

**Basic Concepts of Cell Biology, Sem-II, UPC 2492011203**

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**ASSIGNMENT**

**20 MARKS**

1. An organism has 40 chromosomes in the diploid stage. Indicate how many chromosomes are present in the following stages: (2)
  - i. Telophase of meiosis I
  - ii. Telophase of meiosis II
2. What will happen to the Golgi Apparatus if vesicular transport from the ER is blocked? (3)
3. Explain the difference between brightfield and phase contrast microscopy diagrammatically. (5)
4. With the help of a diagram, discuss the structure of the nuclear pore complex. (4)
5. How are the apical and basolateral domains of an intestinal cell membrane kept functionally distinct? (3)
6. Write a short note on the treadmilling of microfilaments. (3)