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SARDAR PATEL UNIVERSITY**M. Sc. Pharmaceutical Chemistry, Second Semester Examination****Wednesday, 6th April****2016****10.30 a.m. to 1.30 p.m.****Medicinal Chemistry-I: PS02CPCH02****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) Ampicillin is an example of class of drugs.
 (a) Penicillin (b) Cephalosporin (c) Macrolid (d) Quinolone
- (ii) Macrolid class of antibiotic having structure.
 (a) Amino sugars (b) Quinolone (c) Lactone (d) Alkyl chain
- (iii) Texol belongs to class of drug.
 (a) Anticancer (b) Sulphonamide (c) Antiviral (d) Anti fungal
- (iv) Identify the pathogenic mycobacterium from the option given below.
 (a) M. laprae murium (b) M. leprae (c) M. Phlei (d) M. Stercoris
- (v) Salicylic acid is an example of anti T. B. drug.
 (a) first line (b) second line (c) both 'a' & 'b' (d) none
- (vi) Antituberculosis drug inhibits the function of synthesis.
 (a) mycolic acid synthesis (b) cell wall synthesis (c) both 'a' & 'b' (d) none
- (vii) virus contains DNA nucleotide only.
 (a) Herpes virus (b) pox virus (c) adeno virus (d) all
- (viii) Amoebiasis diseases is caused by.....
 (a) Giardia lambila (b) Trypanosoma brucci
 (c) T. gondii (d) Entamoeba histolytica
- Q.2 Answer the following : (Attempt any seven)** **7x2=14**
- (i) Write synthesis of Cycloserin drug.
 (ii) Give the general adverse effect of anticancer drugs.
 (iii) Distinguish between : Platyhelminthis and nematodes.
 (iv) Define Chemotherapeutic agents with example.
 (v) What is TB infection and TB disease ?
 (vi) Write the structure and uses of Thiotepa drug.
 (vii) Write main drugs used for curing of fungal infection.
 (viii) Write the main causes of malarial disease and suggest its treatment.
 (ix) Give two examples of antiviral agents according to their mode of action.
- Q.3 Answer the following :**
- a. Define and classify antiviral agents. Explain life cycle of virus. **06**
 b. Write synthesis, uses and mode of action of penicillin class of drugs. **06**
- OR**
- b. Discuss about *Beta* lactum antibiotics. **06**

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- Q.4 Answer the following :**
- a. Define sulphonamides. Write synthesis of sulphadiazine. Discuss its mode of action. 06
 - b. Define antineoplastic agent. Draw schematic diagram of cell cycle of drug targets on cell cycle. 06

OR

- b. Write the synthesis of melphalan and sulphathiazole. 06

- Q.5 Answer the following:**
- a. Define anti malarial drug. Write synthesis, uses and mode of action of chlorquine drug. 06
 - b. What is tuberculin test ? Explain bacterial resistance of anti TB agents. Also write synthesis of Isoniazide and mefloquine . 06

OR

- b. Draw schematic life cycle of malaria and enlist the antimalarial agents. 06

- Q.6 Answer the following:**
- a. What are the antifungal agents ? Explain about causative agent of fungal infection. Write structure and mode of action of Ketoconazole drug. 06
 - b. Write synthesis of Iodoquinol and mode of action of amphotericin. 06

OR

- b. Write a note on: American trypanosomiasis. 06

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