

Date : October 5, 2024
Total Marks : 100
Writing Time : 150 minutes (2.5 hours)
Reading Time : 15 Minutes (prior to writing time)

1. Write your Registration Number clearly and correctly on the Answer Booklet.
2. The first 15 minutes is being provided to check the number of pages of Question Paper, printing errors, clarify doubts and to read the instructions. You are NOT permitted to write during this time.
3. This paper consists of **TWO SECTIONS**, namely SECTION A & SECTION B:
 - **SECTION A** has two parts:

Part I - 30 Multiple Choice Questions

Part II - 4 Short Answer Questions

All questions under SECTION A are **COMPULSORY**.
 - **SECTION B** consists of two Case Studies. Choose only **ONE** case study and answer the questions of your choice.
4. All answers should be written on the Answer Booklet provided to you. Candidates are not allowed to write anything on the question paper. If required, ask for additional Answer Booklet.
5. All answers should be written with correct numbering of Section, Part and Question Number in the Answer Booklet provided to you. Note that any answer written without indicating the Section, Part and Question Number will NOT be evaluated and no marks will be awarded.
6. Begin each Section and Part in a fresh page of the Answer Booklet.
7. You are not permitted to tear off any sheet(s) of the Answer Booklet as well as the Question Paper.
8. Use of any other paper including paper for rough work is not permitted.
9. **You must hand over the Answer Booklet to the Invigilator before leaving the examination hall.**
10. This paper has **10 printed pages**, including this instruction page.

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SECTION A

PART I: Multiple Choice Questions [30 marks]

Choose the correct answer and write down the letter of your chosen answer in the Answer Booklet against the question number e.g. 31 (d). Each question carries ONE mark. Any double writing, smudgy answers or writing more than one choice shall not be evaluated.

1. Which electrolyte imbalance most likely occurs in a patient with chronic kidney disease?
 - a) Hypocalcemia
 - b) Hyponatremia
 - c) Hypomagnesemia
 - d) Hyperkalemia
2. A patient with myasthenia gravis is at risk for:
 - a) Respiratory failure
 - b) Hypertensive crisis
 - c) Hypoglycemia
 - d) Hypercalcemia
3. The primary goal in the management of diabetic ketoacidosis (DKA) is to:
 - a) Lower blood glucose levels rapidly
 - b) Correct fluid and electrolyte imbalances
 - c) Reduce ketone production
 - d) Manage pain
4. Which drug is used as an antidote for acetaminophen overdose?
 - a) Naloxone
 - b) Flumazenil
 - c) N-acetylcysteine
 - d) Atropine
5. Which condition is characterized by the premature separation of the placenta from the uterine wall?
 - a) Placenta previa
 - b) Ectopic pregnancy
 - c) Molar pregnancy
 - d) Abruptio placentae
6. The most common cause of postpartum hemorrhage is:
 - a) Uterine atony
 - b) Retained placenta
 - c) Lacerations
 - d) Coagulopathy
7. The Apgar score includes all of the following parameters EXCEPT:
 - a) Heart rate
 - b) Respiratory effort
 - c) Muscle tone
 - d) Blood pressure

8. The concept of "informed consent" is based on which ethical principle?
 - a) Nonmaleficence
 - b) Justice
 - c) Autonomy
 - d) Fidelity
9. What is the normal pH range of blood?
 - a) 7.25-7.35
 - b) 7.35-7.45
 - c) 7.45-7.55
 - d) 7.55-7.65
10. What is the most appropriate action if a patient is suspected of having a stroke?
 - a) Give aspirin
 - b) Administer oxygen
 - c) Perform a CT scan immediately
 - d) Start an IV line
11. A patient presents with a sudden onset of severe chest pain, radiating to the back, and a difference in blood pressure between the arms. What is the most likely diagnosis?
 - a) Myocardial infarction
 - b) Pulmonary embolism
 - c) Aortic dissection
 - d) Pneumothorax
12. What is the priority nursing diagnosis for a patient experiencing an acute asthma attack?
 - a) Impaired gas exchange
 - b) Ineffective airway clearance
 - c) Anxiety
 - d) Activity intolerance
13. A nurse is assessing a patient with suspected meningitis. Which of the following findings would indicate a positive Brudzinski's sign?
 - a) Pain and resistance when the neck is flexed
 - b) Flexion of the hips and knees when the neck is flexed
 - c) Inability to straighten the leg when the hip is flexed
 - d) Nuchal rigidity and photophobia
14. A patient is receiving a blood transfusion and develops chills, fever, and back pain. What is the priority nursing action?
 - a) Stop the transfusion immediately
 - b) Slow the rate of infusion
 - c) Administer acetaminophen
 - d) Notify the physician

15. A nurse is caring for a patient with hyperkalemia. Which of the following ECG changes is most indicative of this condition?
- a) Prolonged QT interval
 - b) Depressed ST segment
 - c) Peaked T waves
 - d) Inverted P waves
16. Packed red cells have been prescribed for a patient with low haemoglobin and hematocrit levels. The nurse takes the patient's temperature before handling the blood transfusion and records 100.8 degrees Fahrenheit. Which action should the nurse take?
- a) Give an antipyretic and begin the transfusion.
 - b) Proceeds with the transfusion.
 - c) Administer an antihistamine and begin transfusion.
 - d) Delay hanging the blood and inform the physician.
17. A patient with a history of chronic urinary tract infections complains of urinary frequency and a burning sensation during urination. To determine if the issue involves the kidneys, where should the nurse assess for pain or discomfort?
- a) Urinary Meatus
 - b) Pain in the labium
 - c) Suprapubic area
 - d) Right or left Costovertebral angle
18. A nurse is assessing a patient for signs of renal dysfunction. Which clinical manifestation would most likely indicate that the patient is experiencing fluid overload due to impaired kidney function?
- a) Edema in the extremities
 - b) Dry, flaky skin
 - c) Decreased blood pressure
 - d) Increased urine output
19. Which of the following findings is the best indication that fluid replacement for the patient with hypovolemic shock is adequate?
- a) Respiratory rate of 21
 - b) Diastolic Blood pressure greater than 90mmHg
 - c) Urine output greater than 30ml/hour
 - d) Systolic Blood pressure greater than 110mmHg
20. Dorji, a patient with myasthenia gravis, is scheduled to receive immunosuppressive therapy. Which of the following explains why this therapy is expected to be effective in managing his condition?
- a) Promotes the removal of antibodies that impair the transmission of impulses
 - b) Decreases the production of antibodies that attack the acetylcholine receptors
 - c) Stimulates the production of acetylcholine at the neuromuscular junction
 - d) Inhibits the breakdown of acetylcholine at the neuromuscular junction

21. When faced with an ethical dilemma, the nursing code of ethics advises nurses to:
- Make decisions independently
 - Ignore dilemma
 - Consult the ethics committee or other resources
 - Follow the physician's order without questions
22. According to the nursing code of ethics, the nurse's role in a patient's informed consent is to:
- Make the decision for the patient
 - Provide all necessary information and support patient understanding
 - Document the physician's explanation
 - Minimize patient questions
23. A 25-year-old woman presents to the Emergency Room with acute gastritis and signs of moderate dehydration. What is the most appropriate nursing diagnosis?
- Infection
 - Fluid volume deficit
 - Activity intolerance
 - Fluid volume excess
24. A patient with blunt trauma underwent exploratory laparotomy for repair of an intra-abdominal injury. He develops oliguria and hypotension four hours post-surgery. Which is the priority nursing diagnosis?
- Nausea
 - Risk for infection
 - Deficient fluid volume
 - Impaired urinary elimination
25. Intrauterine growth curves classify a 32-week-old preterm newborn. Birth weight and gestational age show the infant's growth rate falls below the 10th percentile. What is the priority nursing diagnosis for a newborn with a small for gestational age?
- Risk for injury related to impaired gluconeogenesis.
 - Risk for impaired gas exchange related to meconium aspiration.
 - Risk for ineffective thermoregulation related to lack of subcutaneous fat.
 - Risk for altered nutrition less than body requirements related to increased metabolic needs.
26. A 14-year-old patient is admitted with a tonsillar abscess experiencing high fever, dysphagia and difficulty speaking. Which nursing problem needs attention first?
- Acute pain related to throat inflammation
 - Imbalanced nutrition due to inadequate intake
 - Impaired swallowing related to dysphagia
 - Hyperthermia related to acute infection
27. Which of the following offers the best way to set priority?
- Assessing nursing needs and problems
 - Giving instructions on how nursing needs are to be met
 - Controlling and evaluating the delivery of nursing care
 - Assigning a safe nurse-to-patient ratio

28. A patient is receiving a platelet transfusion. The nurse determines that the patient is gaining from this therapy if the patient exhibits which of the following?
- a) Less frequent febrile episode
 - b) Increased level of hematocrit
 - c) Fewer episodes of bleeding
 - d) Increased level of haemoglobin
29. A nurse is surveying to assess nurses' attitudes towards pain management practices. What type of data will be collected through this survey?
- a) Quantitative data
 - b) Qualitative data
 - c) Mixed method data
 - d) Meta-analysis data
30. A four-year-old boy presented with a firm and non-tender mass that his mother had discovered in the right upper abdominal quadrant. He was admitted to the hospital and underwent a complete surgical excision of a renal tumour that had extended beyond the kidney. The child was then scheduled for radiation and chemotherapy treatment. Which stage was the tumour?
- a) I
 - b) II
 - c) III
 - d) IV

PART II – Short Answer Questions [20 marks]

This part has 4 Short Answer Questions. Answer ALL the questions. Each question carries 5 marks. Mark for each sub-question is indicated in the brackets.

1. Answer the following questions on End-of-Life Care.
 - a) Define the term "advance directive." **(1 mark)**
 - b) Explain the role of advance directives in end-of-life care planning. **(2 marks)**
 - c) Explain the ethical implications of respecting advance directives in cases where family members disagree with the patient's wishes. **(2 marks)**
2. Write short answers to the following questions on diabetic ketoacidosis (DKA).
 - a) What are the clinical manifestations of DKA? **(1 mark)**
 - b) Explain the pathophysiology of DKA. **(2 marks)**
 - c) Describe the nursing management for a patient with DKA. **(2 marks)**
3. Write short answers on Heart failure.
 - a) What is heart failure? **(2 marks)**
 - b) List down the types of heart failure. **(3 marks)**
4. Answer questions on pulse points/sites.
 - a) How many common pulse sites/points are there? List five of the common pulse sites. **(3 marks)**
 - b) When assessing a patient's pulse rate, what should a nurse evaluate? **(2 marks)**

SECTION B: CASE STUDY [50 marks]

Choose either CASE I OR CASE II from this section. Each case study carries 50 marks. Mark for each sub-question is indicated in the brackets.

CASE I

Patient Background:

Ms. Sumchum (Pseudonym), a 65-year-old female, is admitted to the emergency department with sudden onset of right-sided weakness, difficulty speaking, and a severe headache that started approximately 2 hours ago. She has a history of hypertension and hyperlipidemia and is currently on lisinopril and atorvastatin. Ms. Sumchum lives alone and reports that she did not recognize the symptoms as being serious until her neighbor noticed her difficulty in speaking and called for help. Upon assessment, Ms. Sumchum's vital signs are:

- BP: 180/100 mmHg
- HR: 88 beats per minute (BPM)
- RR: 20 breaths per minute
- Temperature: 98.6°F

Physical examination reveals:

- Right-sided hemiparesis with significant weakness in the right arm and leg
- Aphasia with difficulty forming coherent sentences
- Facial droop on the right side
- A severe headache described as “the worst headache of my life”

Neurological examination shows:

- Glasgow Coma Scale (GCS) score of 14
- NIH Stroke Scale (NIHSS) score of 12

A non-contrast CT scan of the head shows an area of ischemia in the left middle cerebral artery (MCA) territory, with no evidence of hemorrhage. Laboratory tests include:

- Normal blood glucose level
- Elevated cholesterol levels
- Normal renal function tests

1. Describe how Ms. Sumchum's history of hypertension and hyperlipidemia contributes to her stroke risk. What strategies should be implemented to manage these conditions in the context of her stroke treatment? **(10 marks)**

2. Discuss the importance of timing in stroke treatment and define the "therapeutic window." Is Ms. Sumchum still within this window based on her symptoms and onset time? How does this influence her treatment plan? **(10 marks)**
3. Evaluate the role of CT imaging in the diagnosis and management of stroke. When might these be indicated for Ms. Sumchum? **(10 marks)**
4. Describe the typical clinical features of a stroke that Ms. Sumchum presents with and how they correlate with the ischemic area identified in the CT scan. **(10 marks)**
5. Describe the pathophysiology of ischemic stroke. How does it differ from hemorrhagic stroke in terms of underlying causes and treatment approaches? **(5 marks)**
6. Evaluate the importance of lifestyle modifications in stroke prevention. What specific changes should be recommended to patients to reduce their risk of stroke recurrence? **(5 marks)**

CASE II

Mr. Tshewang, a 57-year-old male, arrives at the Emergency Department (ED) with complaints of chest pain that began approximately one hour after dinner while he was working. He characterizes the discomfort as an intense "crushing pressure" located centrally in his chest, extending down his left arm and towards his back. He rates the pain's severity as 7/10. Upon examination, Mr. Tshewang exhibits diaphoresis and pallor, accompanied by shortness of breath (SOB).

Upon conducting a comprehensive assessment, it was observed that the patient exhibited no signs of jugular vein distention (JVD) or edema. Auscultation revealed normal heart sounds with both S1 and S2 present, while the lungs remained clear, albeit with scattered wheezes. The patient's vital signs were recorded as follows:

BP 140/90 mmHg

HR 92bpm

SpO2 90% on room air

RR 32bpm

Temp: 36.9 degree Celsius

Weight: 104 kg

12 lead EKG and Chest X-ray were also ordered. Blood for cardiac markers was also sent to the laboratory.

The patient was diagnosed with Myocardial infarction (heart attack) and interventions were implemented to alleviate associated symptoms, with a focus on relieving chest pain and improving oxygenation.

1. What intervention should you, as the nurse perform immediately? Why? **(5 marks)**
2. What is Myocardial infarction? List down the causes of MI **(8 marks)**
3. What is a cardiac marker? Name the cardiac markers which you anticipate would be advised by the doctor for Dr. Tshewang? **(7 marks)**
4. What are the complications of MI **(5 marks)**
5. What patient education topics would need to be covered with Mr. Tshewang? **(10 marks)**
6. Prepare a nursing care plan for this patient in relation to pain. Include rationale against each intervention. **(15 marks)**

TASHI DELEK