No. of Printed Pages :2

Sem-III–Zool-CC-7
(Reg)

2020-21

Time - 3 hours
Full Marks – 60

*Answer **all groups** as per instructions.*
Figures in the right hand margin indicate marks.
Candidates are required to answer
in their own words as far as practicable.

Group-A

1. Answer all questions or fill in the blanks as required. [1x8]
   a) Name a sugar-acid.
   b) Write the name of a reducing disaccharide.
   c) What is a hetero polysaccharide?
   d) What do you mean by emulsification?
   e) Write the name of sugar component of nucleotide.
   f) What is the length of purine-pyrimidine pair in double stranded DNA?
   g) What is not present in prokaryotic mRNA?
   h) What is a Zymogen?

GROUP-B

2. Answer any eight of the following questions within two or three sentences each. [$1\frac{1}{2}$x8]
   a) What is Killiani synthesis?
   b) Where do trehalose occur naturally?
   c) What is the main structural polysaccharide of the exoskeleton of arthropods?
   d) What is found in membrane of Yeast and Fungi?
   e) What is the colloidal nature of protein?
   f) What is denaturation of protein?
   g) Write different types of purines.
   h) What is a circular DNA?

i) What is a holoenzyme?

j) What is not present in t-RNA?

GROUP-C

3. Write notes on any eight of the followings within 75 words: [2x8]

a) Triose

b) Maltose

c) Cellulose

d) Steroids

e) Sulphur-containing amino acids

f) Quaternary structure of protein

g) What is pyrimidine?

h) Cloverleaf model

i) MM plot

j) What is a cofactor?

GROUP- D

4. Answer any four questions within 500 words each. [6x4]

a) Describe the structure and properties of any four important disaccharides.

b) Describe the classification and biological importance of fatty acids.

c) Discuss the structure and properties of amino acids.

d) Describe the structure and properties of protein.

e) Describe the structure of DNA.

f) Explain the structure and classes of immunoglobulin.

g) What is enzyme kinetics? Explain the kinetics of single-substrate reaction.

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