Second Professional BHMS Regular Examination

Pathology and Microbiology (Hom UG-Path-M) - Paper II

(2022 SCHEME)

Time: 3 Hours **Total Marks: 100**

Answer all questions to the point neatly and legibly. Do not leave any blank pages between answers .Indicate the question number correctly for the answer in the margin space. Answer all parts of a single question together. Leave sufficient space between answers .Draw table/diagram/flow charts wherever necessary.

1**. Multiple Choice Questions**: **(10x1=10)**

The answers to MCQ's (i – x) shall be written continuously on the pages 3 & 4 only .

i. Bacteria with tuft of flagellae at one end are called
  a) Monotrichate
  b) Peritrichate
  c) Bipolar
  d) Lophotrichate

ii. Glass vessels and syringes are best sterilized by
  a) Hot Air Oven
  b) Autoclaving
  c) Irradiation
  d) Ethylene Dioxide

iii. Staphylococcus does not cause
  a) Osteomyelitis
  b) Abscess
  c) Scarlet fever
  d) Bronchopneumonia

iv. The culture medium for Corynebacterium diphtheria is
  a) Loeffler's serum slope
  b) Mac Conkey's agar
  c) Wilson and Blair's agar
  d) Lowenstein – Jensen medium

v. Anchovy sauce pus of amoebic liver abscess is mainly constituted by
  a) Pus cells
  b) E.histolytica cysts
  c) Degenerated hepatocytes
  d) Pyogenic bacteria

vi. One virus species preventing multiplication of a second virus is called
  a) Viral interference
  b) Mutation
  c) Supervision
  d) Permutation

vii. In Typhoid, Widal test detects
  a) O antigen

b) H antigen
c) Vi antigen
d) Both O & H antigens

viii. Hepatitis B is NOT transmitted by:
a) Blood transfusion
b) Faeco-oral route
c) Congenital transmission
d) Sexual contact

ix. Negri bodies are found mostly in the:
a) Basal ganglia
b) Cerebral cortex
c) Hippocampus
d) Hypothalamus

x. The culture media used for cultivation of fungus is
a) Tellurite medium
b) NNN Medium
c) Chocolate agar medium
d) Sabouraud's medium

Short Answer Questions **(8x5=40)**

2. Describe the structure, function & types of flagella with one example each. (2+1+2)
3. Define sterilisation. Describe moist heat sterilisation. (2+3)
4. Discuss the clinical features & complications of Corynebacterium diphtheriae. (3+2)
5. Differentiate between Lepromatous and Tuberculoid leprosy (2+3)
6. List 5 microscopic differences between amoebic & bacillary dysentery.
7. Describe the pathogenesis & clinical features of Treponema pallidum. (2+3)
8. Enlist 4 intestinal nematodes. Describe ectopic ascariasis . (2+3)
9. Explain the morphology & pathogenesis of Rabies virus. (2+3)

Long Answer Questions **(5x10=50)**

10. Classify Streptococci. Explain the pathogenesis & infections produced by Streptococcus pyogenes. (2+4+4)
11. Describe the morphology, life cycle & pathogenesis of Entamoeba histolytica. (2+4+4)
12. Describe the morphology, lifecycle, pathogenesis & lab diagnosis of Wuchereria bancrofti. (2+3+3+2)
13. Discuss the pathogenesis, clinical features & lab diagnosis of Salmonella typhi. (2+4+4)
14. A 40 year old male presented with history of loss of appetite and malaise since 2 months. On examination there was icterus, hepatomegaly & tenderness in the right hypochondriac region. He gave a history of blood transfusion in the past. Laboratory tests showed elevated surface antigen and transaminase levels.

a) What is the probable diagnosis? (1)
b) Explain the morphology of the causative agent. (3)
c) Discuss the modes of transmission & lab diagnosis. (2+4)
