

Sardar Patel Mahavidyalaya, Chandrapur.
Model Examination Summer – 2018 B.Sc. Sem II (CBCS)
Subject: Microbiology- Paper I
(Microbial Chemistry and Physiology)

Time:3Hrs.

Max.Marks:50

Note: 1. All questions are compulsory and carry equal marks.

- Q.1. Discuss different types of bonds with their importance. 10
OR
Classify amino acids on the basis of R group.
- Q.2. Classify lipids with suitable examples. Add note on significance of lipids. 10
OR
Describe in details. Watson and crick model of DNA.
- Q.3 a) Write short note on optical isomers. 2½
b) Give general features of amino acids. 2½
c) Explain the biological significance of carbohydrates. 2½
d) Discuss the peptide bond theory. 2½
OR
e) Give importance of isomers in biology. 2½
f) Give biological significance of proteins. 2½
e) Explain the structure of hyaluronic acid. 2½
f) Describe in short the general structure of mRNA. 2½
- Q.4 a) Explain different types of solutions. 2½
b) Give general structure of amino acids. 2½
c) Give the structure of glucose and fructose ? 2½
d) What are simple proteins? Explain with two examples. 2½
OR
e) Explain cis-trans isomers in biology. 2½
f) Write short notes on uncommon amino acids. 2½
e) Describe the structure of raffinose. 2½
f) Explain different types of bonds which maintain tertiary structure of protein. 2½
- Q.5 Attempt any ten 10
a) Define atom and molecule.
b) Define Redox Potential.
c) Draw the structure of Maltose.
d) Give two examples of sulfur containing amino acids.
e) Draw the structure of lysine.
f) Give the list of 20 amino acids.
g) What are dextro-rotatory compounds. Give example.
h) Give two examples of Homopolysaccharides.
i) What are Glycerophospholipids.
j) Give three difference between DNA and RNA.
k) What are nucleotides.
l) Give names of different types of nitrogen bases.

All The Best