

B.sc. SEM V
BOT-A
CC 11 (Cell and Molecular Biology)
Internal Examination
2020

Time: 30 min

FM 10

Answer any ten questions:

1X10

- i) Who proposed endosymbiotic theory?
- ii) What is miRNA?
- iii) What is cpDNA?
- iv) What is mtDNA?
- v) What is nuclear lamina?
- vi) What is nucleosome?
- vii) What is SSB protein?
- viii) Write one function of DNA polymerase I.
- ix) What is wobble hypothesis?
- x) What is Marker gene?
- xi) What is cosmid?
- xii) What is plasmid?

**B.sc. SEM V
BOT-A
CC 12 (Biochemistry)
Internal Examination
2020**

Time: 30 min

FM 10

Answer any ten questions:

1X10

- i) Differentiate between covalent and non covalent bond.
- ii) Define isoelectric point.
- iii) Draw the molecular structure of Adenine.
- iv) Give an example of quaternary protein.
- v) Give an example of phospholipid?
- vi) Write the equation of Michaelis-Menten?
- vii) Define free energy?
- viii) What is enantiomer?
- ix) What is Redox potential?
- x) Give an example of glycolipid.
- xi) What is buffer?
- xii) Name one co-enzyme.

**B.sc. SEM V
BOT-A
DSE A (Biostatistics)
Internal Examination
2020**

Time: 30 min

FM 10

Answer any ten questions:

1X10

- i) Define mean.
- ii) Define mode.
- iii) What is Random sampling?
- iv) What is coefficient of variation?
- v) What is standard error?
- vi) Write the formula of standard deviation.
- vii) What is test of significance?
- viii) Define goodness of fit.
- ix) What is degree of freedom?
- x) What is probability?
- xi) Write the formula of chi-square test.
- xii) Write the formula of Hardy-Weinberg equilibrium.

B.sc. SEM V
BOT-A
DSE B (Plant Biotechnology)
Internal Examination
2020

FM 10

Answer any ten questions:

1X10

- i) What is totipotency?
- ii) What is explant?
- iii) What callus culture?
- iv) Write one application of callus culture.
- v) Define artificial seed.
- vi) Write a significance of somatic embryogenesis?
- vii) Define cyto-differentiation.
- viii) Write one importance of protoplast culture.
- ix) Give an example of plant tissue culture medium.
- x) What is BT cotton?
- xi) What is Reporter gene?
- xii) Give an example of gene transfer method.