



SN – 383

III Semester B.Sc. Examination, November/December 2017
(CBCS – F/R)
MICROBIOLOGY – III
Microbial Physiology and Microbial Genetics

Time : 3 Hours

Max. Marks : 70

Instruction : Answer *all* questions.

SECTION – A

I. Write brief notes on the following :

(5×2=10)

- 1) Coenzymes.
- 2) Nitrite oxidising bacteria.
- 3) Hfr.
- 4) Enzyme nomenclature.
- 5) Transitions and transversions.

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SECTION – B

II. Answer **any four** of the following :

(4×5=20)

- 6) Describe acetic acid fermentation.
- 7) Give an account on photosynthetic pigments of prokaryotes.
- 8) Explain methods of ATP production.
- 9) Write a note on induced mutation.
- 10) Give an account on genomic organisation in prokaryotes.

SECTION – C

III. Answer **any three** of the following :

(3×10=30)

- 11) Give detailed account on tricarboxylic citric acid cycle.
- 12) Describe properties, classification and functions of lipids.
- 13) Write a note on enzyme inhibition and regulation.
- 14) Describe detail DNA replication.
- 15) Give an account on transduction.

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SECTION - D

IV. Answer the following in one sentence :

(10×1=10)

- 16) Chitin.
- 17) Active site.
- 18) NADH.
- 19) Rubp carboxylase.
- 20) Homofermentation.
- 21) Phosphoric acid.
- 22) Auxotrophs.
- 23) Transposable elements.
- 24) Ribozyme.
- 25) Hexo kinase.

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