



**B.Sc. VI Semester Degree Examination, Sept./Oct. - 2024**

**BOTANY**

**DSC 13 : Cell Biology  
(NEP)**

Time : 2 Hours

Maximum Marks : 60

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- Note :** (i) Answer **all** the questions.  
(ii) Draw the diagrams wherever necessary.
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**SECTION - A**

Answer **all** the sub-questions.

**10x1=10**

1. (a) Who coined the term cell ?  
(b) Define plasmodesmata.  
(c) Define pinocytosis.  
(d) Name the power house of cell.  
(e) Expand r-RNA.  
(f) What are Lysosomes ?  
(g) What is Chaisma ?  
(h) What is centrifugation ?  
(i) What are spindle fibres ?  
(j) Name any one cytochemical stain.

**SECTION - B**

Answer **any four** of the following

**4x5=20**

2. Write a note on cell theory.
3. Describe the structural organization of mitochondria.
4. Write a note on Golgi apparatus organization.
5. Write a note on causes of Cancer.
6. Describe the embedding procedure with reference to fixation.
7. Write a note on structure of Endoplasmic reticulum.



**P.T.O.**

**SECTION - C**

Answer **any three** of the following.

**3x10=30**

8. Describe the ultrastructure of Nucleus.
9. Write short notes on :
  - (a) Glycocalyx
  - (b) Cell wall
10. Describe the biogenesis of mitochondria.
11. Describe the different phases of mitosis with neat labelled diagram.
12. Write short notes on :
  - (a) Detection of Aldehydes
  - (b) Flow sorting cytometry

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