

(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 2012339

Roll No.

B.TECH.

Regular Theory Examination (Odd Sem-III), 2016-17

MICROBIOLOGY & CELL BIOLOGY

Time : 3 Hours

Max. Marks : 100

Section - A

Note : Attempt all the questions

(a) Fill in the blanks (10×2=20)

1. How do you enumerate the microbes?
2. Differentiate mesophilic and Thermophilic bacteria.
3. Steps involved in the strain development.
4. Name four symbiotic bacterial species.
5. What is cryopreservation?

(b) Explain Briefly

1. What is fortification?
2. How strain improvement in bacteria can be achieved?
3. What do you mean by Pathogenecity?
4. Factors affecting microbial growth?
5. Differentiate between Photosystem I and II.

Section - B

Note : Attempt any three questions with Answer in 100-200 words. (3×10=30)

1. What is protein targeting? Explain.
2. Write briefly on Cancer, its causes and types.
3. Explain different types of bacterial photosynthesis.
4. Write a note on the physical methods of the control of microorganisms.
5. Write short notes on :
 - a) Endospores.
 - b) Rhizosphere.

Section - C

Note : Attempt all questions with answer in 300-500 words. (5×10=50)

1. Write a note on Photophosphorylation.
2. Write briefly on :
 - a) Tuberculosis
 - b) Typhoid

3. Describe all physical, chemical & biological process of domestic waste water treatment.
4. Explain culture media and it types. Explain how you would obtain pure cultures of microorganisms.
5. Discuss the structure of bacterial cell wall. What are the chief differences in the cell wall composition of Gram positive and Gram negative bacteria?

