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SARDAR PATEL UNIVERSITY
SECOND YEAR B.Sc.(THIRD SEMESTER) EXAMINATION

2013

TUESDAY, 19th NOVEMBER

2:30 TO 5:30 pm

US03CBIO 01 (CYTOLOGY)

Marks: 70

Note: 1. Answers of all the questions (including multiple choice questions) should be written in the provided answer book only

2. Draw neat and labelled diagrams wherever necessary

Q.1. Select the correct answer and write it in the answer sheet. [10]

1. The rough endoplasmic reticulum has _____ on it.
(a) ribosomes (b) microbody (c) vesicle (d) None of these
2. Light reaction occurs in _____.
(a) Grana (b) Stroma (c) Both (d) None of these
3. The primary lysosomes are formed from _____.
(a) Golgi body (b) Endoplasmic reticulum (c) Nucleus (d) None of these
4. The centrioles are involved in _____.
(a) Spindle formation (b) Cytoplasmic streaming (c) Both (d) None of these
5. _____ is a process of trapping the solid particles in to vesicle by plasma membrane.
(a) Pinocytosis (b) Exocytosis (c) Cytokinesis (d) Phagocytosis
6. When a cell organelle is trapped by lysosome it forms _____.
(a) residual body (b) autophagic vacuole (c) pinosome
(d) phagosome
7. The network of fibers inside forms _____.
(a) Skeleton (b) Cytoskeleton (c) Mesoskeleton (d) Chromatin network
8. The microtubules are made up of _____ protofilament.
(a) 13 (b) 11 (c) 10 (d) 12
9. _____ protozoan animal is having bi nucleate cell.
(a) Amoeba (b) Paramecium (c) Euglena (d) All of the above
10. _____ is a micro body.
(a) Peroxisome (b) Glyoxisome (c) Both (d) None of these

Q.2. Answer the following. (Any ten) [20]

1. State chemical composition of Nucleolus.
2. Differentiate between Cilia and Flagella.
3. What are Peroxisomes?
4. Write functions of Nuclear membrane.
5. Why are lysosomes called suicidal bags?
6. Draw a labelled diagram of chloroplast.

7. Explain the function of Golgi body.
8. Explain in brief the structure of Cell Wall.
9. Write about structure of golgi body.
10. What are ergastic compounds?
11. Write the function of Nuclear pore.
12. Write the function of micro filament.

Q.3.

- (a) Write about the structure of plant cell wall. [5]
- (b) Describe the structure of plasma membrane with the help of fluid mosaic model. [5]

OR

Q.3.

- (a) What is active transport? Explain the mechanism through plasma membrane. [5]
- (b) Write about the chemical composition and function of plant cell wall. [5]

Q.4.

Write about the types, chemical composition and function of endoplasmic reticulum [10]

OR

Q.4.

Explain about the structure, distribution and function of Mitochondria. [10]

Q.5.

- (a) Write about the chemical composition and kinds of lysosomes [5]
- (b) Write the function of chloroplast in detail. [5]

OR

Q.5.

Write short notes:

- (a) Glyoxysomes [5]
- (b) Function of lysosomes. [5]

Q.6.

Write short notes:

- (a) Nuclear envelope [5]
- (b) Nuclear pore [5]

OR

Q.6.

- (a) Write about chemical composition of Nucleoplasm [5]
- (b) Define Nucleolus and give its function [5]