F.Y.B.SC. SEM – I (CBCS - 2016 Course): WINTER - 2018 SUBJECT: MICROBIOLOGY: INTRODUCTION TO MICROBIOLOGY

Day: Date:	15	onday -/10/2018 W-2	2018-0682	Time 11.00 A.M TO 02.0 Max. Marks: 60	00 PM
N.B.:	1) 2) 3)	All questions are COMPULSO Figures to the right indicate FU Draw neat labeled diagram W H	LL marks.	ıry.	
Q.1	A)	Attempt the following:			(06)
	1)	Which of the following scientist for as a free living nitrogen fixing bactor a) H. Hellriegel c) Martinus Willem Beijerinick	eria? b) H. Wilfarth		
	2)	Who initiated the use of carbolic wound dressings? a) Tyndall c) Jenner	b) Lister d) Ehrlich	surgical instruments and	
	3)	A parasitologist studies parasites. V a) Protozoa b) How viruses cause disease and ac c) The development of chemical sul d) Fungi	re involved in canc	er.	
	4)	The field of involution involution in the self. a) Molecular biology c) Mycology	lved studying how b) Virology d) Immunology	a person defends him/	
	5)	The substage condenser: a) Changes the wavelength of the light procuses light on the specimen. c) Decreases the amount of light read d) Increase the amount of light read.	aching the specimen		
	6)	A substance that forms an insoluble color to bacterial cell is called as a)Mordant c) Fixative	b) Intensifier d) None of the ab		
	B)	Define/ Give the important contribution of the scientist.			
j	i) ii) iii) iv) v)	Bioremediation. Edward Jenner Ionic bonds Decomposition reaction Decolouriser Resolution			

P. T. O.

a)b)c)d)	Name of the parts of the microscope below the stage and give their functions. Why are lipids important to a cell? Enlist properties of water. Why is it called a universal solvent? Name any four scientists in the Modern Era of microbiology and enlist their contributions.		
	Attempt any FOUR of the following:	(12)	
a)b)c)d)e)	Write a short note on fermentation. Give the role of microbes in sewage treatment. Give the basic structure of proteins. Give the important properties and functions of bases. Give the principle and applications of phase contrast microscope.		
	Answer any TWO of the following:	(12)	
a)b)c)	Name different parts of electron microscope and explain the formation of an image in an electron microscope. With the help of diagram explain capsule staining. Draw a diagram of a polynucleotide.		
a) b) c)	Answer any TWO of the following: Explain the procedure of Acid fast staining. What are purines? Explain with the help of a suitable diagram. Why is Robert Koch's contribution important in the field of Microbiology?	(12)	
	b) c) d) b) c) d) b) c) a) b) c) a) b) c)	 b) Why are lipids important to a cell? c) Enlist properties of water. Why is it called a universal solvent? d) Name any four scientists in the Modern Era of microbiology and enlist their contributions. Attempt any FOUR of the following: a) Write a short note on fermentation. b) Give the role of microbes in sewage treatment. c) Give the basic structure of proteins. d) Give the important properties and functions of bases. e) Give the principle and applications of phase contrast microscope. Answer any TWO of the following: a) Name different parts of electron microscope and explain the formation of an image in an electron microscope. b) With the help of diagram explain capsule staining. c) Draw a diagram of a polynucleotide. Answer any TWO of the following: a) Explain the procedure of Acid fast staining. b) What are purines? Explain with the help of a suitable diagram. 	

(12)

Attempt any **THREE** of the following:

Q.2