

Seat No. : _____

AW-103

May-2016

B.Sc., Sem.-II

CC-103 : Environmental Science

(Cell the Unit of Life)

Time : 3 Hours]

[Max. Marks : 70

1. Answer the following : **14**
- (A) Explain the ultra structure of the cell.
- OR**
- Describe the powerhouse of the cell.
- (B) Discuss cytosol and cytoskeleton structures in a cell.
- OR**
- Discuss the Golgisomes and Ribosomes in detail.
2. Answer the following : **14**
- (A) Explain ATP generation during glycolysis.
- OR**
- Describe anabolism giving an example.
- (B) Explain Active and Passive transport system in cell.
- OR**
- Discuss the biochemical process of photosynthesis.
3. Answer the following : **14**
- (A) Describe ageing of cell in detail.
- OR**
- Discuss cell apoptosis and give its significance.
- (B) Explain brief introduction of Prophase I in Meiosis
- OR**
- Define Cell Cycle and describe its stages.

4. Answer the following : 14
- (A) Discuss Central Dogma of Life with diagram.
- OR**
- Discuss Operon model with example.
- (B) Write a note on cell signalling.
- OR**
- Describe steps of transcription in prokaryotes.

5. Answer **all** the following in brief : 14
- (1) Write any two functions of cytoskeleton.
 - (2) Define cilia.
 - (3) Give the nature of cytosol.
 - (4) Give the functions of cell membrane.
 - (5) Define Enzyme.
 - (6) Explain group translocation.
 - (7) Draw labelled diagram of cell cycle.
 - (8) What is cell senescence ?
 - (9) Define : Cell division.
 - (10) Why mitosis is called equational division ?
 - (11) Define Phagocytosis.
 - (12) What is importance of mitotic cell division ?
 - (13) Define DNA Replication.
 - (14) Define Neurotransmitter.
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