

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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