

**NEP-04-1 / 01MSCB4.1- Paper-IV : Molecular Biology and Plant Biotechnology-I**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15064**

Max. Marks : 80

- Notes : 1. All questions are compulsory and carry equal marks.  
2. Illustrate your answers with diagram.

1. Give a detail account on membrane receptors. **16**  
**OR**
- Write notes on.
- a) Cell wall structure. **8**
  - b) Fluid mosaic model. **8**
2. Structure and function of microtubules. **16**  
**OR**
- Write notes on.
- a) Ultrastructure of endoplasmic reticulum. **8**
  - b) Microfilament. **8**
3. Write in detail on eukaryotic DNA replication. **16**  
**OR**
- Write notes on.
- a) Ultrastructure of nucleolus. **8**
  - b) DNA repair. **8**
4. Explain in detail flow cytometry. **16**  
**OR**
- Write notes on.
- a) Ion-exchange chromatography. **8**
  - b) FISH. **8**
5. Write short notes on.
- a) Plasmodesmata. **4**
  - b) Function of mitochondria. **4**
  - c) Forms of DNA. **4**
  - d) ELISA. **4**

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