	Sanjay Ghodawat University, Kolhapur Established as State Private University under Govt. of Maharashtra. Act No XL, 2017		2019-20
Year and Program: 2019-20 TY BSc	School of Science	Department of Chemistry	
Course Code: CHS313	Course Title: Pharmaceutical Chemistry	Semester – Odd (V) 10.30 am to 11 am	
Day and Date: Tuesday 26/11/19	End Semester Examination	Time: ½ hrs, Max Marks: 100	
PRN:	Seat No:	Section A Marks out of 20:	


Instructions: 1) All Questions are compulsory.
 2) For MCQs mark tic (✓) for correct answer. No marks for multiple tics (✓).
 3) Section A should be submitted to Jr Supervisor immediately after first ½ hour.

Section A

Q.1 Select the correct answer for following	Marks 20	level	CO
1 Pharmacophore is a part of molecular structure that is responsible for..... a. Solubility b. High molecular weight c. Acidity d. Particular biological interaction		L1	1
2 Paracetamol is used as a. Anticough b. Analgesic c. Hypnotic d. Antiviral		L1	1
3 In ED50 value, ED stands for..... a. Effective Dose b. Effective Drug c. Efficiency of Drug d. Energy of Drug		L1	1
4 Prodrug is a substance that is administered inform. a. Inactive b. Toxic c. Active d. Acidic		L1	1
5 What is correct definition of bioavailability? a. Bioavailability describes the proportion of the drug administered that is metabolised very quickly and thus is not available to induce a physiological effect. b. Bioavailability describes the ability of the administered drug metabolites to cause undesirable physiological effects c. Bioavailability is used to describe the fraction of the dose of drug administered that is present within the body and facilitates the desired physiological effects d. Bioavailability is the length of time an administered drug is present in the body and thus is available to cause a physiological effect		L2	1

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|----|---|----|---|
| 6 | In pharmacokinetics ADME stands for.....
a. Absorption, Distribution, Metabolism, and Excretion
b. Administration, Differentiation, Metabolism, and Excretion
c. Absorption, Disintegration, Metabolism, and Efficacy
d. Administration, Distribution, Metabolism, and Efficacy | L2 | 1 |
| 7 | Substrate used for synthesis of Acyclovir is.....
a. Phenol b. Aniline
c. Gaunine d. Benzaldehyde | L1 | 2 |
| 8 |is used as as starting material in synthesis of Dapsone.
a. Nitrobenzene b. 4-chloronitrobenzene
c. 4-nitroaniline d. Acetaldehyde | L1 | 2 |
| 9 | Chloramphenicol is an.....
a. Antibiotic b. Analgesic
c. Anticonvulsant d. Antipyretic | L1 | 2 |
| 10 | For azeotropic distillation of ethanol.....is used.
a. Ethyl acetate b. Acetone
c. Pyridine d. Benzene | L1 | 2 |
| 11 | Which of the following is used as substrate in fermentation?
a. Sugar cane b. Ethanol
c. Acetone d. Lemon | L1 | 2 |
| 12 | Phenobarbital hasactivity.
a. Anticough b. Analgesic
c. Hypnotic d. Antiviral | L1 | 2 |
| 13 | Diazepam is used to treat
c. Cancer b. Anxiety
c. Leprosy d. Hart disease | L1 | 2 |
| 14 |is a process to make beer.
a. Mashing b. Malting
c. Brewing d. Sparging | L1 | 2 |
| 15 | Which of the following is not a product of fermentation?
a. Lactate b. Oxygen
c. Carbon dioxide d. Ethanol | L1 | 2 |
| 16 | In fermentation of grains, there is generation of
a. Must b. Brine
c. Lactic acid d. Carbon dioxide | L1 | 2 |
| 17 | Which is not a fruit or vegetable based fermented product?
a. Wine b. Beer
c. Ethanol d. Vinegar | L1 | 2 |
| 18 | Ethanol is considered as an important feed stock for chemical industries because.....
a. It is polar b. It is non toxic | L1 | 2 |

- c. It is inert d. It undergoes variety of reactions
- 19 In fermentation to produce ethanol.....is added to maintain level of nitrogen. L1 2
- a. N_2 gas b. Ammonium salt
- c. Lime d. Aniline
- 20 Aeration is done in preparation of Penicilline to get..... L2 2
- a. Oxygen b. Nitrogen
- c. Moisture d. Carbon dioxide

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Course Code: CHS313	Course Title: Pharmaceutical Chemistry	Semester – Odd (V) <i>11 am to 1.30 pm</i>
Day and Date: <i>Tuesday 26/11/19</i>	End Semester Examination	Time 2.5 hr, Max Marks: 100
PRN:	Seat No:	Section B Marks 80

Section B

		Marks	Bloom's level	CO
Q.2	Solve any Two	12		
i)	Write note on Half-life efficiency of drug.	6	L4	1
ii)	Discuss the drug-receptor interactions.	6	L3	1
iii)	Give the synthesis of Paracetamol.	6	L2	1
Q.3	Solve any Two	12		
i)	Discuss with example the concept of prodrug.	6	L3	1
ii)	Give the synthesis and mode of action of Aspirin.	6	L3	1
iii)	Elaborate the concept of Pharmacophore.	6	L2	1
Q.4	a) Write note on following (Any Three)	12		
i)	Bioavailability	4	L2	1
ii)	Drug-receptor interaction	4	L3	1
iii)	Drug toxicity and Drug addiction	4	L2	1
iv)	LD50 & ED50 values	4	L3	1
	b) Solve any Two	16		
i)	Write note on Process of Fermentation.	8	L2	2
ii)	Discuss the fermentation process for preparation of Glutamic acid.	8	L1	2
iii)	Discuss the reactions involved in synthesis of Diazepam.	8	L2	2
Q.5	a) Solve any Two	16		
i)	Discuss the process of preparation of ethanol.	8	L2	2
ii)	Take an overview of production of Penicillin.	8	L2	2
iii)	Give properties and synthesis of Acyclovir.	8	L2	2
	b) Solve any Two	12		
i)	Give preparation properties and application of Glyceryl trinitrite.	6	L2	2
ii)	Give preparation properties and application of Dapsone.	6	L2	2
iii)	Discuss the reactions involved in synthesis of Zidovudine.	6	L3	4