



BRAINWARE UNIVERSITY

Term End Examination 2021 - 22

Programme – Bachelor of Science in Critical Care Technology

Course Name – Medical Microbiology

Course Code - BCCT201

(Semester II)

Time allotted : 1 Hrs.15 Min.

Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)

1 x 60=60

Choose the correct alternative from the following :

- (1) What is Bacteriology?

a) study of protozoa	b) study of helminthes
c) study of bacteria	d) study of viruses
- (2) Father of microbiology is

a) Louis Pasteur	b) Lister
c) A.V. Leeuwenhock	d) Robert Koch
- (3) According to Pasteur statements which one of the following is true

a) Living organisms discriminate between stereoisomers	b) Fermentation is a aerobic process
c) Living organisms doesn't discriminate between stereoisomers	d) Both a and b
- (4) B.anthraxis was isolated by

a) Louis Pasteur	b) Robert Koch
c) Antony van Leewenhok	d) None of these
- (5) The main feature of prokaryotic organism is

a) Absence of locomotion	b) Absence of nuclear envelope
c) Absence of nuclear material	d) Absence of protein synthesis
- (6) Temperature required for pasteurization is

a) Above 150°C	b) Below 100°C
c) 110°C	d) None of these
- (7) Among these the sterilizing agent is

- a) Ethylene oxide
c) Nitrogen
- b) Oxygen
d) Carbon tetrachloride
- (8) At the temperature 160°C for one hour, complete sterilization occurs in
a) Autoclave
c) Laminar flow
- b) Hot air oven
d) Incubator
- (9) Lysol is a
a) Sterilent
c) Antiseptic
- b) Disinfectant
d) Antifungal agent
- (10) Relationship between two individuals where both are benefitted when they are associated
a) symbiosis
c) mutualism
- b) parasitism
d) commensalism
- (11) Degree of pathogenicity is
a) pathogenic
c) virulence
- b) opportunistic
d) toxins
- (12) Study of algae is
a) Nematology
c) phycology
- b) immunology
d) mycology
- (13) Tyndallisation was proposed by
a) John Tyndall
c) Robert Koch
- b) Pasteur
d) Jenner
- (14) Temperature used for hot air oven is
a) 100°C for 1 hour
c) 160°C for 1 hour
- b) 120°C for 1 hour
d) 60°C for 1 hour
- (15) Peptone water medium is an example for
a) Synthetic medium
c) Differential medium
- b) Semisynthetic medium
d) None of these
- (16) The bacterial cells are at their metabolic peak during-
a) Lag phase
c) Stationary
- b) Log
d) Decline
- (17) Endotoxin produced by gramnegative bacteria is present in-
a) Peptidoglycan
c) Teichoic acid
- b) Lipopolysaccharide
d) Inner membrane
- (18) Which of the following are acid fast structures?
a) Mycobacteria
c) Nocardia
- b) Bacterial spores
d) All of these
- (19) What is the function of bacterial capsule?
a) Production of organism from phagocytosis
c) Both of them
- b) Helps in adherence of bacteria to surface in its environment
d) None of these
- (20) Identify the obligate anaerobes-
a) Salmonella
c) Cl. tetani
- b) Vibrio cholera
d) Sarcinae

- (21) Of the following, this is a capsulated organism-
- | | |
|-----------------------|---------------------|
| a) Bacillus anthracis | b) Escherichia-coli |
| c) Corynebacterium | d) Brucella |
- (22) β -haemolytic bacteria is-
- | | |
|---------------------------|--------------------|
| a) Streptococcus pyogenes | b) Str. pneumoniae |
| c) Str. viridans | d) Str. faecalis |
- (23) Presence of viable bacteria in the blood stream is called-
- | | |
|----------------|-----------------|
| a) Viraemia | b) Septicaemia |
| c) Bacteraemia | d) Bactericidal |
- (24) If more than one stain is used, such staining is called-
- | | |
|--------------------------|----------------------|
| a) Simple staining | b) Negative staining |
| c) Differential staining | d) None of these |
- (25) The extra cellular infections virus particle is called-
- | | |
|-----------|------------------|
| a) Capsid | b) Nucleocapsid |
| c) Virion | d) None of these |
- (26) Cell-wall is-
- | | |
|--|--|
| a) Thick in Gram positive than Gram negative | b) Thick in Gram negative than Gram positive |
| c) Equal in both | d) In Gram negative cell-wall is absent |
- (27) The action of alcohol during Gramstaining is-
- | | |
|--------------------------|------------------|
| a) Allows the color | b) It adds color |
| c) Decolorises the cells | d) None of these |
- (28) Bacteria multiply by-
- | | |
|--------------------|--------------------------|
| a) Spore formation | b) Simple binary fission |
| c) Conjugation | d) Gametes |
- (29) Separation of a single colony is-
- | | |
|-------------------|------------------|
| a) Pure-culturing | b) Isolation |
| c) Separation | d) None of these |
- (30) The protein moiety of an enzyme is known as-
- | | |
|----------------|---------------|
| a) Holo enzyme | b) Apo enzyme |
| c) Co enzyme | d) Enzyme |
- (31) Biological Oxygen Demand (BOD) is a measure of-
- | | |
|--|---|
| a) Industrial wastes poured into water bodies | b) Extent to which water is polluted with organic compounds |
| c) Amount of carbon monoxide inseparably combined with haemoglobin | d) Amount of oxygen needed by green plants during night |
- (32) The first phase of a growth curve is-
- | | |
|-------------------|-----------------|
| a) Log phase | b) Lag phase |
| c) γ phase | d) All of these |
- (33) The no. of generations per hour in a bacteria is-
- | | |
|------------------|--------------------|
| a) Growth rate | b) Generation time |
| c) Sigmoid curve | d) None of these |
- (34) The reproduction rate is equal to death rate in which stage-

- a) Decline phase
c) Lag phase
- b) Stationary phase
d) Log phase
- (35) Non-cyclic photophosphorylation is also known as-
- a) Oxygenic photosynthesis
c) Anoxygenic photosynthesis
- b) Photosynthesis
d) Photophosphorylation
- (36) Optimum growth temperature is greater than 45°C is-
- a) Mesophiles
c) Psychrophiles
- b) Thermophiles
d) None of these
- (37) Which one of the following mutagens act only on replicating DNA?
- a) Ethidium bromide
c) Acridine orange
- b) Nitrosoguanidine
d) None of above
- (38) Plasmids are ideal vectors for gene cloning as-
- a) They can be multiplied by culturing
c) They can replicate freely outside the bacterial cell
- b) They can be multiplied in the laboratory using enzymes
d) They are self replicating within the bacterial cell
- (39) DNA-replication is by the mechanism of-
- a) Conservative
c) Dispersive
- b) Semiconservative
d) None of the above
- (40) Genetic information transfer DNA to RNA is called –
- a) Transcription
c) Transformation
- b) Transduction
d) Recombination
- (41) Example for DNA viruses:
- a) Adeno virus and Papova virus
c) Herpes virus and cauliflower mosaic
- b) Bacteriophage T1, T2, T3, T4, T5, T6
d) All of these
- (42) The antibiotic acting on cell wall is-
- a) Bacitracin
c) Cyclosporine
- b) Penicillin
d) All of these
- (43) Which of the following induces dimerisation of thymine?
- a) X-rays
c) α -rays
- b) U.V. rays
d) None of these
- (44) Discontinuous heating is called-
- a) Pasteurization
c) Fermentation
- b) Sterilization
d) Tyndalisation
- (45) The antiseptic method was first demonstrated by-
- a) Lwanowski
c) Edward Jenner
- b) Lord Lister
d) Beijerinck
- (46) Interferon is formed by-
- a) Lymphocytes
c) Fibroblasts
- b) Lymphoblasts
d) All of these
- (47) Culture medium used for bacterial motility testing-
- a) Solid
b) Liquid

- c) Semi-solid
- (48) LJ medium is used for-
- a) *Bacillus anthracis*
c) *Mycobacterium*
- (49) Among the following which organ is sterile?
- a) blood
c) muscle
- (50) Symbiotic relationship can be-
- a) mutualistic
c) parasitic
- (51) Plaques are:
- a) clear areas in a lawn of cultured cells caused by virus infection.
c) virus colonies on agar.
- (52) Gaspak system is used for-
- a) anaerobic bacterial culture
c) both of them
- (53) Obligate aerobes are-
- a) lives in presence of oxygen
c) lives in both the conditions
- (54) Majority of microbes present in conjunctiva are-
- a) *Staphylococcus epidermidis*
c) Both of them
- (55) The image obtained in a compound microscope is-
- a) Real
c) Real inverted
- (56) Bacterial transformation was discovered by
- a) Ederberg and Tatum
c) Griffith
- (57) Light gathering capacity of Microscope is called-
- a) Numerical aperture
c) Both of them
- (58) Flurosent substance used in fluorescent microscopy are-
- a) Quinine sulphate
c) Both of these
- (59) Bacterial locomotion is accomplished by-
- a) fimbriae
c) cytoskeleton
- (60) Of the following, this is a capsulated organism-
- a) *Bacillus anthracis*
c) *Corynebacterium*
- d) All of these
- b) *Pneumococcus*
d) None of these
- b) brain
d) all of these
- b) commensalistic
d) all of the above
- b) stained areas in a cell culture indicating cells infected by a virus.
d) bacterial colonies on agar
- b) areobic culture
d) none of them
- b) lives in absence of oxygen
d) lives in extreme heat conditions
- b) *Propionibacterium acnes*
d) None of them
- b) Virtual
d) Virtual inverted
- b) Beadle and Tatum
d) None of these
- b) Angular aperture
d) None of them
- b) Auramine
d) None of these
- b) flagella
d) None of the above
- b) *Escherichia-coli*
d) *Brucella*