

Time : 3 Hours]

- Instructions : (1) All questions carry equal marks.
(2) Draw figure wherever needed.

[Max. Marks : 70]

Answer any two :

- Describe briefly effect of pH & Temperature on growth of bacteria.
- Explain : Classification of bacteria on the basis of Oxygen requirement.
- Describe briefly selective and enriched media.
- Explain : Facilitated diffusion with figure.

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Answer any two :

- Describe briefly general properties of enzymes.
- Explain : Nomenclature of enzymes.
- Explain : Factors affecting enzyme activity.
- Explain : Mechanism of enzyme action.

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3. Explain any two :

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- What is growth ? Discuss normal growth curve of bacteria.
- Explain : Measurement of microbial growth on the basis of cell numbers.
- Explain : Synchronous growth.
- Describe mode of action of streptomycin.

4. Answer any two :

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- Explain : Basic structure and function of DNA.
- Explain : Role of reducing power in metabolism.
- Describe briefly classification & use of lipid.
- Explain : Role of energy rich compounds in metabolism.

5. Answer the following in one or two lines only :

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- What is the function of agar agar in a culture medium ?
- Give example of broad spectrum antibiotics.

- (c) What are Halophiles ?
- (d) What are extra cellular enzymes ?
- (e) Give two examples of co-enzymes.
- (f) What is generation time of E coli ?
- (g) What is prosthetic group ?
- (h) Who discovered Penicillin antibiotic ?
- (i) Name the protein present in egg.
- (j) Give two examples of anaerobic bacteria.
- (k) What is anabolism ?
- (l) What is binary fission ?
- (m) What is primary metabolism ?
- (n) Give full form of NAD.

