MBBS II (Second) Professional Examination 2015-16

Course Code:MBS202 **Paper ID**: 0322405

Microbiology-I

Time: 2 Hours 40 Minutes **Max Marks:** 30

Note: Attempt all questions. Draw proper diagrams to support your answer.

Part 'B'

1. Define Urinary Tract Infection, Enumerate bacteria causing UTI. D`escribe the laboratory diagnosis of UTI under the following headings: specimen collection and transport, screening tests, processing for culture and interpretation of culture report. (7)

2. Define sterilization. Enumerate methods of sterilization. Discuss the principle, functioning and control of an autoclave. (7)

3. Write short notes on: (4x2=8)
   a) Laboratory diagnosis of pulmonary tuberculosis
   b) Structure and function of IgM

4. Write short notes on: (4x2=8)
   a) Virulence factors and diseases caused by *Staphylococcus aureus*
   b) Structure, function and demonstration of bacterial capsule

MBBS II (Second) Professional Examination 2015-16

Roll No. **Student's Name**

Student's Signature **Invigilator's Signature**

Course Code:MBS202 **Paper ID**: 0322405

Microbiology-I

Part 'A'

Time: 20 Minutes **Max Marks:** 10

Note: 1. Attempt all questions and return this part of the question paper to the invigilator after 20 Minutes.
2. Please tick (√) correct one only. Cutting, overwriting or any other marking are not allowed.
3. For answering please use Ball- pen only.

c) Bacterial countbetween10^3 and 10^4 CFU per mL
d) Bacterial count$<10^2$ CFU per mL

Q.2 Most common bacterial cause of sore throat is:
a. Group D streptococci
b. Group C streptococcus
c. Group A streptococcus
d. Group B streptococcus

Q.3 The causative agent of Donovanosis is:
a) Haemophilus ducreyi
b) Klebsiella granulomatis
c) Candida albicans
d) Mycoplasma hominis

Q.4. Type 1 Hypersensitivity reaction is mediated by:
a) IgG b) IgM
c) IgA d) IgE

Q.5 Which cell wall component of *Staphylococcus aureus* takes part in Coagglutination:
a) Protein A
b) Beta Lysin
c) Clumping factor
d) Peptidoglycan

Q.6 Multidrug resistance tuberculosis (MDR-TB) is due to *M.Tuberculosis* strain:
a) Resistance to Niacin only
b) Resistance to Rifampicin and Ethambutol
c) Resistance to Niacin and Streptomycin
d) Resistance to both Niacin and Rifampicin

Q.7 One of the stage of whooping cough is most infective:
a) Paroxysmal stage
b) Catarrhal stage
c) Convalescent stage
d) None of the above

Q.8 Widal test is used in the diagnosis of:

Q.9 One of the following bacteria shows Darting motility:
a) Salmonella typhi
b) Escherichia coli
c) Proteus vulgaris
d) Vibrio cholera

P.T.O.

Q.10 One of the anaerobic spore bearing bacilli gives a positive Nagler reaction:
a) Clostridiumtetani
b) Clostridium difficile
c) Clostridium botulinum
d Clostridium perfringens

Q.11 Chinese letter arrangement of bacilli is a characteristic feature of:
a) Corynebacterium diphtheriae
b) Mycobacterium tuberculosis
c) Mycobacterium gordoniae
d) Corynebacterium Ulcerans

Q.12 One of the following bacteria is capsulated:
a) Corynebacterium diphtheriae
b) Enterococcus fecalis
c) Shigella dysenteriae
d) Streptococcus pneumoniae

Q.13 Antistreptolysin O test (ASO) is used in the diagnosis of:
a) Acute rheumatic fever
b) Typhoid fever
c) Q fever
d) Relapsing fever

Q.14 Toxic shock syndrome is caused by:
a) Staphylococcus epidermidis
b) Staphylococcus saprophyticus
c) Staphylococcus aureus
d) Staphylococcus intermedius

Q.15 Classical pathway of the complement is activated by:
a) Antigen
b) Antibody
c) Endotoxin
d) Antigen-antibody complex

Q.16 One of the following immunoglobulins is the most efficient to produce agglutination reaction:
a) IgG
b) IgM
c) IgA
d) IgE

Q.17 Chemical nature of Endotoxin is:
a) Lipopolysaccharide
b) Protein
c) Carbohydrate
d) Dextran

Q.18 Drug resistance in *Mycobacterium tuberculosis* is due to:
a) Transformation
b) Conjugation
c) Transduction
d) Mutation

Q.19 Catalase test is negative in:
a) Streptococcus pyogenes
b) Staphylococcuis aureus
c) Eschericha coli
d) Klebsiella pneumoniae

Q.20 One of the followings is used commercially for sterilisation of disposable plastic items:
a) Autoclave
b) Ethyl alcohol
c) Ethylene oxide
d) Gluteraldehyde