BRAINWARE UNIVERSITY

Term End Examination 2024-2025

Programme – B.Sc.(CCT)-2022/B.Sc.(OTT)-2022/B.Sc.(OTT)-2023/B.Sc.(CCT)-2023/B.Sc.(CCT)-2024/B.Sc.(OTT)-2024

Course Name – Pathology

Course Code - BCCTC203/BOTTC203

(Semester II)

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) Identify the temperature which is maintained by the Freezers in the pathology labs?

a) 10°C – 15°C b) 0°C – 10°C
c) – 10°C to -60°C d) – 100°C

(ii) Identify the usual concentration of the commercial formaldehyde available

a) 7 to 10% b) 17 to 27%
c) 37 to 40% d) 40 to 50%

(iii) Identify hypertrophy of a muscle is due to

a) increase in number b) increase in size of cell
c) Decrease in number of cell d) Abnormal shape of cells

(iv) Identify from the following which is not a feature of reversible cell injury

a) Cellular swelling b) Reducing of ATP synthesis
c) Reduce cellular pH d) Defect in cell membrane

(v) Select from the following which is an active cell death process

a) necrosis b) lysis
c) apoptosis d) senescence

(vi) Fat embolism is commonly identified in

a) Head injuries b) Long bone fractures
c) Drowning d) Hanging

(vii) Identify the modifiable risk factor associated with coronary artery disease is

a) Age
b) Obesity
c) Heredity
d) Gender

(viii) Identify from the following which is one of the symptoms of Coronary artery disease

a) Sleep problems
b) Headache
c) Diarrhoea
d) Pain or discomfort in the chest, lower jaw or arms

(ix) Select from the following which tumors arise from epiphysis

a) Ewing's sarcoma
b) Osteoclastoma (GCT)
c) Chondromyxoid fibroma
d) Osteosarcoma

(x) Predict body temperature is regulated by

a) Medulla
b) Thalamus
c) Hypothalamus
d) Cerebellum

(xi) Identify on collecting blood, what solution is added to it?

a) sodium citrate
b) potassium citrate
c) sodium phosphate
d) potassium phosphate

(xii) Select from the following which is a type of arthritis caused by the buildup of uric acid crystals in the joints

a) Osteoarthritis
b) Rheumatoid arthritis
c) Gout
d) Ankylosing spondylitis

(xiii) Tell that high level of serum lipase is indicative of

a) Liver dysfunction
b) Pancreatic inflammation
c) Kidney failure
d) Cardiac issues

(xiv) Identify the main purpose of a urinalysis

a) Assess kidney function
b) Monitor blood glucose levels
c) Evaluate liver function
d) Measure serum electrolytes

(xv) Choose from the following which is a hallmark feature of apoptosis

a) Cell swelling
b) Cellular hyperplasia
c) Nuclear fragmentation
d) Increased cell size

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Discuss different types of renal calculi. (3)
3. Illustrate the various WBC disorders in brief. (3)
4. Recognize the factors which are related to hypercoagulability. (3)
5. Define Histopathology. (3)
6. Differentiate between Ovarian tumor and Fibroid. (3)

OR

Differentiate between Rickets and Osteomalacia. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Describe the cause and treatment of Atherosclerosis. (5)
8. Distinguish between irreversible & reversible cell injury. (5)
9. Describe the pathophysiology of Prostatic hyperplasia. (5)
10. Illustrate the steps of Histopathological Techniques. (5)

11. Express the details about transfusion reaction. (5)
12. Evaluate the key factors to assess in the COPD patient's health history. (5)

OR

Illustrate the causes of Atherosclerosis. (5)

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