

B.Sc. Semester-III Examination, 2022-23**MICROBIOLOGY [Honours]**

Course ID : 32212 Course Code : SH/MCB/302/C-6

Course Title : Cell Biology

Time : 1 Hour 15 Minutes Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*Answer **all** the questions.**UNIT-I**1. Answer any **five** of the following questions:

1×5=5

- Mention the basic constituents of middle lamella.
- Who proposed the 'Fluid-mosaic model'?
- What is RER & SER?
- Which cell organelle is called 'suicidal bag'?
- Mention the function of Cdks.
- What is 'Osteosarcoma'?
- Mention the function of transducer proteins in cell signaling.
- Mention the full form of GERL.

*[Turn Over]***UNIT-II**2. Answer any **two** of the following questions:

5×2=10

- Write a short note on GPCR based signaling.
- Describe the process of trafficking of proteins from ER to Golgi apparatus.
- What do you mean by sedimentation coefficient? Briefly mention the role of ribosome in protein synthesis. 2+3=5
- Briefly describe the molecular structure of centromere.

UNIT-III3. Answer any **one** of the following questions:

10×1=10

- What are golgi apparatus? Write its functions. "Mitochondria are semiautonomous" – Justify the statement. 8+2=10
- Differentiate apoptosis and necrosis. Briefly describe the cellular events of apoptosis.

2+8=10