

C 80662

(Pages : 2)

Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, MARCH 2020

(CUCSS)

Aquaculture and Fishery Microbiology

AFM 4C 17—BIOTECHNOLOGY AND MOLECULAR BIOLOGY

Time : Three Hours

Maximum : 36 Weightage

I. Write short answers to the following. Answer *all* questions :

- 1 Lethal genes.
- 2 Operon.
- 3 Stem cell.
- 4 Replication bubble.
- 5 Primer.
- 6 Lagging strand.
- 7 Sliding clamp.
- 8 Termination.
- 9 Promoter DNA.
- 10 Abortive initiation.
- 11 Lac Operon.
- 12 Transcription inducer.
- 13 Biofilm.
- 14 snRNA.

(14 × 1 = 14 weightage)

II. Write short paragraph answers to the following. Answer any seven questions :

- 15 Gene regulation in prokaryotes.
- 16 RNA polymerase.
- 17 Application of cell lines.
- 18 Probiotics.

Turn over

- 19 The genetic code.
- 20 Induced mutations.
- 21 Gene loss as evolutionary adaptation.
- 22 Bioremediation.
- 23 Bidirectional replication.
- 24 Methylation of DNA.

(7 × 2 = 14 weightage)

III. Answer any *two* questions :

- 25 Write an essay on applications of recombinant DNA technology.
- 26 What is mutation? What are the practical applications of mutation ?
- 27 Describe the gene regulation strategies in eukaryotes.
- 28 What are the applications of microbial biotechnology in aquaculture ?

(2 × 4 = 8 weightage)