

[60] Seat No : _____

No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY

S. Y. B.Sc. 3rd SEMESTER EXAMINATION

25th November, 2019, Monday

02.00 PM to 05.00 PM

CONCEPT OF BIOLOGY (US03CBIO21)

Total Marks: 70

Q.1 Multiple Choice Question (One Mark each) (10)

1. Theory of acquired characters was given by _____
(a) Lamarck (b) Darwin (c) Miller (d) Oparin
2. Ribosome in the bacterial cells is _____ type.
(a) 77 s (b) 70 s (c) 80 s (d) 90 s
3. Loss of water from the aerial parts of plants in the form of water vapour is called _____
(a) Transpiration (b) Photosynthesis (c) Respiration (d) none
4. Stomata remain open at night and closes during day in _____ plant.
(a) C3 (b) C4 (c) CAM (d) none
5. Non cyclic Photophosphorylation is also known as _____ scheme.
(a) W (b) Z (c) M (d) N
6. Metacentric chromosomes have _____ arms.
(a) Equal (b) unequal (c) negligible (d) none
7. The shape of _____ RNA is cloverleaf shaped.
(a) m- RNA (b) t- RNA (c) r-RNA (d) all
8. Adenine pairs with _____ nitrogenous base.
(a) Guanine (b) Thiamine (c) Cytosine (d) none
9. Lampbrush chromosome is a _____ chromosome.
(a) Giant (b) Normal (c) Sex (d) none
10. m- RNA copies the message of DNA by the process of _____.
(a) Translation (b) Transcription (c) Transgenesis (d) all of the above

Q.2 Answer in brief (Any 10) (20)

1. Draw a diagram of Chloroplast.
2. Explain Darwinism in brief.
3. Write the function of Mitochondria.
4. Define osmosis.
5. What is Plasmolysis?
6. Explain Diffusion in brief.
7. Write about Euchromatin
8. What is a Nitrogenous base?
9. Write the chemical composition of Chromosomes.
10. What is Transcription?
11. Explain Translation.
12. What is a Nucleotide?

Q.3 Give a detailed account of characteristics and properties of life (10)

OR

Q.3 (a) Describe the structure and function of cell wall. (05)

(b) Explain Miller's experiment. (05)

Q.4 (a) Explain cyclic Photophosphorylation. (05)

(b) Write about different type of Transpiration (05)

OR

Q.4 (a) Explain non-cyclic Photophosphorylation. (05)

(b) Write a note on CAM cycle (05)

Q.5 (a) Write the structure of chromosome. (05)

(b) Write about m-RNA (05)

OR

Q.5 (a) Write the structure of Watson and Crick model of DNA (05)

(b) Write about t-RNA (05)

Q.6 Explain Protein synthesis in Prokaryotic cell. (10)

OR

Q.6 Explain Protein synthesis in Eukaryotic cell. (10)

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