

C 42411

(Pages 2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, JUNE 2013

(CUCSS)

Microbiology

MB 4E 05—GENETIC ENGINEERING

Time : Three Hours

Maximum : 36 Weightage

I. Write short answers to the following. Answer *all* questions. Each question carries 1 weightage :

- 1 Expression vectors.
- 2 Self ligation.
- 3 Insertional inactivation.
- 4 Fluorescent probes.
- 5 SiRNA.
- 6 Primer.
- 7 Nested PIR.
- 8 Ti plasmid.
- 9 Adaptors.
- 10 Reverse transcriptase.
- 11 Restriction enzymes.
- 12 Bacterial transformation.
- 13 Dye-terminator sequencing.
- 14 Gene gun.

(14 x 1 = 14 weightage)

II. Write short paragraph answers to the following. Answer any *seven* questions. Each question carries 2 weightage :

- 15 AFLP.
- 16 Site directed mutagenesis.
- 17 Electroporation.
- 18 Plaque lift assay.
- 19 BAC.

Turn over

- 20 Codon optimisation.
- 21 Binary vector.
- 22 Taq DNA polymerase.
- 23 Applications of radio labeled probes.
- 24 Diagnostic applications of western blotting.

(7 x 2 = 14 weights)

III. Explain the following. Answer any *two* questions. Each question carries 4 weightage

- 25 Explain cDNA library construction and methods to screen cDNA library.
- 26 Explain Northern blotting and its applications,
- 27 Explain RAPD and its applications.

(2 x 4 = 8 weightage)