

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: MSC
BRANCH: BIO-TECH

SEMESTER : I
SESSION : MO/18

SUBJECT: BT401-MOLECULAR CELL BIOLOGY

TIME: 03:00

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
-

- Q.1(a) Write a short note on the transport across the cell membrane. [5]
(b) With the help of neat diagrams describe the semi autonomous cell organelles. [5]
- Q.2(a) Throw light on fundamentals of molecular biology. [5]
(b) Describe the Patch clamp method and its significance. [5]
- Q.3(a) Write a short note on molecular motors. [5]
(b) Give the comparative account of the different types of cytoskeletal elements. [5]
- Q.4(a) Write a vivid note on the plant growth factors and hormones. [5]
(b) Describe with a neat diagram signaling pathways that depend on regulated proteolysis. [5]
- Q.5(a) Give the overview of the components of the cell cycle and cell cycle control system, [5]
(b) Describe intracellular and extracellular control of the cell cycle events. [5]

*****28.11.18*****M