U.G. 2nd Semester Examination - 2020

Molecular Biology & Biotechnology

[HONOURS]

Course Code : MBTH/CC-201-T-CCR3

Full Marks : 40 Time : $2\frac{1}{2}$ Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

GROUP-A

1. Answer any **five** from the following questions: 2×5=10

   a) What is saltatory conduction?

   b) Name the hormones secreted by posterior pituitary.

   c) State two important functions of melatonin.

   d) What is endemic goitre?

   e) What is synaptic cleft?

   f) What do you mean by motor end plate?

   g) What do you mean by rigor mortis?

   h) What is fibrinolysis?

GROUP-B

2. Answer any **two** from the following questions: 5×2=10

   a) Discuss how carbon dioxide is transported through our blood. 5

   b) Describe the role of thrombin in blood coagulation. 5

   c) Describe the structure of synapse with labelled diagram. 5

   d) Briefly describe the synthesis of T3 and T4. 5

GROUP-C

3. Answer any **two** from the following questions: 10×2=20

   a) i) Briefly describe the process of erythropoeiesis.

      ii) Explain the role of erythropoietin in erythrocyte formation. 6+4=10

   b) i) Briefly describe about the pressure and volume changes during cardiac cycle.

      ii) State the role of intercalated disc. 8+2=10

c) i) Describe the mechanism of action of steriod hormones.

ii) Write a note on diabetes insipidus. 7+3=10

d) i) Discuss the mechanism of protein absorption in alimentary canal.

ii) Describe the role of bile in fat metabolism. 7+3=10

———————