



**PAQ-003-1132001** Seat No. \_\_\_\_\_

**M. Sc. (Biotechnology) (Sem. II) (CBCS)  
(W.E.F. 2016) Examination**

**August - 2020**

**BT-206 : Molecular Cell Biology  
(New Course)**

**Faculty Code : 003**

**Subject Code : 1132001**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

**Instruction :** All questions are compulsory. Support your answers with suitable illustrations where required.

**1 Answer Any Seven : (2 Marks each) 14**

- (1) What is Mitosis?
- (2) Differentiate cell biology and molecular cell biology.
- (3) What do you understand by cell cycling?
- (4) What is the corelation of G-Protein and signal transduction?
- (5) Comment on the Necrosis.
- (6) What is apoptosis?
- (7) What is the most salient difference between prokaryotes and eukaryotes?
- (8) What are cytoskeletons?
- (9) What is IVF?
- (10) Enlist various proteins necessary in fertilization.

**2 Write detailed comments on (Answer Any Two) 14  
(7 marks each)**

- (a) Mitotic cell division
- (b) G-Protein and its function
- (c) Post-Fertilization events

- 3** Write comments : (7 marks each) **14**  
(a) Meiosis and its regulation  
(b) Apoptosis
- OR**
- 3** Comment on : (7 marks each) **14**  
(a) Developmental Biology  
(b) Microtubules in cell division
- 4** Comment on : (7 marks each) **14**  
(a) Cytoskeletons and their significance  
(b) Role of protein kinase in cell cycling
- 5** Write detailed comments on : (Any **Two**) (7 marks each) **14**  
(a) Early embryonic developments  
(b) Recent developpements in cancer diagnosis and treatment  
(c) Regulation of the Oncogenes  
(d) Cell motility and its significance
-