

SEAT No. \_\_\_\_\_

[109]

No. of Printed Pages : 2

Sardar Patel University  
External Exam-2020 (NC)

B.Sc V semester

Subject: Zoology

Course code: USO5CZOO.03 (Cell biology)

Date: 28.12.2020

Full marks: 70

Time: 2 to 4 pm

Q1. Multiple choice questions

(10)

1. Congo red is
  - a. Basic stain
  - b. Acidic stain
  - c. Neutral stain
  - d. None
2. Formaldehyde is used to fix
  - a. Enzyme
  - b. Lipid
  - c. Nucleic acid
  - d. All
3. Plasma lemma is
  - a. Selectively permeable
  - b. Impermeable
  - c. Semi permeable
  - d. Permeable
4. Mitochondria multiplies through
  - a. Binary fission
  - b. Multiple fission
  - c. Budding
  - d. Amitosis
5. Which organelles are without DNA?
  - a. Plastids
  - b. Mitochondria
  - c. Nucleosis
  - d. Ribosomes
6. Ribosome is often called
  - a. Microsome
  - b. RNA pastide
  - c. Dictyosome
  - d. Oxisome
7. 9 + 2 type of structure is found in
  - a. Centriole
  - b. Flagella
  - c. Ribosome
  - d. Microtubules
8. Microbodies are rich in enzymes
  - a. Hydrolases
  - b. Mutases
  - c. Oxidases
  - d. Isomerases
9. Which one is non-living cell inclusion ?
  - a. Golgi complex
  - b. Centrosome
  - c. Vacuole
  - d. Lysosome
10. Cilia and flagella are bilateral in symmetry due to
  - a. Plasma lemma
  - b. Singlet fibril
  - c. Double bridge
  - d. Both b and c

[1]

(P.T.O.)

Q2.

(08)

Fill in the blanks.....

1. Electrophoresis is a laboratory technique to separate.....
2. Nucleus was discovered by.....,
3. Largest cell organelle is .....
4. Engine of the cell is .....

True or false

5. Electron microscopy uses electrons.
6. Export house of cell is lysosome.
7. Director of the cell is nucleus.
8. Ribosome is without membrane.

Q3. Write short question (Any ten)

(10X2= 20)

1. Describe basic stain.
2. Write about Hook's compound microscope.
3. Draw mitochondria
4. Write importance of staining.
5. Explain mitochondria.
6. Describe suicidal bag of cell.
7. Write functions of microtubules.
8. Draw Golgi complex.
9. What is oxisome?
10. Draw acrocentric chromosome.
11. Describe Nucleolus.
12. Differentiate cilia and flagella.

Q4. Attempt any four. (LONG ANSWER)

(8X4=32)

1. Write a note on light microscope.
2. Describe cell fractionation.
3. Explain Singer Nicolson structure of plasma membrane
4. Write a note on lysosome.
5. Describe lampbrush chromosome.
6. Write a note on nucleus.
7. Write about centrioles.
8. Describe microbodies.