



## BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Physiotherapy-2021/B.Physiotherapy-2022/B.Physiotherapy-2023

Course Name – Medical Pathology and Microbiology

Course Code - BPTC301

( Semester III )

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

### Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) What is the primary purpose of sterilization?
  - a) To reduce microbial load
  - b) To eliminate all microorganisms
  - c) To disinfect surfaces
  - d) To preserve food
- (ii) select thermal death time
  - a) Time required to kill all cells at a given temperature
  - b) Temperature that kills all cells in a given time
  - c) Time and temperature needed to kill all cells
  - d) All of the these
- (iii) B and T cells are produced by stem cells that are formed
  - a) Bone marrow
  - b) The liver
  - c) The spleen
  - d) The lymph nodes
- (iv) All of the following inhibit thrombosis except
  - a) Protein S
  - b) Fibrinogen
  - c) Antithrombin
  - d) Anti-Xa
- (v) What do you mean by Hemostasis?
  - a) production of new blood cells
  - b) process by which bleeding stops from damaged blood vessels
  - c) normal body condition
  - d) none of the these
- (vi) Cytotoxic T-cells can be recognized by which of the following cell surface marker?
  - a) CD4
  - b) CD7
  - c) CD8
  - d) CD9
- (vii) identify the dengue fever virus
  - a) Arbo virus
  - b) Echo virus
  - c) Entero virus
  - d) Orthomyxo virus
- (viii) Lachrymal glands contains-
  - a) bactericidal substances
  - b) bacteriostatic substances

- c) both of them  
(ix) Exotoxins are-  
a) protein in nature  
c) carbohydrates  
(x) Infrared radiation is a method of sterilization by-  
a) Dry heat  
c) Chemical method  
(xi) Thermal death time is  
a) Time required to kill all cells at a given temperature  
c) Time and temperature needed to kill all cells  
(xii) Select the organism for which kala-azar is caused  
a) *Wuchereria bancrofti*  
c) *Leishmania*  
(xiii) Indicate the apoptosis method  
a) Cell degradation  
c) Cell regeneration  
(xiv) Which of the following patients is at increased risk for developing osteomyelitis?  
a) A healthy young adult  
c) A patient with seasonal allergies  
(xv) What is a common symptom associated with active tuberculosis?  
a) Severe headaches  
c) Skin rashes  
d) lysosome  
b) lipid in nature  
d) None of these  
b) Moist heat  
d) Mechanical method  
b) Temperature that kills all cells in a given time  
d) All of them  
b) *Plasmodium*  
d) None of these  
b) Type of cell injury  
d) Cell activation  
b) A diabetic patient with foot ulcers  
d) A person with no medical history  
b) Persistent cough with blood-tinged sputum  
d) Joint pain

#### Group-B

(Short Answer Type Questions)

3 x 5=15

2. Explain infection and its types. (3)
3. Describe about Osteogenesis Imperfecta (3)
4. pathogenesis of paget disease (3)
5. Write a short note on the most likely mediators in inflammation. (3)
6. Explain the role of immunity in our daily life. (3)

OR

Write a short note on Hypertrophy (3)

#### Group-C

(Long Answer Type Questions)

5 x 6=30

7. illustrate about osteoporosis and osteomyelitis. (5)
8. Analyze the pathophysiology, risk factors, and management of atherosclerosis, a common vascular disease (5)
9. Describe about the 5 physical sterilization techniques with examples. (5)
10. Illustrate the causative organism, mode of transmission, pathogenesis of Kala-azar. (5)
11. Explain the difference between diphtheria, whooping cough and tetanus. (5)
12. Discuss the pathophysiology, risk factors, and clinical features of osteoarthritis. (5)

OR

Explain the concept of juvenile idiopathic arthritis (JIA), its types, and its management. (5)

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