

M.Sc.(Microbiology) (CBCS Pattern) Semester - II
PSMBT-106 - Paper-II : Membrane Structure and Signal Transduction

P. Pages : 1

Time : Three Hours



GUG/S/23/11217

Max. Marks : 80

-
- Notes : 1. All the questions are compulsory and carries equal marks.
2. Draw the diagram wherever it is necessary.

1. Write about
- a) Flow cytometry. 8
 - b) Differential scanning colorimetry. 8
- OR**
- Write in detail about membrane junctions. 16
2. Describe mechanism of active and passive transport? 16
- OR**
- Write note on followings.
- a) Non gated ion channels. 8
 - b) ATP powered pumps. 8
3. Explain the following.
- a) Describe RTK kinases. 8
 - b) Give details on G-protein coupled receptors. 8
- OR**
- Discuss cytokine receptors and their mechanism in details? 16
4. Explain in brief.
- a) Histidine kinase pathway. 8
 - b) Mating types of yeast. 8
- OR**
- Write about Osmoregulatory pathway, in detail. 16
5. Add a note on.
- a) Mitochondria. 4
 - b) Uniport. 4
 - c) JAK – STAT pathway. 4
 - d) Heat shock proteins. 4
