



ACL-1267 Seat No. _____

B. Sc. (Sem. I) Examination
November / December - 2016
MB-01 Microbiology
(Fundamentals of Microbiology)

Time : 3 Hours]

[Marks : 70

1 Answer the following MCQs : 35

- (1) Which of the following is example of Dual purpose media
 - (a) Nutrient agar
 - (b) MRBA media
 - (c) Nutrient broth
 - (d) Macconkey's media
- (2) Which of the following medium ingredient used for solidification of media
 - (a) Peptone
 - (b) NaCl
 - (c) Yeast extract
 - (d) Agar Agar powder
- (3) Which of the following is method for preservation of microorganisms
 - (a) Pour plate method
 - (b) Serial dilution method
 - (c) Lyophilization
 - (d) Spread plate method
- (4) Which of the following is also known as 'Glycocalyx'?
 - (a) Endospore
 - (b) Capsule
 - (c) Flagella
 - (d) Cell Wall

ACL-1267 |

1

- (5) Phenol is also known as.....
 - (a) Glacial acetic acid
 - (b) Carboic acid
 - (c) Sulfuric acid
 - (d) Propenol
- (6) Small pox vaccine was first discovered by...
 - (a) Robert Koch
 - (b) Louis Pasteur
 - (c) Paul Ehrlich
 - (d) Edward Jenner
- (7) Who was the first discovered Anthrax vaccine?
 - (A) Alexander Fleming
 - (b) Louis Pasteur
 - (c) Paul Ehrlich
 - (d) Edward Jenner
- (8) Who was the first developed tyandallization technique?
 - (a) John needham
 - (b) Louis Pasteur
 - (c) John tyndall
 - (d) Joseph lister
- (9) Penicillin was first discovered by....
 - (a) Alexander Flemming
 - (b) Rober Koch
 - (c) Paul Ehrlich
 - (d) Elie Metchnikoff
- (10) Who was the first discovered Streptomycin Antibiotic?
 - (a) Theoder Schwann
 - (b) Van Dusch
 - (c) Joseph Lister
 - (d) Selmana A. Waksman

ACL-1267 |

2

(Contd..

- (11) Moist Heat is used in which of the following Instrument...
- (a) Hot Air Oven
 - (b) Autoclave
 - (c) Refrigerator
 - (d) Incubator
- (12) Which Of the following filter is used in Laminar Air Flow?
- (a) Membrane filter
 - (b) Sand filter
 - (c) HEPA filter
 - (d) Seitz filter
- (13) Which of following is example of Halogenic Compound?
- (a) Phenol
 - (b) Chlorine
 - (c) Alcohol
 - (d) Formaldehyde
- (14) Which of the following is example of Non-Ionizing radiation?
- (a) Ultraviolet rays
 - (b) X-rays
 - (c) Gamma rays
 - (d) Cathode rays
- (15) Which of following is example of Aldehyde?
- (a) Phenol
 - (b) Bromine
 - (c) Formaldehyde
 - (d) Iodine
- (16) Gram's Staining is known as.....
- (a) Simple staining
 - (b) Differential staining
 - (c) Structural Staining

- (17) Viruses can be observed by.....
- (a) Bright field microscopy
 - (b) Electron Microscopy
 - (c) Dark field microscopy
- (18) Mercury lamp is used as light source in
- (a) Bright field microscopy
 - (b) Fluorescence microscopy
 - (c) Phase contrast microscopy
- (19) The Culture containing only a single kind of organism is known as.....
- (a) Pure Culture
 - (b) Mixed Culture
 - (c) Axenic Culture
 - (d) Continuous Culture
- (20) Which of the following instruments is used for Single Cell Isolation?
- (a) Microscope
 - (b) Micromanipulator
 - (c) Hot Air Oven
 - (d) Incubator
- (21) What is the other name of "Freeze Drying Process"?
- (a) Tyndallization
 - (b) Pasteurization
 - (c) Lyophilization
 - (d) Refrigeration
- (22) The colour imparting part of the dye is known as
- (a) Auxochrome
 - (b) Chromophore
- (23) Bacterial Endospores are produced in
- (a) Gram Positive Bacteria
 - (b) Gram Negative Bacteria

- (24) Bacteriophage was first discovered by
- (a) Florey and Chain
 - (b) Needham
 - (c) D'Herelle & F.W.Twort
 - (d) Pasteur
- (25) The Maggot Experiment was performed by....
- (a) Robert Koch
 - (b) Francisco Redi
 - (c) Paul Ehrlich
 - (d) G. Domagk
- (26) Who was the first to isolate tubercle bacillus?
- (a) S. Winogradsky
 - (b) A.V. Leeuwenhoek
 - (c) E. Jenner
 - (d) R. Koch
- (27) Which of the following organism is used in Phenol Coefficient Method?
- (a) E.coli
 - (b) S. Typhi
 - (c) Pr. Vulgaris
 - (d) B. Subtilis
- (28) Who discovered the "Magic Bullet - 606"?
- (a) Paul Ehrlich
 - (b) Martinus Wilhem Beijerink
 - (c) Louis Pasteur
 - (d) Walter Reed
- (29) Who was the first to introduce the use of Agar-Agar Powder for Bacteriological Media?
- (a) Howard Temin
 - (b) Bruce Ames
 - (c) Fanny Hesse
 - (d) Temin & Baltimore

- (30) Which of the following protein is present in flagella?
- (a) Melanin
 - (b) Keratin
 - (c) Flagellin
 - (d) Lipoprotein
- (31) Which of the following element inhibits the growth of gram positive bacteria in MacConkey's Agar Medium?
- (a) NaCl
 - (b) Peptone
 - (c) Bile Salts
 - (d) Crystal Violet
- (32) Dorners' Method is used to stain.....
- (a) Capsule
 - (b) Spore
 - (c) Cell Wall
 - (d) Flagella
- (33) Which of the following agent is used in "Cold Sterilization"?
- (a) UV
 - (b) Moist Heat
 - (c) Hypochlorous Acid
 - (d) NaCl
- (34) Who discovered the X-Rays?
- (a) Roentgen
 - (b) Graham Bell
 - (c) Albert Einstein
 - (d) Max Plank
- (35) Which of the following is an example of acidic dye?
- (a) Nigrosine
 - (b) Malachite Green
 - (c) Safranin
 - (d) Methylene Blue

- 2 Answer any four Short Questions from the Following : 8
- (1) Define: Sterilization
 - (2) Define: Biogenesis
 - (3) Explain the mode of action of Dry Heat
 - (4) Give the examples of Spore producing bacteria
 - (5) Give the examples of Capsule producing bacteria
 - (6) What are Leuco compounds?
- 3 Answer any three questions in brief : 9
- (1) Important of microorganism in the field of medicine.
 - (2) Write down the classification of the stain.
 - (3) Explain the principle of Dark field microscopy.
 - (4) Discuss various method of Pure culture technique.
 - (5) Koch's Postulates.
- 4 Write Short Notes on any three of the following : 18
- (1) Golden era of Microbiology
 - (2) Phase Contrast Microscopy
 - (3) Lyophilization as a method of preservation of Microorganisms.
 - (4) Write a note on selective and differential media.
 - (5) Phenol coefficient technique.