



Year: 2018-19 School of Technology Program: F Y B-Tech

Course Code: FYT 123 Course title: Biology for Engineers Semester: II

Day and Date: End Semester Exam (ESE) Time: 3 hrs.

Max Marks: 100
Section A: 20marks
10:30 to 1:30 pm

Wednesday, 22nd May 2019
Instructions for Students:

- 1) All questions are compulsory.
- 2) Write complete sentence with correct option for MCQs.

CO'S Marks Blooms
Level

SECTION A

- | | | |
|---|-------------|----|
| Q1). <u>Answer the following.</u> | (20) | |
| A) Multiple choice questions. | (10) | |
| 1. The structural and functional unit of life is called as _____
a. Mitochondria b. Golgi bodies
c. DNA d. Cell | CO1 (1) | L1 |
| 2. The binding of one cell to another is brought by _____
a. Cell binding b. Cell adhesion
c. Cell junction d. Cell bonding | CO2 (1) | L1 |
| 3. Nucleotides are a component of _____
a. Neuron b. Nephron
c. DNA d. Protein | CO1 (1) | L1 |
| 4. _____ is not a greenhouse gas
a. Carbon-dioxide b. Nitrogen
c. Methane d. CFC's | CO1 (1) | L1 |
| 5. Based on sources stem cells are classified into _____ and _____
a. Pluripotent and Totipotent b. Endodermic and ectodermic
c. Embryonic and Adult d. Unipotent and Multipotent | CO2 (1) | L2 |
| 6. Which of the following is an abiotic factor?
a. Grass b. Water
c. Sea weed d. Lichen | CO3 (1) | L1 |

7. The most common type of neurotransmitter is the _____ CO4 (1) L1
 a. GABA b. Serotonin
 c. Stercobillin d. Acetylcholine
8. Nucleus was first discovered by _____ CO2 (1) L1
 a. Robert Hooke b. Robert Koch
 c. Robert Brown d. Robert Langdon
9. Transcription, translation and replication together are called as _____ CO2 (1) L1
 a. Information central b. Inheritance
 c. Evolutionary traits d. Central dogma
10. Dopamine is a _____ type of neurotransmitter. CO4 (1) L2
 a. Inhibitory b. Synthetic
 c. Excitatory d. Regulatory

B) State whether the statement is True or False. (10)

1. The human brain carries actual electric charges through itself. CO4 (1) L2
 (True/False)
2. Lysosomes are also called as the powerhouse of the cell. (True/False) CO1 (1) L1
3. Scientists Watson and Crick gave the 3-D helical model for DNA. CO2 (1) L1
 (True/False)
4. Flagella are also called as the bacterial motor. (True/False) CO3 (1) L1
5. Current human population of human beings on earth is over 7 million. CO1 (1) L1
 (True/False)
6. The study of human development is called as Evolutionary genetics. CO4 (1) L1
 (True/False)
7. Proteins are functional only in their tertiary conformation. (True/False) CO3 (1) L2
8. Mendel put forth the theory of molecular basis of inheritance. CO1 (1) L1
9. The assembly of electron microscopes is placed in a vacuum chamber. CO1 (1) L1
 (True/False)
- 10). Chitin is an extracellular matrix protein. (True/False) CO1 (1) L1

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