EXAM DATE: 5/ 12/ 2020

GURUDAS COLLEGE
INTERNAL EXAMINATION 2020
BSc (Semester II) Under CBCS
MICROBIOLOGY (HONS)
PAPER CC 4

TIME 2 Hr **FULL MARKS: 50**

GROUP A
(25 MARKS)

Q.1 Answer any **TEN** Questions 10 x 2.5 = 25

a. What is Nuclear Localisation Signal (NLS)? What is its significance?
b. What are the components of ECM? Briefly mention names only.
c. What is the difference between plant, bacteria and archaeal cell wall only?
d. What is cytoskeleton protein of cell? Mention their types found in animal cell.
e. What is sorting signal? Explain with example.
f. What is post and co translational protein translocation?
g. What do you mean by glycosylation of protein? Briefly explain with example.
h. What is cGMP signalling pathway? Explain with diagram.
i. What is the intrinsic pathway of apoptosis? Diagrammatically explain only.
j. State three characteristics of a cancer cell.
k. What do you mean by Cyclin Cdk cycle? Explain with diagram only.
l. What is the role of Hydroxyurea and Caffein in check point protein?
m. How activation of Cdk is taking place? Explain with diagram only.
n. What is the function of cdc 25 phosphatase and Wee1 kinase on cdk? Explain diagrammatically.
o. What is embryonic stem cell therapy? Explain with diagram only.

GROUP B
(15 MARKS)

Q.2 Answer any **Three** question 3 x 5 = 15

a. Diagrammatically represent phases of Mitosis in typical onion root cell.
b. What is the difference between Mitosis and Meiosis.
c. What differences you observed in between plant cell and animal cell under normal microscope?
d. What properties you identify under microscope of cancerous cell?
e. Draw a diagram of Mitochondria typically mentioning its various structure seen under Microscope.

GROUP C
(10 MARKS)

Q. 3 Answer any **Four** question 4x 2.5 = 10

a. State four important difference between cancer cell and normal cell.
b. Mention function of the following protein in cell cycle: Wee 1 Kinase, CAK, APC, Mad
c. What are autocrine, paracrine and endocrine signalling?
d. Mention three different fates of secretory proteins in cell.
e. What is the characteristics of lysosome? Why it is called suicidal bag of cell?
f. What are apoptosom, procaspase and caspase?

NOTE: **SUBMIT PDF OF ANSWER SCIPT TO infomcbasem2@gmail.com WITHIN 1:30 PM**