

2017

Time : 3 hours

Full Marks : 80

Answer from **both** the Sections as per direction

The figures in the right-hand margin indicate marks

(BIO-ORGANIC, CHEMISTRY)

SECTION – A

1. Answer any *four* questions from the following : 4 × 4
- (a) Explain the process of photosynthesis.
 - (b) Explain the degradation of amino acids.
 - (c) Write the primary structure of proteins.
 - (d) Write the structure of starch and glucose.
 - (e) Explain the hydrolysis of nucleic acid with one example.
 - (f) Write about the biological energy currency.

(2)

Or

2. Answer *all* questions from the following : 2×8

- (a) What are polysaccharides ? Give examples.
- (b) What is the importance of Krebs's cycle ?
- (c) Write the secondary structure of proteins.
- (d) What is Krebs's cycle ?
- (e) What is meant by folding of proteins ?
- (f) Write the chemical hydrolysis products of nucleic acids.
- (g) What are prokaryotic cells ? Give examples.
- (h) What is the role of carbon in the origin of life ?

SECTION – B

Answer *all* questions : 16×4

3. Explain Krebs's cycle in detail.

(3)

Or

Explain the process of Glycolysis of carbohydrates.

4. Write the methods of synthesis of amino acids.

Or

Discuss the folding and domain structure of proteins.

5. Describe the structure of RNA.

Or

Discuss the Double helix model of DNA.

6. Explain the structure of Eukaryotic cells.

Or

Write in detail about building blocks of bio-micromolecules.
