. 06
B. Explain the salient features and SAR of Tetracycline class of drug. 06

OR

- B Write synthesis, uses and mode of action of Ampicilin and Cycloserin. 06

Q.4

- A. Define anti-neoplastic agents. Discuss in detail about cell cycle by schematic diagram. 06
B. Write the synthesis and explain mode of action of Sulphadiazine drug. 06

OR

- B. Write the synthesis and uses of following: 06
(a) Mechloromethamine and (b) Thiotepa

Q.5

- A. What are the casual organisms responsible for malaria? How do the antimalerials affect the life cycle of mosquito? 06

- B. Write the synthesis and mode of action for : Pyrazinamides and Primaquine. 06

OR

- B. Discuss in detail about various class of anti-tuberculosis agents. Explain the mode of treatments for tuberculosis. 06

Q.6

- A. Define and classify antifungal agents. Write synthesis and uses of any two antifungal drugs. 06

- B. Classify the antiviral agent on the basis of their chemical structure. Draw the structure, chemical name and uses of potent drug of each category. 06

OR

- B. Discuss in detail about Azoles used in fungal infection. 06