

**JAMIA HAMDARD
DEPARTMENT OF PHYSIOTHERAPY
SCHOOL OF NURSING SCIENCES & ALLIED HEALTH**

BPT 2nd YEAR, ANNUAL EXAMINATION, MAY 2023

PATHOLOGY & MICROBIOLOGY (THEORY)

PAPER CODE: BPT – 265

Time: 3 hours

Maximum Marks: 75

(Write your Roll No. on top of the paper immediately)

Instructions:

- i. Attempt **Section A – Pathology** and **Section B – Microbiology** on separate main sheets.
- ii. Attempt **ALL** questions
- iii. Choices are mentioned wherever applicable
- iv. Parts of a question must be answered together
- v. Draw diagrams wherever necessary
- vi. Give examples wherever necessary

SECTION A

PATHOLOGY (50 Marks)

Part – I

Multiple choice Questions (All are compulsory)

(10 × 1 Mark = 10 Marks)

1. Grading of tumours depends upon the following except:
 - a) Degree of anaplasia.
 - b) Metastatic spread.
 - c) Rate of growth of cells.
 - d) Degree of differentiation.
2. All of the following characteristics are seen in the stool of Amoebic dysentery except one:
 - a) RBCs in clumps b) Eosinophils c) Ghost cells d) Macrophages
3. Test used to detect the presence of HIV infections during window period
 - a) ELIZA.
 - b) p24 antigen capture assay
 - c) Western Blotting.
 - d) None of the above.
4. Transudate differs from exudate in having the following except:
 - a) Low glucose content
 - b) Low protein content
 - c) Low specific gravity
 - d) No inflammatory cells

5. Most common etiologic factor implicated in chronic bronchitis
 - a) Atmospheric pollution
 - b) Cotton mills
 - c) Mycoplasma infection
 - d) Cigarette smoking
6. Silicosis occurs in the following occupational exposure except:
 - a) Ceramic workers
 - b) Foundry workers
 - c) Textile workers
 - d) Construction workers
7. The most common causative organism for lobar pneumonia is:
 - a) Staphylococci
 - b) Streptococci
 - c) Pneumococci
 - d) Haemophilus
8. Which of the following is the hallmark of acute inflammation:
 - a) Neutrophils
 - b) Connective tissue
 - c) Macrophages
 - d) Granuloma formation
9. Which of the following are most frequent site/s of venous thrombosis?
 - a) Veins of lower extremity
 - b) Pelvic veins
 - c) Portal Vein
 - d) Pulmonary veins
10. Which of the following statements is not correct for Hookworm infestation:
 - a. Hookworm infection causes anaemia.
 - b. Man acquires infection when filariform larvae penetrate skin.
 - c. Hookworm infection may sometimes be acquired by oral route.
 - d. Hookworm infection can be diagnosed by finding trophozoites in the stool.

Part – II

Answer any **ONE** of the following:

(1 × 10 Marks = 10 Marks)

1. Define Necrosis. Enumerate different types of necrosis. Difference between necrosis and apoptosis.
2. Classify Tumours of Bone. Discuss in detail the etiopathogenesis of Osteogenic Sarcoma.
3. Enumerate the pathogenesis of Rheumatoid arthritis with diagram. Mention the different laboratory test which helps in its diagnosis.

Part - III

Answer any **TWO** of the following:

(2 × 15 Marks = 30 Marks)

1. Define Inflammation. Enumerate the cellular events in acute inflammation. Discuss in detail the mechanism of Chemotaxis and Phagocytosis.
2. Define and classify Shock. Discuss in detail about septic shock.

3. Define Atherosclerosis. Discuss in detail the risk factors, pathogenesis, morphology and complications.
4. Define Anaemia. Classify Haemolytic Anaemia. Write in detail about the pathogenesis of Sick Cell Anaemia.

SECTION B
MICROBIOLOGY (25 Marks)

Part – I

Multiple choice Questions (All are compulsory)

(5 × 1 Marks = 5 Marks)

1. Which of the following cells of the immune system do not perform phagocytosis?
a) Macrophage b) Neutrophil c) Eosinophil d) Basophil
2. Each of the following agents is a recognized cause of diarrhea except
a) Clostridium perfringens
b) Vibrio cholerae
c) Enterococcus faecalis
d) Escherichia coli
3. Which of the following virus promotes cell death by apoptosis?
a) Rubella virus
b) HSV
c) Vaccinia virus
d) Myxoma virus
4. In malaria, the form of plasmodia transmitted from mosquito to human is the
a) Sporozoite b) Gametocyte c) Merozoite d) Hypnozoite
5. Which of the following method can be used to determine the number of bacteria quantitatively?
a) Spread-plate
b) Streak-plate
c) Pour-plate and spread plate
d) Pour plate

Part – II

Attempt any **TWO** of the following:

(2 × 10 Marks = 20 Marks)

1. Define Immunity. Explain the mechanism of various types of immunity.
2. Describe the general characteristics and classification of virus.
3. Write short notes on the followings:
 - a) Hospital acquired infections
 - b) Immunodeficiency disease
