REV-01 DPH/01/03 2023/05

# D.PHARM. FIRST YEAR PHARMACEUTICAL CHEMISTRY ER20-12T [REPEAT]

Duration: 3 hrs.

Full Marks: 80

## (PART-A: Objective)

#### Choose the correct answer from the following: $1 \times 20 = 20$ 1. Macrolide antibiotics inhibit protein synthesis by binding with a. 70s subunit b. 30s subunit c. 50s subunit d. None of the above Penicillin was discovered by scientist a. Paul ehrlich b. Gerhard Domagk c. Alexander fleming d. None of the above 3. The drug which is used as diuretics and hair care product is a. Mannitol b. Mephalan c. Minoxidil d. Metolazone 4. Which of the following disease is known as juvenile disease? b. Type II diabetes mellitus a. Type I diabetes mellitus c. Type II diabetes mellitus d. Type IV diabetes mellitus 5. Ramipril is an example of a. Beta blockers b. ACE Inhibitors c. Alpha blockers d. Calcium channel blockers 6. Pharmaceutical preparation for Mitomycin is a. Tablet b. Cream c. Capsule d. Injection 7. Flecainide belongs to which class a. Class 1A b. Class 1D c. Class 1C d. Class 1E 8. Mefloquine is a. 4- amino quinoline b. Quinine methanol d. 2,4 - diaminopyrimide c. 8- amino quinoline 9. Which category of Anti Anginal agents produce a side effect commonly known as Monday morning sickness: a. Calcium channel blockers b. Nitro vasodilators d. All of the above c. Potassium channel blockers

b. Abnormal pairing of purine and

pyrimidine bases d. All of the above

10. Alkylating agents exert cytotoxic action by inducing:

a. Breakage of DNA strand

c. Cross linking of DNA strands

11.	Malaria is a –	
	a. Bacterial disease	b. Fungal disease
	c. Protozoal disease	d. Algal disease
12.		
	a. Diazepam	b. Paracetamol
	c. Ibuprofen	d. Ketoconazole
13.	A chemical that changes its colour in acidic called.	and basic medium during titration is
	a. Indicator	b. Titrant
	c. Analyte	d. None of these
14.	Which of the following is heteroatom?	
	a. B	b. N
	c. K	d. Na
15.	Nitrous oxide is also known as gas.	
	a. Crying Gas	b. Laughing Gas
	c. Tearing Gas	d. Fearing Gas
16.	Orally and topically active antifungal drug having allylamine structural fe	
	a. Itraconazole	b. Fluconazole
	c. Terbinafine	d. ketoconazole
17.	Aceclofenac is used in	
	a. Bursitis	b. Toothache
	c. Spondylitis	d. All of these
18.	Heterocyclic ring present in furosemide is	
	a. Pyridine	b. Furan
	c. Pyrimidine	d. Pyrizine
19.	Which one of the following drug belongs to	class nitrosoureas
	a. Thiotepa	b. Lomustine
	c. Busulfan	d. Decarbazine
20.	Which one of the following is not a first line	antitubercular drug?
	a. ethambutol	b. rifampin
	c. rifabutin	d. pyrazinamide
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# PART-B: Short Answers

### [ Answer any ten (10) from the following ] [3x10=30]1. Define virus and write the stages of replication of virus 1+2=3 2. Write the difference between sedative and hypnotics. Classify 1+2=3 sedative and hypnotics with example 3. Explain life cycle of Malaria 4. What do you mean by First line Anti Tubercular Drug. Why Multi 1+2=3 drug Regimen is preferred in tuberculosis treatment. 1+2=3 Define and Classify Diuretics with Example. 6. Define Angina Pectoris and Write the Mechanism of action of 1+2=3 **Nitrates** 7. Define limit test and write the principle involved in limit test for iron 8. Give reason 1+1+1 =3a. Why glycerin is used in assay of Boric acid assay b. Combination antacid is more preferable than individual antacid c. Why formaldehyde is used in assay of ammonium chloride. 9. Define adrenergic antagonist. Classify them with examples 1+2=310. Write the labeling requirement and uses of CO<sub>2</sub>, NO<sub>2</sub> and O<sub>2</sub>. 1+1+1 =311. Explain acid-base titration with examples. 3 (PART-C: Long Answers) [ Answer any six (6) from the following [ [5x6=30]

1. Define NSAID. Write the structure, brand name and uses of

2. Define and classify anti hypertensive agent with example

aspirin and paracetamol

1+4=5

1+4=5

3.	Define Diabetes Mellitus. Write its types. Write the role of Insulin.
	Write the name of secreted hormone of Alpha, Beta and Gamma
	cells present in Pancreas

4. Define cancer and classify them. Classify alkylating agent as anti cancer agent and write it's mechanism of action.

5. Define Anti Arrhythmic agents. Classify them with example. Write the structure and uses of Procainamide

6. Define "Antacid" Classify them with example. Write a short mono-graph of any one drug of it.

 Define Heterocyclic Compound. Write the nomenclature of Heterocyclic Compound accordind to Hantzsch and Widman nomenclature.

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5

1+2+2 =5

1+2+2

1+1+3

1+4=5

=5

=5