

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR
OF SCIENCE IN NURSING**

NURU 229: HUMAN PATHOLOGY

STREAMS: BSC (NURU)

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 16/04/2025

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (20 MARKS)

1. Barret oesophagus is an example of:
 - a) Metaplasia
 - b) Hyperplasia
 - c) Anaplasia
 - d) Displasia
2. Features of reversible cell injury include
 - a) Cell shrinkage
 - b) Pyknosis
 - c) Plasma membrane blebs
 - d) Cellular fragmentation
3. Causes of mitochondrial damage include all the following except.
 - a) Increased cytosolic calcium
 - b) Reactive Oxygen species
 - c) Ischemia
 - d) Enzyme activation
4. The major differences between necrosis and apoptosis is the is that in necrosis
 - a) The cell shrinks
 - b) Adjacent tissue are inflamed
 - c) The cell membrane is intact
 - d) Occurs due to protein misfolding

5. The pattern of necrosis associated with inadequate flow of blood to brain is.
 - a) Coagulative
 - b) Gangrenous
 - c) Liquefactive
 - d) Caseous
6. Opsonins are proteins that coat microbes making them target for phagocytosis. They Include:
 - a) Antibodies, lectins
 - b) Thrombin, Lectins
 - c) Kinins, Antibodies
 - d) Kinins, lectins
7. Tissue injury is common feature in chronic inflammation. It results from
 - a) Reduced blood flow
 - b) Reaction of oxygen species
 - c) Release of vasoactive amines
 - d) Arachidonic acid metabolites

A scar contains which type of collagen

 - a) I
 - b) II
 - c) III
 - d) IV
8. The most dominant leucocyte in chronic inflammation is
 - a) Neutrophil
 - b) Macrophage
 - c) Eosinophil
 - d) Master cells
9. Which of the following is associated with the first phase of wound healing.
 - a) Neutrophil migration
 - b) Angiogenesis
 - c) Collagen Matrix Formation
 - d) Wound contraction
10. Common feature of carcinoma and sarcomas is
 - a) Slow rate of growth
 - b) Well defined cleavage plane
 - c) Abnormally large cells
 - d) Ability to metastasize
11. The most frequently affected organ in haematogenous spread of carcinoma is
 - a) Lungs
 - b) Liver
 - c) Brain
 - d) Heart

12. DNA is found in the cell in the nucleus and the
 - a) Mitochondria
 - b) Ribosomes
 - c) Lysosomes
 - d) Peroxinase
13. Production of excess hormones and growth factor on target cells is likely to result in
 - a) Hypertrophy
 - b) Hyperplasia
 - c) Metaplasia
 - d) Dysplasia
14. Which of the following is not a cause of atrophy?
 - a) Malnutrition
 - b) Hormonal stimulation
 - c) Denervation
 - d) Advanced age
15. The term that describes fading of the chromatin is
 - a) Karyolysis
 - b) Pyknosis
 - c) Karyorrhexis
 - d) Hypoxia
16. Metastatic calcification is caused by
 - a) Old trauma
 - b) Atherosclerotic lesions
 - c) Scarred heart valves
 - d) Hyper parathyroidism
17. The cardinal sign of inflammation which is as a result of increased vascular permeability is
 - a) Calor
 - b) Tumor
 - c) Dolor
 - d) Rubor
18. An excessive formation of collagenous tissue that results to a raised area of scar tissue is called
 - a) Ulceration
 - b) Keloid
 - c) Hypertrophic scar
 - d) Dehiscence
19. Generalized Edema is called
 - a) Hydrothorax
 - b) Hydro pericardium
 - c) Anasaca
 - d) Ascites

SECTION B- SHORT ANSWER QUESTIOS (30 MARKS)

- a. State five characteristics of necrosis (5 marks)
- b. State five factors that determine wound healing (5 marks)
- c. Outline effects of neoplasm in the body (5 marks)
- d. Explain five factors that determine formation of oedema (10 marks)
- e. State five causes of genetic disorders (5 marks)

SECTION C-LONG ANSWER QUESTIONS (20 MARKS)

- a) Describe cellular events that take place in inflammation. (8 marks)
 - b) Outline six systematic effects of inflammation. (6 marks)
 - c) Explain three vascular responses to inflammation. (6 marks)
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