REV-01
BPT/112/37/42

2025/12

SET B

BACHELOR OF PHYSIOTHERAPY
THIRD SEMESTER
MICROBIOLOGY
BPT - 304

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

(Objective)

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Mode of transmission of Hepatitis B virus is
   a. Air borne
   b. Feco oral
   c. Blood and body fluids
   d. Vector borne

2. HIV belongs to which virus family ?
   a. Picornaviridae
   b. Retroviridae
   c. Paramyxoviridae
   d. Herpesviridae

3. Which cells are destroyed by Poliovirus ?
   a. Anterior horn cells of spinal cord
   b. Posterior horn cells
   c. Schwann cells
   d. Endothelial cells

4. Which of the following viruses causes acute bronchitis ?
   a. Adenovirus
   b. Influenza virus
   c. Rhino virus
   d. All of the above

5. Albert stain is specifically used for identifying
   a. Streptoccocus species
   b. Candida species
   c. Cornebacterium diphtheriae
   d. Bordetella pertussis

6. Which stage is responsible for fever, chills, anemia
   a. Sporozoite
   b. Merozoite in RBCs
   c. Gametocyte in mosquito
   d. Ookinite

7. Which organism is most commonly associated with ascending UTI ?
   a. Escherichia coli
   b. Staphylococcus aureus
   c. Candida albicans
   d. Salmonella typhi

8. Which of the following is the most common route of urinary tract infection?
   a. Direct Trauma
   b. Hematogenous spread
   c. Ascending infection from urethra
   d. Descending infection

9. Which of the following causes miscarriage in pregnant ladies ?
   a. Brucella
   b. Burkholderia
   c. Bacillus
   d. Rickettsia

10. Tertian malaria is
    a. Fever spike in every 24 hours
    b. Fever spike in every 72 hours
    c. Fever spike in every 48 hours
    d. Fever spike in every 56 hours

11. The form of plasmodium injected by the mosquito into the host is
    a. Sporozoite
    b. Merozoites
    c. Gametes
    d. Schizont

12. Which of the following causes death in neonatal by producing pneumonia?
    a. Mumps virus
    b. Pneumonicoccus
    c. Rubella virus
    d. Ebstein Barr Virus

13. The influenza virus belongs to which family ?
    a. Adenoviridae
    b. Herpes viridae
    c. Picorna viridae
    d. Orthomyxo viridae

14. A student exposed to cold weather catches a viral infection due to the lowered body defenses. Which immunity was compromised ?
    a. Adaptive
    b. Passive
    c. Innate
    d. Artificial active

15. After recovering from measles, a person does not get infected again. This is due to
    a. Presence of IgE antibodies
    b. Immune memory of B and T cells
    c. Continuous exposure to the virus
    d. Artificial vaccination

16. The main source of reservoir of infection is
    a. Vector
    b. Pathogen
    c. Host
    d. Fomite

17. The predominant normal flora of the large intestine is
    a. Staphylococcus auerus
    b. Escherichia coli
    c. Mycobacterium tuberculosis
    d. Streptococcus pyogenes

18. The disinfectant suitable for hand hygeine is
    a. Formaldehyde
    b. Chlorine
    c. Ethyl alcohol
    d. Phenol

19. Pili (Fimbrae) in bacteria are used for
    a. Movement
    b. Conjugation and Attachment
    c. Respiration
    d. Reproduction

20. The genetic material in bacteria is found in the
    a. Nucleus
    b. Nucleoid
    c. Ribosome
    d. Pili

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Descriptive

Time: 2 hrs 30 min **Marks: 50**

[Answer question no.1 & any four (4) from the rest]

1. Write a short note on Malaria. Mention the Life cycle upon two hosts , it's diagnosis and complications of Falciparum Malaria. **10**

2. Write a short note on structure of Bacteria , it's gram staining procedure. Also differentiate Gram positive and Gram negative bacteria with appropriate diagram. **10**

3. Define Disinfection and write it's classifications. **10**

4. Write the diseases caused in animals caused by Bacteria and Virus. **10**

5. Write the properties of Virus and classify it's family with examples. **10**

6. Write a short note on Urinary track Infection and Pyrexia of Unknown Origin. **10**

7. Classify Respiratory Track Infection and mention the organisms involved. **10**

8. Write *any two :* **5+5=10**
   - **a.** Poliomyelitis
   - **b.** HIVVirus
   - **c.** Hepatitis Virus

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