



RAN - 1803000201030111



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**F. Y. B. Sc. (Sem. - I) Examination**

**March - 2023**

**Bioscience (Microbiology) : BS-101**

**Introduction to Microbiology**

**સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

**Fill up strictly the details of signs on your answer book**

Name of the Examination:

**F. Y. B. Sc. (Sem. - I)**

Name of the Subject :

**Bioscience (Microbiology) : BS-101 Introduction to Microbiology**

Subject Code No.: **1803000201030111**

Seat No.:

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Student's Signature

(2) All questions are compulsory.

***O.M.R. Sheet ભરવા અંગેની અગત્યની સૂચનાઓ આપેલ***

***O.M.R. Sheetની પાછળ છાપેલ છે.***

***Important instructions to fillup O.M.R. Sheet  
are given on back side of the provided O.M.R. Sheet.***

- Q. 1.** To focus a specimen, it is best to start with which objective:
- a. High power
  - b. Low power
  - c. Scanning
  - d. Ocular
- Q. 2.** When using the high power objective, you should not adjust the:
- a. Coarse focus
  - b. Fine focus
  - c. Diaphragm
  - d. Stage clips
- Q. 3.** A microscope has a 10x ocular lens and a 10x objective, what is this microscope's total magnification?
- a. 100x
  - b. 1000x
  - c. 10000x
  - d. 1000x
- Q. 4.** A light microscope has an objective lens with a magnification of 40x and an ocular lens with a magnification of 10x. What is the total magnification of the image?
- a. 40x
  - b. 50x
  - c. 400x
  - d. 450x
- Q. 5.** Which of the following contribute the final magnification?
- a. The wavelength of the light
  - b. The magnification of the ocular & objective lens
  - c. The refractive index of the material between the specimen and the lens
  - d. The numerical aperture of the lens
- Q. 6.** Which of the following is an example of dry heat sterilization?
- a. Autoclave
  - b. Incineration
  - c. Fumigation
  - d. None
- Q. 7.** Millipore filters are also known as,
- a. Whatmann filters
  - b. Bacteriological filters
  - c. Sand filter
  - d. None
- Q. 8.** An ideal disinfectant should be
- a. Cheap and easily available
  - b. Unstable at room temperature
  - c. Active at high concentration
  - d. All

- Q. 9.** Cold sterilization is carried out by
- Ethylene oxide
  - Phenolic compound
  - Tincture iodine
  - All
- Q. 10.** Which of the following is not correctly matched
- Disinfectant-Halogen compound-chlorine
  - Antiseptic-Alcohol-70% ethanol
  - Chemotherapy-Heavy metal-HgCl<sub>2</sub>
  - All
- Q. 11.** A process that kill all bacteria but not a spores is called \_\_\_\_\_.
- Disinfection
  - Sanitization
  - Sterilization
  - All
- Q. 12.** HEPA filters are used in
- Aerospace industry
  - Pharmaceutical industry
  - Electronics industry
  - All
- Q. 13.** \_\_\_\_\_ is not useful for radiation sterilization
- Ultra violet rays
  - Gamma rays
  - X-ray
  - None
- Q. 14.** Which of the following is correct
- Crystal violet, Saffranin
  - Iodine solution, Tannic acid
  - Alcohol, HCl
  - All
- Q. 15.** Bacterial cell surface is – ve charged, so they can be stain by
- Acidic dye
  - Basic dye
  - Chromogen
  - All
- Q. 16.** Which of the following is not correct
- Crystal violet, Congo red, Saffranin
  - Iodine solution, Tannic acid
  - Alcohol, Acetone, HCl
  - None
- Q. 17.** Which of the following is a acidic stain
- Crystal violet
  - Congo red
  - Saffranin
  - None

- Q. 18.** The percentage of alcohol used as decolorizer
- a. 75%
  - b. 90%
  - c. 60%
  - d. 25%
- Q. 19.** A chromogen having an auxochrome group is called
- a. Dye
  - b. Stain
  - c. Dye & Stain
  - d. None
- Q. 20.** Indirect staining bacteria appear as
- a. Pink
  - b. Violet
  - c. Colorless
  - d. None
- Q. 21.** Bacteria stain violet in the color by
- a. Methylene blue
  - b. Crystal violet
  - c. Congo red
  - d. Safranin
- Q. 22.** The action of alcohol is
- a. Allows the color
  - b. It adds color
  - c. Decolorizes the cells
  - d. None of these
- Q. 23.** Which of the following is mordant
- a. Iodine
  - b. Alcohol
  - c. Crystal violet
  - d. None
- Q. 24.** A colored negative ion of an acidic dye will stain the background of a bacterial smear is called
- a. Direct staining
  - b. Positive staining
  - c. Negative staining
  - d. All
- Q. 25.** Which of the following is a basic stain
- a. Safranin
  - b. Crystal violet
  - c. Malachite green
  - d. All
- Q. 26.** An example of natural stain
- a. Iodine
  - b. Crystal violet
  - c. Indigo
  - d. All

- Q. 27.** Which of the following is use for fixation of smear
- a. Heat
  - b. Iodine
  - c. Alcohol
  - d. None
- Q. 28.** Chromophore group of a dye is responsible for
- a. Color of the dye
  - b. Ionization of dye
  - c. Fixation of the smear
  - d. All
- Q. 29.** \_\_\_\_\_ is an example of natural dye
- a. Indigo
  - b. Colchicines
  - c. Haematoxyllin
  - d. All
- Q. 30.** \_\_\_\_\_ is also called as Fraction sterilization
- a. Incineration
  - b. Tyndalization
  - c. Pasteurization
  - d. None
- Q. 31.** Temperature & time for sterilization in hot air oven
- a. 121 degree for 20 minutes
  - b. 160 degree for 60 minutes
  - c. 140 degree for 30 minutes
  - d. 61 degree for 30 minutes
- Q. 32.** Moist heat is \_\_\_\_\_ effective than dry heat
- a. More
  - b. Less
  - c. Equally
  - d. None
- Q. 33.** Which of the following is not an example of moist heat sterilization
- a. Autoclave
  - b. Steamer
  - c. Boiling
  - d. Flamming
- Q. 34.** The highest taxon amongst following is
- a. Kingdom
  - b. Class
  - c. Order
  - d. Genus
- Q. 35.** Two words comprising the binomial nomenclature are
- a. Family & genus
  - b. Order & family
  - c. Genus & species
  - d. Species & variety

- Q. 36.** The five kingdom classification was given by
- Whittaker
  - Linnaeus
  - Copeland
  - Haeckel
- Q. 37.** Carl Linnaeus is famous for
- Coining the term 'systematic'
  - Introducing binomial nomenclature
  - Giving all natural system of classification
  - All
- Q. 38.** The smallest unit of living organism is
- DNA
  - RNA
  - Cell
  - Protein
- Q. 39.** Which of the following is true
- Binomial nomenclature method is given by Linnaeus.
  - Linnaeus is known as father of taxonomy.
  - Two kingdom classification system is given by Linnaeus.
  - All
- Q. 40.** Which of the following is included in five kingdom classification?
- Monera, Protista, Animalia, Plantae, Algae
  - Monera, Protista, Fungi, Plantae, Animalia
  - Virus, Prokaryote, Fungi, Plantae, Animalia
  - Algae, Fungi, Bryophyta, Pteridophyta, Gymnosperm
- Q. 41.** Who is the "Father of Taxonomy"?
- Linnaeus
  - Aristotle
  - Whittaker
  - Carl Woes
- Q. 42.** Methanogens is also called
- Eubacteria
  - Actinomycetes
  - Cyanobacteria
  - Archeobacteria
- Q. 43.** According to Whittaker's classification, prokaryotes are placed in
- Monera
  - Plantae
  - Protista
  - Animalia

- Q. 44.** Example of blue green algae is
- Spirochete
  - Spirogyra
  - Spirulina
  - None
- Q. 45.** The study of nomenclature and classification of algae is called
- Algal taxonomy
  - Algology
  - Taxonomy
  - Phycology
- Q. 46.** Unicellular eukaryotic microorganisms comprise
- Fungi
  - Monera
  - Plants
  - Protista
- Q. 47.** Protista include :
- Paramecium, Euglena, Dianoflagellates
  - Hydra, Amoeba, Paramecium
  - Yeast, Euglena, Dianoflagellates
  - Mushroom, Paramecium, Euglena.
- Q. 48.** Microbes were first observed by
- A.V. Leeuwenhoek
  - Pasteur
  - Janssen and Hans
  - None of these
- Q. 49.** The lens that is within the eyepiece of the light microscope is called the:
- Scanning
  - Low power
  - High power
  - Ocular
- Q. 50.** The wheel under the stage that adjusts the amount of light is called the:
- Coarse knob
  - Body tube
  - Stage clip
  - Diaphragm
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**SPACE FOR ROUGH WORK**