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UNIVERSITY EXAMINATIONS 2023/2024

FIRST YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN NURSING

NNU 3133: PATHOLOGY

DATE: APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS: *All questions are compulsory*

Ensure that all your answers are properly numbered

Part 1 Multiple Choice Questions (MCQs): Write the correct answer on the space provided in the answer booklet. Each MCQ is one mark.

Part 11: Short Answer Questions-Answer questions following each other on the answer booklet

Part 111: Long Answer Questions-Answer the questions on the answer booklet.

SECTION A: Multiple Choice Questions (20 MARKS)

1. A 52-year-old client is brought to the emergency department with the following symptoms: dyspnea, agitation, crackles upon auscultation, and a productive cough of pink, frothy secretion. The nurse immediately suspects:
 - a. Pulmonary edema.
 - b. Pulmonary embolism.
 - c. Pneumonia.
 - d. Pleural effusion
2. Lack of folic acid in a pregnant client's diet may cause which fetal problem?
 - a. Dextrocardia.
 - b. Cleft palate.

- c. Neural tube defects.
 - d. Anencephaly.
3. Which statement best describes psoriasis?
- a. A viral infection that presents as a blister.
 - b. A nonspecific dermatitis.
 - c. A contagious bacterial infection.
 - d. A chronic inflammatory disease with silver scales.
4. The most frequent fracture site in a client with osteoporosis is:
- a. Knee.
 - b. Vertebral body.
 - c. Wrist.
 - d. Hip.
5. When assessing shock states, which type of shock would the nurse recognize as being different from all other classic presentations of shock?
- a. Burn shock.
 - b. Septic shock.
 - c. Hemorrhagic shock.
 - d. Cardiogenic shock.
6. Which is the predominant cause of angina?
- a. Extreme cold temperatures.
 - b. Decreased afterload.
 - c. Decreased oxygen supply to the heart muscle.
 - d. Increased preload.
7. Which surgery involves removing organs or tissues that are likely to develop cancer?
- a. Palliative.
 - b. Prophylactic.
 - c. Diagnostic.
 - d. Reconstructive
8. A client admits to frequent urination, thirst, and weight loss. The client is diagnosed with diabetic ketoacidosis (DKA). The nurse knows DKA is caused by:
- a. Severe lack of insulin.
 - b. Too much insulin.
 - c. High-calorie diet.
 - d. Excessive exercise.

9. In taking care of a client with acute respiratory distress syndrome (ARDS), the nurse knows that a characteristic specific to ARDS is:
- Arterial hypoxemia unresponsive to supplemental O₂
 - Increased lung compliance.
 - Pink, frothy sputum.
 - Barrel chest.
10. Which is the most common complication of a myocardial infarction (MI)?
- Hepatomegaly.
 - Endocarditis.
 - Heart failure.
 - Arrhythmia.
11. Grading of tumours depends upon the following except:
- Degree of anaplasia
 - Metastatic spread
 - Rate of growth of cells
 - Degree of differentiation
12. All of the following are X-linked recessive disorders except:
- Hemophilia A and B
 - Chronic granulomatous disease
 - Glucose -6-phosphate dehydrogenase deficiency
 - Sickle cell anemia
13. In atrophy, the cells are:
- Dead cells
 - Shrunken cells
 - Irreversibly injured cells
 - Reversibly injured cells
14. The most common causative organism for lobar pneumonia is:
- Staphylococci
 - Streptococci
 - Pneumococci
 - Haemophilus
15. Which of the following causes of anemia is associated with microcytosis?
- Folic acid deficiency
 - Therapy with zidovudine (AZT)

- c. Hypothyroidism .
.d. Thalassemia
16. Which of the following would occur in response to stress?
- increased systolic blood pressure
 - decreased epinephrine
 - constriction of the pupils
 - decreased adrenocorticoids
17. A 20-year-old woman undergoes cesarean section to deliver a term infant, and the lower abdominal incision is sutured. The sutures are removed one week later. Which of the following statements best describes the wound site at the time of suture removal?
- Collagen degradation exceeds synthesis
 - Granulation tissue is still present
 - No more wound strength will be gained
 - Type IV collagen predominates
18. Formation of granuloma is:
- Type I hypersensitivity reaction
 - Type II hypersensitivity reaction
 - Type III hypersensitivity reaction
 - Type IV hypersensitivity reaction
19. In Alzheimer's disease, cerebral plaques consist of:
- Aβ protein
 - Aβ₂M protein
 - AP protein
 - Prion protein
20. Most frequently and severely involved joints in rheumatoid arthritis are:
- Knees
 - Elbows
 - Interphalangeal
 - Sacroiliac

SECTION B: SHORT ANSWER ESSAY QUESTIONS (30 MARKS)

- Describe the pathophysiology of an aneurysm (4 marks)
- What are the four key steps in carcinogenesis (4 marks)



3. With reasons, classify whether each of the following is an inflammation or infection:
- a. sunburn,
 - b. skin rash under adhesive tape,
 - c. common cold,
 - d. Red, swollen eye with purulent exudate
- (4marks)
4. Outline five the cardinal signs of an inflammatory response (5marks)
5. Outline a plan of care for the patient in circulatory shock. (4marks)
6. State four possible causes of undernutrition (4marks)
7. Define the term exudate and outline four types of exudates (4marks)

SECTION C: LONG ANSWER ESSAY QUESTIONS (20 MARKS)

1. A 40-year-old woman, recently married and pregnant for the first time, comes to the clinic with a question about the chances of having "a Down syndrome baby."
- a. Name two of the common clinical features? (2 marks)
 - b. i) What major genetic abnormalities are associated with Down syndrome? (3 marks)
 - ii) How might these abnormalities lead to the clinical features of the syndrome? (5 marks)
 - c. How might this woman's age contribute to her risk of having a child with Down syndrome? (3 marks)
2. Discuss the changes that occur in cell injury for reversible and irreversible injury (10marks)