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SIIS 71 A-2K14
B.Sc. IInd Semester Degree Examination
Biotechnology (Optional)
(Biochemistry & Biophysics)
Paper - 2.5

Time :3 Hours

Maximum Marks : 80

Instructions to Candidates:

- 1) Answer **all** the sections
- 2) Draw diagrams wherever necessary.

Section - I

I Answer the following in brief:

(15×1=15)

- 1) Prosthetic group
- 2) Beri - Beri
- 3) Spingo lipids
- 4) Z - DNA
- 5) Co - enzyme
- 6) Nucleotide
- 7) Tocopherol
- 8) Oligosaccharides
- 9) Cholesterol
- 10) Lambert law
- 11) Raman effect
- 12) Optic filters
- 13) Radio isotopes
- 14) Phototropism
- 15) X-ray crystallogram.

Section - II

II Write any five of the following in brief

(5×5=25)

- 16) Fat soluble vitamins
- 17) IR spectroscopy and its applications

- 18) Waxes and steroids.
- 19) Principle and applications of UV-visible spectrophotometry.
- 20) Chemical properties of carbohydrates.
- 21) Light receptors in animals.
- 22) Tertiary structure of proteins.

Section - III

III. Write explanatory note on any four of the following.

(4×10=40)

- 23) Principle and instrumentation of atomic absorption spectroscopy.
 - 24) Classification and chemical properties of enzymes.
 - 25) What is ECG? Explain
 - 26) Classify and add properties of fat soluble vitamins
 - 27) Role of radio isotopy in Biology
 - 28) NMR imaging and its applications.
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