

Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and Commerce
Department of Dairy Technology
B. Voc. Dairy Technology
Semester I BDT 203- Dairy Microbiology
Question Bank
Section I

Q1.A) Fill in the blanks

- 1) The major locomotary structure of bacterial cell is ----
- 2) ----- agar is used for the isolation of Gram negative enteric bacteria.
- 3) ----- and ----- method , in which only surface colonies will develop.
- 4) The cell wall of Gram negative bacteria contain ----- percentage of lipid.
- 5) ----- are fungal metabolites.
- 6) ----- is the type of meat spoilage in which off odour and taste is developed.
- 7) ----- agar is used for isolation of yeast and mold
- 8) Chocolate agar is used for the isolation of ----- organisms.
- 9) Sodium Chloride maintains ----- of the medium.
- 10) ----- medium is added with complex nutritionally rich organic substances like blood, serum, haemoglobin , extracts of plants or growth factors.
- 11) ----- and ----- method, in which only surface colonies will develop
- 12) pH = -----
- 13) -----agar is used for the isolation of all types of microorganisms.
- 14) Mesosomes is the invasion of -----
- 15) The secondary metabolite produce in ----- phase of growth curve.
- 16) The Scientist -----was invented streak plate technique and used gelatin as solidifying agent.
- 17) Teichoic acid present in the cell wall of -----
- 18) In Gram staining ----- is used as mordant.
- 19) ----- organisms have moderate temperature for their growth.
- 20) Prokaryotic cell means -----
- 21) CFU/ ml = -----
- 22) The major locomotary structure of bacterial cell is -----
- 23) ----- and -----, in which only surface colonies will develop.
- 24) The cell wall of Gram positive bacteria contain ----- percentage of lipid.
- 25) -----_is the type of meat spoilage in which off odour and taste is developed.
- 26) ----- agar helps to differentiate the organisms into two groups as haemolytic and non haemolytic.
- 27) ----- media which contain all ingredients of known chemical composition.
- 28) A bacterial flagellum is made up of three parts -----, ----- and -----
- 29) Bacterial ribosome's are ----- type.
- 30) ----- is due to proteolytic activity of organisms.

Q.1B) Define the terms

- 1) Stain
- 2) Basic stain
- 3) Acidic stain
- 4) Neutral stain
- 5) Food infection

- 6) Food intoxication
- 7) Enrichment media
- 8) Enriched media
- 9) Differential media
- 10) Synthetic media
- 11) Prokaryotic cell
- 12) Natural media
- 13) Negative staining
- 14) Gram's staining
- 15) Fermentation
- 16) Metabolism
- 17) Perishable food
- 18) Sterilization
- 19) Pasteurization
- 20) Plasmolysis
- 21) Plasmoptysis
- 22) Acidophilic organism
- 23) Neutrophilic organisms
- 24) Alkalophilic organisms
- 25) Psychrophiles
- 26) Thermophiles
- 27) Hyperthermophiles
- 28) Obligate Psychrophiles
- 29) Anaerobic organism
- 30) Facultative anaerobic organisms

Section - II

Q.2 Short notes

- 1) Enriched media
- 2) Differential media
- 3) Growth curve
- 4) Structure Cell wall of Gram positive organisms
- 5) Structure of Cell wall Gram negative organisms
- 6) Types of microorganisms
- 7) Spoilage of milk and milk products
- 8) Spoilage of meat and meat products
- 9) Structure and working of compound microscope
- 10) Negative staining
- 11) Gram's staining
- 12) Monochrome staining
- 13) Acid fast staining
- 14) Pour plate method
- 15) Streak plate method
- 16) Structure and functions of flagella
- 17) Structure and functions of cell membrane
- 18) Scope of food microbiology
- 19) Prokaryotic cell and Eukaryotic cell
- 20) Sources of contamination of food

Q.3 Long Answers

- 1) Write about methods for isolation of pure culture.
- 2) Discuss the structure and function of cell wall of Gram negative bacteria
- 3) Write the principle ,composition, and use of Mac –Conkeys agar
- 4) Write down principle , composition ,procedure and applications of Potato Dextrose Agar
- 5) Write the structure, arrangement and functions of flagella.
- 6) Write the principle, procedure and mechanism of acid fast staining.
- 7) Write the principle, procedure and mechanism of negative staining
- 8) Discuss the structure and Function of cell wall of Gram positive organisms.
- 9) Write about sources of contamination of food
- 10) Food borne infection and Food intoxication

Q.4 Very Long Answer

- 1) Write about Enrichment media and Differential media with example
- 2) Discuss in detail about which factors affecting growth of microorganisms
- 3) Define differential staining. Discuss in detail about the principle, procedure and mechanism of Gram's staining
- 4) Write about methods for isolation of pure culture
- 5) Discuss in detail about simple staining and negative staining
- 6) Write in detail about Blood agar and Mac – Conkeys agar
- 7) Write in detail the phases of growth curve
- 8) Discuss in detail about types of media
- 9) Write the structure ,functions of Gram positive cell wall and Gram negative cell wall
- 10) Discuss in detail about compound microscope, write down the types of microscopes.