



Technical Diploma Program in Nursing

<u>Final Exam (Answer)</u> Advanced Critical Care Nursing (II) Second Year- Second Term

Date: 28/5/2024

Time: 3 hours Code: SNUR 251

Questions parts: 3

Total marks: 100 Marks

Part I: Multiple Choice Questions: (60 ×1=60 Marks)

*Please circle the best correct answer only:

- 1- When the heart rhythm is regular and heart beats 60-100 b/m, the type of this rhythm is called
 - a) Sinus tachycardia.
 - b) Sinus bradycardia
 - c) Normal sinus rhythm.
 - d) Sinus dysrhythmia.

2- A patient with pneumonia is experiencing pleuritic chest pain. Which of the following describes pleuritic chest pain?

- a) A mild but constant aching in the chest.
- b) Severe midsternal pain.
- c) Moderate pain that worsens on inspiration/coughing.
- d) Muscle spasm pain that accompanies coughing.

3-Treatment for COVID-19 disease for persons with mild symptoms: a) <u>Antipyretics, antibiotics, fluids and rest.</u>

- b) Antiviral drugs.
- c) Corticosteroid dexamethasone.
- d) Supplemental oxygen.

4- All the following are the non- pharmacological approach for patients with hypertension, <u>Except one:</u>

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- a) Weight reduction.
- b) Regular exercise and relaxation.
- c) Prescribed diuretics intake.
- d) Dietary approaches to stop hypertension.

5-What is the most common types of arrhythmias that the Vagal maneuvers is effective in its treatment?

- a) Sinus arrest.
- b) Sinus bradycardia
- c) Normal sinus rhythm
- d) Supraventricular tachycardia.
- 6- Which of the following pathophysiological mechanisms that occur in the lung parenchyma allow pneumonia to develop?
 - a) Atelectasis.
 - b) Inflammation.
 - c) Bronchiectasis.
 - d) Effusion.

7- Characteristics of patients admitted to intensive care include:

- a) Real or potential social problem.
- b) Need of intermittent observation.
- c) At risk for seriously physiological complications.
- d) Physiologically stable.
- 8- Patients with do not experience any cardiovascular symptoms?
 - a) Sinus tachycardia.
 - b) Sinus bradycardia.
 - c) Normal sinus rhythm.
 - d) Sinus arrhythmia.

9- All of the followings from the causes of sinus bradycardia, Except one?

a) <u>Hyperthyroidism.</u>

- b) Hypothyroidism.
- c) Hypoglycemia.
- d) Some medications.

10- All of the followings are common causes of head injury, Except one:

- a) Falls.
- b) Traffic accidents.

c) Physical comfort.

d) sports-related accidents.

11-Cool and clammy skin is the main manifestations of which of the following types of arrhythmias?

- a) Sinus tachycardia.
- b) <u>Sinus bradycardia</u>.
- c) Normal sinus rhythm.
- d) Sinus arrhythmia.

12- is an inflammation and infection of lung- by inhaledorganisms, transmitted to lower airways and alveoli causing impairs gas exchange.

- a) Chronic Bronchitis.
- b) Chronic pharyngitis.
- c) Pneumonia.
- d) Acute pharyngitis.
- 13- All of the followings from manifestations of sinus tachycardia, Except one:
 - a) Dizziness.
 - b) Lightheadedness.
 - c) Decreased pulse rate.
 - d) Chest pain.

14- All of the followings actions that should be avoided during first aid to head injuries, Except one?

- a) Avoid shaking or moving a person who has head injuries.
- b) Avoid washing the wound or removing debris.
- c) Do not remove helmet in case of head injury.
- d) Remove helmet in case of head injury.

15- What is atrial rate in sinus tachycardia?

- a) 60-100 bpm.
- b) 100-110 bpm.
- c) 70-80bpm.
- d) <u>100-180 bpm.</u>

16-All of the following clinical manifestations for the most common forms of bacterial pneumonia are true, Except one:

- a) Rapid, bounding pulse.
- b) Fatigue, poor appetite.
- c) **Bradycardia**
- d) Sudden onset.

17-Which of the following is the major goal for the patient with pneumonia?

a) Improving airway patency.

- b) Changes in physical assessment findings.
- c) Increase complications.
- d) Changes in temperature and pulse.
- 18- is any sort of injury to the brain, skull, or scalp. This may range from a mild bump to a traumatic brain injury.
 - a) Abdominal injury.
 - b) Chest wound
 - c) Head injury
 - d) Lung edema

19-An unconscious patient with multiple injuries arrives in the critical care unit. Which nursing intervention receives the highest priority?

<u>a) Establishing an airway.</u>

b) Replacing blood loss.

- c) Stopping bleeding from open wounds.
- d) Checking for a neck fracture.
- **20- Reduce the accumulation of secretion for patients with pneumonia by:** a) Restriction of fluids.
 - b) Limit physical activity and moving.
 - c) Breathing, coughing exercise and chest physiotherapy.
 - d) Maintain upright position
- 21- Which of the following has been identified as signs/symptoms for a patient diagnosed with hypothyroidism?

a) <u>Complaints of extreme fatigue and hair loss.</u>

- b) Exophthalmos and complaints of nervousness.
- c) Complaints of profuse sweating and flushed skin.
- d) Treaty and complaints of stiffness of the hands.

22-An elderly patient with pneumonia may appear with which of the following symptoms <u>first</u>?

a) Altered mental status and dehydration.

- b) Fever and chills.
- c) Hemoptysis and dyspnea.
- d) Pleuritic chest pain and cough.

23-All of the following criteria for calling intensive care staff to critical ill patients are true <u>Except:</u>

a) Threatened airway.

- b) Oxygen saturation more than 90%.
- c) All respiratory arrests.
- d) All cardiac arrests.

24- Which vaccine is providing to a 68-year-old patient for the prevention of bacterial pneumonia?

- a) Meningococcal vaccine.
- b) Tetanus and diphtheria vaccine.
- c) Pertussis vaccine.
- d) Pneumococcal vaccine.

25-All the following are the non- pharmacological approach for patients with hypertension, <u>except one:</u>

- a) Weight reduction.
- b) Regular exercise and relaxation.
- c) Prescribed diuretics intake.
- d) Dietary approaches to stop hypertension.

26-People usually experience COVID-19 symptoms after......

- a) 2 to 14 weeks.
- b) <u>2 to 14 days</u>.
- c) $\overline{14}$ to 20 days.
- d) 14 to 20 weeks.
- 27- Which of the following has been identified as a potential risk factor for the development of pneumonia?
 - a) Chronic constipation.
 - b) Long- term use of laxatives.
 - c) History of heart failure and diabetes.
 - d) Chronic cough.
 - 28- Which one of the following therapeutic device used to regulate heart beats?
 - a) Angiography.
 - b) Cardiac x-rays.
 - c) Implantable cardioverter-defibrillator.
 - d) Nitroglycerin therapy.
 - 29- Which of the following types of arrhythmias is defined as the transient absence of sinus P waves that last from 2 seconds to several minutes?
 - a) Normal sinus rhythm.
 - b) Sinus bradycardia.
 - c) Sinus pause or arrest.
 - d) Sinus arrhythmia.

30-The nurse carefully monitors the patient with pneumonia for which of the following complications?

- a) Early resolution.
- b) Duodenal ulcer.
- c) Cirrhosis.
- d) Hypotension and shock.

31- Which of the following is the initial diagnosis of hypertension?

- a) **Blood pressure measurement.**
- b) Retinal examination.
- c) Urine tests.
- d) Blood chemistry.
- 32- Inderal is a:
 - a) Loop diuretic.
 - b) Beta Blockers.
 - c) ACE inhibitor.
 - d) Calcium Channel Blocker.

33- Ageusia means....

- a) Loss of smell.
- b) Loss of hair.
- c) Loss of vision.
- d) Loss of taste.

34- A diagnosis of pneumonia is typically achieved by which of the following diagnostic tests?

- a) ABG analysis.
- b) Chest x-ray.
- c) Blood cultures.
- d) Sputum culture and sensitivity.

35- Which of the following complications is associated with the CORONA virus?

- a) Hemorrhagic shock.
- b) Septic shock.
- c) Congestion or runny nose.
- d) Muscle or body aches.

36-Medically speaking, breathlessness or being short of breath is called......

- a) **Dyspnea.**
- b) Asthma.
- c) Bronchitis.
- d) Winded.

37-When the patient feeling morning occipital headache, fatigue, dizziness, flushing and blurred vision that's means patients suffering from:

- a) Early stages of hypertension
- b) Mineralocorticoid hypertension.

c) Hypertension advances.

- d) Pulmonary hypertension.
- 38- What is the name of cardiac surgery used in treatment of arrhythmias and the surgeon creates a new path for blood to flow around a blocked or partially blocked artery in the heart?
 - a) Cardiac catheter.
 - b) Pacemaker.
 - c) Coronary bypass graft surgery.
 - d) Valve replacement surgery.
- 39- All the following are the major types of skull hematoma, except one:
 - a) Epidural hematoma.
 - b) Subdural hematoma.
 - c) Subarachnoid hematoma.
 - d) Subcutaneous Hematoma.

40-All of the following contributing factors for essential hypertension are true <u>Except:</u>

- a) More than ideal body weight (central abdominal obesity).
- b) Diabetes mellitus and excessive alcohol intake.
- c) Vasoconstriction.
- d) Decreased sodium intake.

41- Which of the following is a desirable blood pressure reading?

a) 130/90

b) Lower than 120/80

- c) 140/80
- d) 180/110

42- One of the following is not related to causes of sinus tachycardia

- a) Fever.
- b) Hypertension.
- c) Hypothyroidism.
- d) Recreational drugs such as cocaine.

43- Recovering from acute respiratory distress syndrome (ARDS):

- a) In the first month and continue to two months.
- b) In the first month and continue to three months.
- c) In the first week and continue to three weeks.
- d) In the first 3-6 months and continue to one year.

44- Besides high blood pressure values, what other signs and symptoms may the nurse observe if hypertension is present?

- a) Unexplained pain and hyperactivity.
- b) Headache, flushing of the face, and epistaxis.
- c) Mottled extremities.
- d) Dusky or cyanotic skin that is cool to the touch.

45- The nurse instruct patient with arrhythmia to practice coughing or putting an ice pack on the face to slow heart rate. These are methods of.....

- a) Vagal maneuvers.
- b) Cardioversion.
- c) Pacemaker.
- d) Ecchosonography.

46-....is characterized by elevations in blood pressure as a consequence of a particular underlying disease or condition.

- a) Primary hypertension.
- b) Malignant hypertension.

c) Secondary hypertension.

d) Rate 180/110.

47- Weight loss, rapid heart rate, and heat sensitivity are the most common clinical manifestations of.....

- a) Hypothyroidism.
- b) Hyperthyroidism.
- c) Thyroid cancer.
- d) Hyperglycemia.

48- One of the most important common head injuries include......

- a) Nose bleeds.
- b) Epistaxsis.
- c) Concussions.
- d) Ear inflammation.

49- Which one of the following measures used by the doctor to reduce pressure on the brain in treatment of head injuries?

a) Give sedatives and other medications to control brain pressure.

- b) Monitor vital signs.
- c) Write to patient laboratory investigation.
- d) Read patient electrocardiography.

50-When does the patient need to take diuretics "Lasix" for hypertensive patients?

- a) Relatively inexpensive.
- b) Effective orally.
- c) Effective during long-term administration
- d) When a patient needs rapid diuresis.

51-What is the most appropriate drug used for treating hypothyroidism

a) Synthetic levothyroxine.

- b) Manitol.
- c) Lasix.
- d) Non-steroidal anti-inflammatory drugs.

52-Severe respiratory distress develops.....after the onset of illness.

a) <u>8-48 hours.</u>

- b) 4- 6 hours.
- c) 4-6 months.
- d) 4-6 weeks.

53-What types of COVID-19 tests?

a) PCR tests and rapid antigen testing.

- b) CRP tests.
- c) CPR tests.
- d) RCP tests.

54- Older adults have an increase in systolic pressure related to what?

a) Retinal flexibility.

b) Change in vessel elasticity.

- c) Hypo- aldosteronism.
- d) Diminished blood volume.

55- Which one of the following from complications of head injuries?

a) Mild headaches that won't go away with balance problems.

- b) Poly urea.
- c) Colonic pain.
- d) Nose fracture.

56-from most important drug used to decrease intracranial pressure .Which one of the followings?

- a) Manitol.
- b) Aspirin.
- c) Primpran.
- d) Ketolac.

57- A male patient's X-ray result indicating acute respiratory distress syndrome (ARDS). This syndrome results from:

- a) Cardiogenic pulmonary edema.
- b) Respiratory alkalosis.
- c) End-stage chronic respiratory disease (COPD).
- d) Renal failure.

58-Which individual is at greatest risk for developing hypertension?

- a) 50 year and more old men.
- b) 20 year old women.
- c) Women after menopause.

d) <u>A & C.</u>

59-Many of the common risk factors of many chronic diseases are related to daily life activities as.....

- a) Measles.
- b) Allergies.
- c) Dust mites.

d) <u>Smoking.</u>

60- Which of the following is a primary goal for the nurse when design nursing care plan for patient with head injury?

a) Improve cerebral blood flow.

- b) Decrease brain edema.
- c) Prevent patient vomiting.
- d) Increase skin integrity.

Part II: Please, read the statement carefully and select the letter (T) if the

statement is true and the letter (F) if the statement is false (20 ×1=20 Marks)

No	Statement	T (a)	F (b)
	In the early stages of hypertension the patient may report; morning occipital	(u)	F
61.	headache, fatigue, dizziness, flushing, blurred vision, and epistaxis.		
62.	COVID-19 has many similar symptoms to TB.	Т	
63.	In severe skull injuries, if a part of the skull removed it's difficult to saved and back in the patient at a later date.		F
64.	A diffuse axonal injury is one of the most dangerous types of head injuries. It can lead to permanent brain	Т	
65.	Lobar pneumonia is lung inflammation caused by bacterial or viral infection and affects one lung.		F
66.	Apply ice to injured head area to minimize swelling	Т	
67.	Streptococcal is the most common causative agents of pneumonia it a Gram-Negative Bacteria.		F
68.	Penetrating head injury means person were hit with an object that broke the skull and entered the brain.	Т	
69.	Keep the patient with severe head trauma lying down and quiet, with the head and shoulders flat.	F	
70.	Pleural effusion is one of the complications of bacterial pneumonia.	Т	
71.	Klebsiella is a gram-negative bacteria.	Т	
72.	Hypertension is called the (SILENT KILLER), because it is a disease that usually occurs with symptoms.		F
73.	Acute respiratory distress syndrome is one of the complications of coronavirus	Т	
74.	Anosmia means loss of taste.		F
75.	The nurse must reduce accumulation of secretion for patients with pneumonia to improve their airway patency through regular physiotherapy program.	Т	
76.	In the early stage of hypertension, there is no clinical manifestation other than elevations in blood pressure.	Т	
77.	Many human coronaviruses come from bats which are considered natural hosts of these viruses.	Т	
78.	A concussion occurs when the impact on the head is severe enough to cause brain injury		
79.	Propranolol (Inderal) used for treatment of tachycardia.	Т	
80.	Intracerebral hemorrhage is bleeding within the brain tissues.	Т	

Part III: Essay questions

Answer the following (20 ×1= 20 Marks)

1- Write five of nursing intervention for patient has acute respiratory distress syndrome (ARDS): (5 marks)

- (1) Observe the patient for increased difficult breathing & cyanosis and sudden change in RR.
- (2) Encourage deep breathing exercises at frequent interval.
- (3) Chest auscultation for abnormal or diminished breath sound
- (4) Maintain open airway (frequent suction).
- (5) Measure fluid intake and output.
- (6) Vital signs measurement
- (7) Frequent assessment for renal, cardiac and respiratory status
- (8) Care of patient on mechanical ventilation.
- (9) Frequent observation for mental status.
- (10) Planning the patient activities due to dyspnea.
- (11) Provide assistance when unable to perform some activities such as bathing, grooming and oral care.
- (12) Meeting the patient's physical and emotional needs will help in alleviating anxiety.
- (13) Provide frequent explanation will reduce anxiety (care of tube & oxygen supply.... etc.)

2- Write five steps from First Aid for head injury: (5 Marks)

- Immobilize the patient.
- Support the head and neck in the position in which you found it.
- Maintain an open airway.
- If necessary do Cardio Pulmonary Resuscitation (CPR).
- Apply ice to injured area to minimize swelling.
- Control any bleeding and apply dressings to any open wounds.
- Do not apply direct pressure if there are any signs of an obvious skull fracture.

3- Write five steps for how the nurse providing emotional support for patient with hypothyroidism? (5 Marks)

Providing emotional support for patient with hypothyroidism?

The patient and family may require assistance and counselling to deal with the emotional concerns and reactions that result.

- Provide thyroid hormones as prescribed.
- Monitor the patient for signs of angina or myocardial

infarction.

- Assess mental status of the pt.
- Monitor arterial blood gases & pulse oximetry.
- Provide low caloric high fibrous diet.

Instruct the patient to gradually increase activity

4- List five side effects of Thiazide Diuretic: (5 marks)

- 1- Dry mouth & thirst
- 2- Weakness, drowsiness, & lethargy
- 3- Muscle aches & muscular fatigue
- 4-Tachycardia
- 5- GI disturbance.

6- Postural hypotension may be potentiated (triggered- stimulated) by alcohol, opioids, or hot weather.

With best wishes for success

Dr. Amal Said

Dr. Hala Abd El–Salam Sheta