Enrollment No: _____ Exam Seat No:_____

C. U. SHAH UNIVERSITY

Summer Examination-2020

Subject Name : Pharmaceutical Microbiology-I

Subject Code : 4PS05PMI1 **Branch: B.Pharm**

Semester : 5 **Date : 24/02/2020** **Time : 10:30 To 01:30** **Marks : 70**

Instructions:

(1) Use of Programmable calculator & any other electronic instrument is prohibited.
(2) Instructions written on main answer book are strictly to be obeyed.
(3) Draw neat diagrams and figures (if necessary) at right places.
(4) Assume suitable data if needed.

Q-1 **Define the following terms:** **(14)**

a) Spore
b) Pharmaceutical microbiology
c) Disinfectant
d) D Value
e) Abiogenesis
f) Cold sterilization
g) Inactivation factor
h) Sterility testing
i) Virus
j) Vitamin assay
k) Protozoa
l) Biofilms".
m) Isolation techniques for microbes
n) Alcohols as preservatives

Attempt any four questions from Q-2 to Q-8

Q-2 **Attempt all questions** **(14)**

a) How you validate bacterial filter for its efficiency ? **7**
b) Write a note on sterility testing. **7**

Q-3 **Attempt all questions** **(14)**

a) Discuss the scope of microbiology and its application. **7**
b) Classify the methods for viable counts. Write a note on Roll Tube Method. **7**

Q-4 **Attempt all questions** **(14)**

a) Write a note on factor affecting the growth of microorganism. **7**
b) Differentiate between gram positive and gram negative microorganism. **7**

Q-5		**Attempt all questions**	**(14)**
	a)	Classify methods of sterilization. Discuss Hot air oven with their application	**7**
	b)	Describe contribution of Louis Pasteur in microbiology.	**7**
Q-6		**Attempt all questions**	**(14)**
	a)	Explain SEM and TEM with Ray diagram.	**7**
	b)	Draw a labeled diagram of bacterial cell. Explain flagella	**7**
Q-7		**Attempt all questions**	**(14)**
	a)	Classify and explain various culture media.	**7**
	b)	Explain Dry heat sterilization in detail.	**7**
Q-8		**Attempt all questions**	**(14)**
	a)	Classify different method for microbial assay. Describe ditch plate method for microbiological assay.	**7**
	b)	Describe structure & composition of virus.	**7**