2106000102030102
Examination February – March 2024
SECOND MBBS
MICROBIOLOGY (PAPER - II) - LEVEL 3

[Time: Three Hours] **[Max. Marks: 100]**

Instructions:
1. Fill up strictly the following details on your answer book
a. Name of the Examination : **SECOND MBBS**
b. Name of the Subject : **MICROBIOLOGY (PAPER - II) - LEVEL 3**
c. Subject Code No : **2106000102030102**
2. Sketch neat and labelled diagram wherever necessary with blue pen/pencil only.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
5. Write heading of each question properly
6. Write legibly

Seat No:

Student's Signature

SECTION – 1

Infections of skin soft tissues & musculoskeletal systems, Respiratory system, Infections of central nervous system, genitourinary system, Hospital acquired Infections, Miscellaneous

Q.1 MCQs **1x20=20**

1) PRAS is
A. Pro-Reduced Anaerobic system
B. Pro-Reduced Aerobic system
C. Pre-Reduced Anaerobic system
D. Pre-Reduced Aerobic system

2) The fungus that exhibits septate hyphae with dichotomous branching on KOH mount is
A. Cryptococcus B. Penicillium
C. Mucor D. Aspergillus

3) Differentiating feature of Neisseria gonococcus from Neisseria meningitides is?
   A. Oxidase Positive
   B. It ferments glucose
   C. It ferment Maltose
   D. It reduce Nitrates

4) Proteus antigen cross react with?
   A. Klebsiella
   B. Rickettsiae
   C. Chlymydiae
   D. E.coli

5) The common cause of Pneumonia in immunocompromised patients is
   A. C. tropicalis
   B. P. jiroveci
   C. C. A. niger
   D. P. marneffi

6) The following are moments of hand hygiene
   A. After touching a patient
   B. Before any aseptic procedure
   C. After touching patients surroundings
   D. All of the above

7) Total number of Categories in BioMedical Waste are
   A. 10
   B. 6
   C. 4
   D. 2

8) MGIT used in tuberculosis diagnosis is actually
   A. Automated culture
   B. Biochemical test
   C. Microscopic method
   D. None of the above

9) Buruli ulcer is caused by
   A. M. xenopi
   B. M. scrofulaceum
   C. M. malmoense
   D. M. ulcerans

10) The amplifier host for Japanese B Encephalitis is
   A. Ardeid birds
   B. Pigs
   C. Egrets
   D. Herons

11) Epstein-Barr virus is associated with the following malignancies except
   A. Nasopharyngeal carcinoma
   B. Burkitt's lymphoma
   C. Carcinoma of cervix
   D. Non-Hodgkin lymphoma

12) Which of the following is correct statement regarding the shape of the virus
   A. Rota virus- wheel shape
   B. Tobacco mosaic virus- Filamentous shape
   C. Ebola virus- Rod shape
   D. Adeno virus- Brick shape

13) Guinea worm disease is caused by
   A. Schistosoma haemotobium B. Ancylostoma duodenale
   C. Trichinella spiralis D. Drancunculus medinensis

14) In Influenza, antigenic drift is due to
   A. Point mutation B. Deletion mutation
   C. Genetic reassortment D. All of the above

15) The following intestinal parasite migrate to lung in their life cycle except
   A. Trichinella spiralis B. Ascaris lumbricoides
   C. Ancylostoma duodenale D. Strongyloides stercoralis

16) The following fungus infect Central Nervous system except
   A. Mucor B. Aspergillous
   C. Cryptococcus neoformans D. Acremonium species

17) Wool Sorter's disease is caused by
   A. Bacillus anthracis B. Staphylococcus aureus
   C. Yersinia pestis D. Rhodococcus equi

18) All of the following parasites can cause encephalitis **except**
   A. Acanthamoeba B. Ascaris lumbricoids
   C. Toxoplasma gondii D. Naegleria

19) Koch-Weeks bacillus is
   A. Haemophilus aegyptius
   B. Haemophilus ducreyi
   C. Haemophilus parainfluenzae
   D. Haemophilus hemolyticus

20) Ecythyma gangrenosum is caused by
A. Moraxella lacunata
B. Stenotrophomonas maltophila
C. Pseudomonas aeruginosa
D. Burkholderia pseudomalle

SECTION – 2

Infections of skin soft tissues, musculoskeletal systems & Respiratory system

Q.2 Essay type question / clinical scenario based. 12 marks

A 5 year old boy presented to the pediatric OPD with H/O pain in throat and difficulty in swallowing. He had low grade fever for the past 2 days. On examination he was found to have cervical lymphadenopathy and tonsillar pillars were covered by gray-white discharge. (On examination a grey brown color thick fibrinous membrane on the pharynx). His vaccination card showed that the child's immunization was not complete.

1. What is the clinical condition?(1 mark)
2. Name the most probable etiological agent responsible for this condition. (1 mark)
3. Write in detail the pathogenesis of the condition. (4 marks)
4. Write in details of laboratory diagnosis & treatment of above condition. (4+2 marks)

Q.3 Short Note (any 4 out of 5) 7x4=28

1. Discuss skin and soft tissue infections caused by Staphylococcus aureus. Write its lab diagnosis
2. Cutaneous leishmaniasis
3. Mycetoma
4. Mumps
5. Discuss the vaccine against Poliomyelitis.

SECTION – 3

Infections of central nervous system, genitourinary system, Hospital acquired Infections, Miscellaneous

Q.4 Essay type question / clinical scenario based. **12 marks**

Define HAI. Enlist major types of HAI. Explain Standard precaution & write Detail about Hand Hygiene. Write in detail about bundle care approach for prevention of devise associated Infection

Q.5 Short Note (any 4 out of 5) **7x4=28**

1. A 25-year-old Australian visited his local doctor complaining of difficulty in swallowing liquids, loss of appetite and restlessness. He had a travel history to India one month back and did mention being bitten by a street dog.
   a. What is the most probable etiological diagnosis?
   b. Discuss the laboratory diagnosis and the vaccines available for human use.

2. Define and describe the properties of an Idea Disinfectant. Enumerate the various Disinfecting agents and their applications.

3. Classify anaerobes. Describe the aetiology, pathogenesis, lab diagnosis and prophylaxis of tetanus.

4. Non gonococcal urethritis

5. Congenital toxoplasmosis.

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