

T.Y.B.SC. SEM – V (2014 COURSE) : SUMMER - 2018

SUBJECT : MOLECULAR BIOLOGY & BIOCHEMISTRY

Day : **Friday**
Date : **20/04/2018**

S-2018-0754

Time : **03.00 PM TO 05.00 PM**
Max. Marks : 40

N.B.

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

- a) Give factors affecting enzyme activity.
- b) Give definition and functions of amino acids.
- c) Explain DNA finger printing.

Q.2 Attempt **ANY TWO** of the following: **(10)**

- a) Give classification and functions of polysaccharides.
- b) Explain RNA structure and their forms.
- c) Explain concept of genetic engineering.

Q.3 Attempt **ANY TWO** of the following: **(10)**

- a) Give classification and properties of lipids.
- b) Describe Lock-key hypothesis in enzyme action.
- c) Give functions of monosaccharides and oligosaccharides.

Q.4 Attempt **ANY FIVE** of the following: **(10)**

- a) Write a note on cellulose.
- b) Give functions of proteins.
- c) Write about gene cloning.
- d) Write a note on Z forms of DNA.
- e) Sketch and label DNA structure.
- f) Write a note on *Agrobacterium*.
- g) What is BT cotton and give its examples.

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