

PARUL UNIVERSITY
FACULTY OF PHARMACY
Pharm. D Summer April -2023 -24 Examination

Year: 2

Subject Code: 08207202

Subject Name: Pharmaceutical Microbiology

Date: 01/05/2024

Time: 2:00pm to 4:00pm

Total Marks: 70

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1	Essay Type Questions. (any 2 out of 3) (15 Mark Each)	(30)	CO	PO	Bloom's Taxonomy
1.	a) Differentiate Eukaryotes and Prokaryotes. b) Enlist methods used for total and viable count of bacteria. Explain any one method of total count.		1 2	1,7 1,2,7,11	1,2 1,2,3
2.	a) Enlist various methods use to evaluate the disinfectants. Explain phenol coefficient tests in detail. b) Enumerate methods for antigen antibody reactions. Explain any two methods in detail.		3 4	1,2,7,11 1,2,3,7,11	1,2,3 1,2,3
3.	a) Write a note on mode of transmission, sign-symptoms, diagnosis and treatment of typhoid. b) Explain microbiological assay of vitamin B12 in detail.		5 5	1,2,3,7,11 1,2,7,11	1,2,3 1,2,3
Q.2	Short Essay Type Questions. (any 4 out of 5) (5 Mark Each)	(20)			
1.	Classify methods for cultivation of virus. Explain any one method in detail.		1	1,2,3,7,11	1,2,3
2.	Enlist methods for isolation of bacteria. Explain any one method in detail.		2	1,2,3,7,11	1,2,3
3.	Enlist methods for sterility test as per I.P. Explain one method in detail.		3	1,2,7,11	1,2,3
4.	Differentiate Endotoxin and Exotoxin.		4	1,2,7,11	1,2
5.	Describe in brief about widal test.		5	1,2,3,7,11	1,2,3
Q.3	Short Answers. (2 Mark Each)	(20)			
1.	Write contributions of Louis Pasteur in Microbiology.		1	1,7	1
2.	Differentiate between log phase and decline phase.		1	1,7	1,2
3.	Enlist staining methods for identification of bacteria.		2	1,2,7,11	1,2,3
4.	Classify sterilization techniques with suitable example.		2	1,2,3,7,11	1,2
5.	Enlist properties of an ideal disinfectant.		3	1,7	1
6.	Explain chemical indicators in brief.		3	1,7	1,2
7.	Define importance of booster dose.		4	1,2,7	1,2
8.	Draw a labelled structure of antibody.		4	1,7	1
9.	Write the applications of ELISA.		5	1,7	1,2
10.	Write sign, symptoms and mode of transmission of hepatitis.		5	1,2,7	1,2