

RAN-2403001301066009 / 2403000501066009

B.Sc. (Bio Technology) (NCF-NEP) (Sem. I) Examination November - 2025

SEC-Bacteriological Media and Isolation Techniques

Time: 30 min]

[Total Marks: 13

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book.
- (2) Figures to the right indicate full marks.
- (3) Draw neat and labelled diagrams wherever necessary.

Seat No.:

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Student's Signature

Q.1. Choose the correct option.

(06)

1. What type of culture media has an unknown chemical composition?
A) Defined media B) Enriched media
C) Complex media D) Minimal media
2. Bacteria that require 12-15% NaCl concentration are known as:
A) Halotolerant bacteria B) Halophilic bacteria
C) Acidophilic bacteria D) Thermophilic bacteria
3. What is the usual percentage of agar used in solid media?
A) 0.1% – 0.5% B) 1% – 2%
C) 5% – 7% D) 10%
4. Apart from EDTA, which of the following can be used as a chelating agent in media?
A) Sodium chloride B) Citric acid
C) Glucose D) Peptone
5. Which of the following red algae is commonly used to extract agar?
A) Ulva B) Spirulina
C) Gracilaria D) Laminaria
6. Which type of heat is used by an autoclave for sterilization?
A) Dry heat B) UV radiation
C) Moist heat under pressure D) Infrared radiation

Q.2. Answer in one word/one line (Any 7).

(07)

1. What method should be used for sterilization of heat labile substances?
2. What is the melting temperature of agar?
3. Mention one method used for the isolation of pure culture.
4. Which device is used to pick a single bacterial cell from a mixed culture?
5. Facultative anaerobe also grows in presence of _____.
6. What type of media is having a jelly like or custard like consistency?
7. Which element plays an important role in formation of endospore?
8. Mention one trace element used in media preparation.