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SEAT No. :

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S.Y.B.Sc. (Vocational)

BIOTECHNOLOGY-II

**VOC-Biotech-212: Recombinant DNA Technology
(2013 Pattern) (Semester-I) (Paper-II)**

Time :2Hours]

[Max. Marks : 40

Instructions to the candidates:

- 1) All questions are compulsory.*
- 2) All questions carry equal marks.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Figures to the right indicate full marks.*

Q1) Answer each of the following in 1-2 lines:

[10]

- a) What are cosmids?
- b) Name the two methods for DNA Sequencing.
- c) Mention any one NIH guideline in RDT.
- d) Define site directed mutagenesis
- e) Enlist the two types of λ -phage vectors.
- f) What is gene cloning?
- g) Name any one restriction endonuclease with its recognition sequence.
- h) What is southern blotting?
- i) Define proteomics.
- j) Give two examples of vectors used in r-DNA technology.

Q2) Write short notes on any two of the following:

[10]

- a) YAC vector .
- b) DNA Modifying enzymes.
- c) Northern blotting.

P.T.O.

Q3) Answer any two of the following. **[10]**

- a) Describe non- radioactive detection procedures for screening of transformants.
- b) Explain genomics in detail.
- c) What is r-DNA? Describe any 4 tools used in r-DNA technology.

Q4) What is PCR? Explain the steps involved in PCR. Enlist the types of PCR and give its applications.

OR

Describe different applications of r-DNA Technology. **[10]**

