

T.Y.B.SC. SEM – V (2014 Course) : WINTER - 2018
SUBJECT: BOTANY : MOLECULAR BIOLOGY & BIOCHEMISTRY (B – 55)

Day : Wednesday
Date : 17/10/2018

W-2018-0847

Time: 12.00 NOON TO 02.00 PM
Max. Marks: 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat and labeled diagrams **WHEREVER** necessary.
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Q.1 Attempt **ANY TWO** of the following: [10]

- a) Explain concept of DNA fingerprinting.
- b) Define proteins and give its importance.
- c) Explain various factors affecting enzyme activity.

Q.2 Attempt **ANY TWO** of the following: [10]

- a) What are lipids? Give its properties.
- b) Give an account of protein synthesis.
- c) Give the concept of genetic engineering.

Q.3 Attempt **ANY TWO** of the following: [10]

- a) What is DNA sequencing? Explain in detail.
- b) Define amino acids. Give properties of amino acids.
- c) Explain Lock-Key hypothesis in enzymes.

Q.4 Attempt **ANY FIVE** of the following: [10]

- a) What are polysaccharides?
- b) Give the properties of lipids.
- c) Explain in short transgenic plants.
- d) Give the forms of DNA.
- e) Write functions of amino-acids.
- f) What is gene transfer in plants?
- g) Distinguish between monosaccharides and oligosaccharides.

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