



श्री चित्रा तिरुनाल आयुर्विज्ञान और प्रौद्योगिकीसंस्थान, तिरुवनंतपुरम्-11
SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES & TECHNOLOGY
THIRUVANANTHAPURAM—695 011

ENTRANCE EXAMINATION - ACADEMIC SESSION JANUARY 2022

Program: Diploma in Cardiovascular and Thoracic Nursing/Diploma in Neuronursing

Time:90 Minutes

Max. Marks: 100

(Select the most appropriate answer)
(There are **no negative** marks for wrong answers)

- 1 After cardiac surgery, a client's blood pressure measures 126/80. The nurse determines that the mean arterial pressure (MAP) is which of the following?
 - a. 46 mm Hg
 - b. 80 mm Hg
 - c. 95 mm Hg
 - d. 78 mm Hg
- 2 The forceps used for endotracheal intubation is
 - a. Kelly's Forceps
 - b. Magill Forceps
 - c. Mosquito forceps
 - d. DeBakey Forceps
- 3 Normal range of CSF protein is
 - a. 20-40mg/dl
 - b. 05-20 mg/dl
 - c. 15-45 mg/dl
 - d. 45-80 mg/dl
- 4 The nerve involved in Bell's Palsy
 - a. Facial
 - b. Trigeminal
 - c. Optic
 - d. Vagus
- 5 Transforming thoughts, ideas and messages into verbal and non-verbal signs is referred to
 - a. Channel of communication
 - b. Mediation
 - c. Encoding
 - d. Decoding
- 6 The dose of antibiotic prescribed is 650 mg every 6 hours. The medication label reads as follows: reconstitute with 4.8 ml of sterile water to yield 2g in 5 ml. How many ml should the nurse withdraw from the vial for one dose?
 - a. 1.3 ml
 - b. 1.6ml
 - c. 1.8ml
 - d. 2ml
- 7 How would you position a patient for Lumbar Puncture?
 - a. Supine with head elevated
 - b. Prone
 - c. Lateral Side Lying position
 - d. Sim's Position

- 8 The normal pH of human blood
- a. 6.35-6.45
 - b. 7.5-7.6
 - c. 7.35-7.45
 - d. 7.8-7.9
- 9 Which of the following is a life threatening arrhythmia?
- a. Sinus Bradycardia
 - b. Ventricular Fibrillation
 - c. Junctional Escape Rhythm
 - d. Atrial Fibrillation
- 10 A patient is upright in bed with upper part of body elevated between 60 and 90 degrees
- a. Fowler's
 - b. Semi-Fowler's
 - c. Sims Position
 - d. High Fowler's
- 11 According to 2020 AHA Guidelines, while giving CPR to an adult by 2 persons, the recommended ratio of external chest compression to ventilation is
- a. 15-1
 - b. 15-2
 - c. 30-1
 - d. 30-2
- 12 When caring for the client who is receiving an aminoglycoside antibiotic (Eg-Inj. Amikacin) the nurse should monitor which laboratory value.
- a. Serum sodium
 - b. Serum Potassium
 - c. Serum Creatinine
 - d. Serum Calcium
- 13 Term used to describe the amount of stretch on the myocardium at the end of diastole?
- a. Preload
 - b. Cardiac Index
 - c. Cardiac Output
 - d. Afterload
- 14 The part of brain which controls posture and balance
- a. Midbrain
 - b. Cerebrum
 - c. Cerebellum
 - d. Medulla Oblongata
- 15 A priority nursing intervention to prevent respiratory complications after surgery in older adults is:
- a. Ambulate the patient every 2 hours
 - b. Monitor intake & output every shift
 - c. Increase fluid intake during first 24 hours
 - d. Encourage the patient to turn, deep breathe and cough frequently
- 16 Which actions should the nurse implement to prevent ventilator-associated pneumonia (VAP) in the client on mechanical ventilation?
- a. Practice meticulous hand hygiene
 - b. Head of bed elevation at 10 degrees
 - c. Hyperoxygenate before suctioning
 - d. Change ventilator circuit every 4 hours
- 17 Factors influencing the nosocomial infection are
- a. Patient susceptibility
 - b. Microbial agent
 - c. Environmental Factors
 - d. All of the above

- 18 Which of the following medications used for seizures has the side effect of "gingival hyperplasia"?
- Phenobarbital
 - Valproic Acid
 - Phenytoin
 - Carbamazepine
- 19 Which of the following is the common clinical manifestation of hypoglycemia in diabetic patients?
- Diaphoresis
 - Polyuria
 - Nausea, Vomiting
 - Weight loss
- 20 The most important drug in the management of Anaphylactic Shock?
- Atropine
 - Adrenaline
 - Deriphyllin
 - Aminophylline
- 21 The most common cause of ischemic stroke is
- Arterial Stenosis
 - Haemorrhage
 - Thrombus
 - Aneurysm Rupture
- 22 Which of the following personal protective equipments will mainly help in prevention of droplet infection?
- Gloves
 - Gown
 - Googles
 - Mask
- 23 Infusion of 500ml of normal saline over 10 hrs require how many drops per minute? (the drop factor is 15 drops /mt)
- 13
 - 15
 - 17
 - 20
- 24 Broca's area in the left hemisphere of the brain is related to
- Learning and reasoning
 - Receiving impulses from eyes
 - Speech
 - Sensation of smell
- 25 The amount of blood pumped by each ventricle during ventricular contraction is termed as
- Stroke Volume
 - Cardiac output
 - Tidal Volume
 - Heart rate
- 26 A patient on mechanical ventilation admitted in the ward. Culture and sensitivity report of the routine endotracheal aspirate was found positive for MRSA. The first priority action of the nurse is
- Obtain a blood sample for culture and sensitivity
 - Initiate contact precautions
 - Administer prescribed dose of Vancomycin
 - Transfer the patient to an isolation room with negative pressure ventilation
- 27 Subarachnoid space is the space between
- Piamater and arachnoid mater
 - Arachnoid mater and duramater
 - Piamater and brain
 - Brain and arachnoid mater

- 28 The antidote used in paracetamol toxicity
- a. Isoproterenol
 - b. Desferroxamine
 - c. Atropine
 - d. N- Acetylcysteine
- 29 What is the glucose level of a normal CSF?
- a. 100-110 mg/100ml
 - b. 135-145mg/100 ml
 - c. 10-20 mg/100ml
 - d. 45-75mg/100 ml
- 30 The heart valve present between Left atrium and left Ventricle is
- a. Mitral valve
 - b. Aortic valve
 - c. Tricuspid valve
 - d. Pulmonary valve
- 31 Which among the following is a cyanotic heart defect
- a. Ventricular septal Defect
 - b. Patent Ductus Arteriosus
 - c. Tetralogy of Fallot
 - d. Atrial Septal Defect
- 32 Normal value of serum sodium level?
- a. 95-115 meq/L
 - b. 120-130 meq/L
 - c. 135-145 meq/L
 - d. 150-160 meq/L
- 33 A client is in coma of unknown cause and planning for intubation. Which procedure should the nurse withheld until the client is properly intubated?
- a. Gastric feeding
 - b. Urinary catheterisation
 - c. Finger stick for blood glucose level
 - d. Venepuncture for complete blood count
- 34 Drug which decrease heart rate
- a. Deriphylline
 - b. Dopamine
 - c. Metoprolol
 - d. Diamox
- 35 The recommended flow rate of oxygen via nasal cannula is
- a. 1-4 litres/minute
 - b. 4-6 litres/minute
 - c. 6-8 litres/minute
 - d. 8-10 litres/minute
- 36 A patient developed seizure while sitting in the chair. The first action the nurse must do is
- a. Lift the patient to bed
 - b. Ease the patient to the floor
 - c. Restrain body movements
 - d. Insert an airway into the mouth
- 37 The thrombolytic agent used in acute ischemic stroke is
- a. Heparin
 - b. Tissue plasminogen Activator
 - c. Aspirin
 - d. Low molecular weight heparin
- 38 Vaccination is an example for
- a. Tertiary prevention
 - b. Secondary prevention
 - c. Primary Prevention
 - d. None of the above
- 39 Removing 250 to 500ml of blood from a peripheral vein
- a. Venipuncture
 - b. Vasodilation
 - c. Phlebotomy
 - d. Apheresis

- 40 The purpose of water in water seal chamber of a chest drainage system is to
- Foster removal of chest secretions
 - Prevent entrance of air into the pleural cavity
 - Facilitate emptying of bloody drainage from the chest
 - Decrease the danger of sudden change of pressure within the tube
- 41 Patients with raised intracranial pressure should be nursed in
- Flat position
 - Side-Lying position
 - Head end elevated to 30 degree with neck neutral position
 - Head end elevated with neck flexed
- 42 The treatment of choice for Ventricular Fibrillation
- Cardioversion
 - Defibrillation
 - CPR
 - Head end elevated to 90
- 43 Paradoxical respiration is commonly seen in
- Congestive heart failure
 - Obstructive airway disease
 - Cardiac Tamponade
 - Flail Chest
- 44 The Q wave in an ECG represents
- Atrial depolarisation
 - Ventricular depolarisation
 - Ventricular repolarisation
 - Atrial repolarisation
- 45 The most important initial step in clinical waste management is
- Storage
 - Transportation
 - Segregation
 - Labelling
- 46 Which of the following is a gram negative bacteria?
- Staphylococcus Aureus
 - Mycobacterium
 - Streptococcus
 - Pseudomonas Aeruginosa
- 47 A client is receiving heparin sodium by continuous intravenous infusion. Which adverse effect of this therapy should the nurse monitor the client?
- Tinnitus
 - Ecchymoses
 - Increased Pulse rate
 - Decreased Blood pressure
- 48 An older adult with a history of heart failure is admitted to the emergency department with pulmonary oedema. On admission, what should the nurse assess first
- Blood Pressure
 - Skin Breakdown
 - Serum Potassium level
 - Urine Output
- 49 Normal PR interval in ECG
- 0.12- 0.20 seconds
 - 0.10 - 0.12 seconds
 - 0.08-0.10 seconds
 - 0.08-0.12 seconds

- 50 The difference between apical pulse rate and radial pulse rate is
- Pulse deficit
 - Pulsus alternans
 - Pulsus Bigeminy
 - Pulse pressure
- 51 The breathing pattern associated with Diabeticketoacidosis in which rate and depth of respiration is increased
- Cheyne-Stokes respiration
 - Tachypnoea
 - Apnoea
 - Kussmaul's Respiration
- 52 Which of the following is an early indicator of hypoxia ?
- Cyanosis
 - Hypotension
 - Decreased respirations
 - Restlessness
- 53 A client has a prescription for seizure precautions. Which interventions should be included in the plan of care?
- Have suction equipment readily available
 - Keep all the lights on in the room at night
 - Keep tongue blade at the bedside
 - None of the above
- 54 The nurse is assessing a peripheral IV site after completion of a vancomycin infusion and notes that area is reddened, warm, painful and slightly edematous proximal to the insertion of IV catheter. Which action by the nurse is the best?
- Check for the presence of blood return
 - Remove the IV catheter and restart at another site
 - Document the findings and continue to monitor the site
 - Request to change the order to be given orally
- 55 On assessment of a newborn, the nurse palpates the anterior fontanelle and notes that it feels soft. The nurse determines that this finding indicates which condition?
- Dehydration
 - Normal Finding
 - Decreased ICP
 - Increased ICP
- 56 A 6 year old child is admitted with congestive heart failure. Digoxin 0.12 mg is ordered for child. The bottle contains 0.05 mg of digoxin in 1 ml of solution Which of the following amounts should the nurse administer to the child?
- 1.2 ml
 - 2.4 ml
 - 3.5 ml
 - 4.2 ml
- 57 Which one is the best defence in legal issues associated with nursing care?
- Physician's report on the incident
 - Nursing Supervisor's report on the incident
 - Duty nurses' accurate documentation
 - Patient's self-report
- 58 The perception of noise or ringing in the ears is otherwise termed as
- Vertigo
 - Tinnitus
 - Tenesmus
 - Meniere's Disease
- 59 When planning care for a client with myasthenia gravis, the nurse understands that the client is at a highest risk for
- Aspiration.
 - Bladder dysfunction
 - Hypertension
 - Sensory loss

- 60 The nurse evaluates the ABG results of a client who is receiving supplemental oxygen. Which finding would indicate that the oxygen level was adequate?
- a. A PO₂ of 45 mm Hg
 - b. A PO₂ of 50 mm Hg
 - c. A PO₂ of 60 mm Hg
 - d. A PO₂ of 85 mm Hg
- 61 The type of arrhythmia showing saw toothed wave pattern in ECG
- a. Atrial Fibrillation
 - b. Atrial Flutter
 - c. Ventricular Fibrillation
 - d. Ventricular Tachycardia
- 62 The initial blood pressure of a patient with a head injury is 124/80 mm of Hg. As his condition worsens, pulse pressure increases. Which of the following blood pressure readings indicates a pulse pressure greater than the initial pulse pressure?
- a. 102/60 mm of Hg
 - b. 110/90 mm of Hg
 - c. 140/100 mm of Hg
 - d. 160/100 mm of Hg
- 63 The most common cause of airway obstruction in the unresponsive victim is occlusion by
- a. vomitus
 - b. Tongue
 - c. Oral secretions
 - d. Foreign body
- 64 The nurse is preparing a continuous IV infusion at the medication cart. As the nurse goes to insert the spike end of the IV tubing into the IV bag, the tubing drops and spike end hits the top of the medication cart. The nurse should take which action?
- a. Obtain a new IV bag
 - b. Obtain a new IV tubing
 - c. Wipe the spike end of tubing with povidone iodine
 - d. Wipe the spike end of tubing with alcohol swab
- 65 Normal Intracranial Pressure
- a. 0-5 mm Hg
 - b. 5-15 mm Hg
 - c. 20-25 mm Hg
 - d. 25-30 mm Hg
- 66 The nurse reviews wound culture results and learns that client has MRSA infection in a wound. Which type of transmission based precautions does the nurse institute for this client?
- a. Enteric precautions
 - b. Droplet precautions
 - c. Air borne precautions
 - d. Contact Precautions
- 67 The size of the intravenous cannula (in gauge) used in a neonate
- a. 18
 - b. 20
 - c. 22
 - d. 26
- 68 Humidifier attached to an oxygen source helps to
- a. Prevent irritation on the skin
 - b. Prevent fire hazard
 - c. Prevent transmission of microorganisms
 - d. Prevent dryness of mucus membranes

- 69 International Nurses' Day Theme 2021
- a. Nurses' a voice to lead; Nursing the world to Health
 - b. Nurses' a voice to lead; Vision for future health care
 - c. Nurses' a voice to lead; Health For all
 - d. Nurses' a voice to lead; health is the human right
- 70 The cranial nerve responsible for pupillary constriction and eyemovement
- a. Optic nerve
 - b. Trigeminal
 - c. Vagus
 - d. Oculomotor
- 71 Centre for controlling body temperature
- a. Hypothalamus
 - b. Medulla Oblongata
 - c. Cerebellum
 - d. Midbrain
- 72 Collection of air in the subcutaneous tissue
- a. Melanoma
 - b. Pyoderma
 - c. Empyema
 - d. Emphysema
- 73 Inj. Dopamine is prescribed for a patient with left ventricular failure. The nurse will know that medication is working if patient's
- a. Blood pressure rises
 - b. Blood pressure decreases
 - c. Cardiac Index falls
 - d. Pulmonary pressure rises
- 74 ECG changes in myocardial Ischemia
- a. ST segment depression
 - b. Physiologic Q wave
 - c. Widened QRS complex
 - d. Distorted P waves
- 75 The nurse is caring for a client with chest pain in the emergency department. Which of the following laboratory findings would MOST concern the nurse?
- a. ESR 10 mm/hr
 - b. Hematocrit(Hct): 42%
 - c. Creatine Phosphokinase-MB(CK-MB): 4ng/ML
 - d. Serum glucose: 100 mg%
- 76 A 10 year boy is admitted with diagnosis of viral meningitis. He is experiencing severe headache, a stiff neck, vomiting, photophobia and drowsiness. The nurse can make him more comfortable by
- a. Providing him with a large soft pillow
 - b. Teaching him deep breathing
 - c. Encouraging him to drink fluids
 - d. Closing the shades and dimming the lights
- 77 What is the smallest gauge intravenous catheter that can be used to administer blood transfusion in adults?
- a. 20 G
 - b. 24 G
 - c. 26 G
 - d. 28 G
- 78 Dyspnoea associated with congestive heart failure is primarily due to
- a. Blockage of pulmonary artery by an embolism
 - b. Accumulation of fluid in the interstitial spaces and alveoli of lung
 - c. Blockage of bronchi by mucus secretions
 - d. Compression of lung by the dilated heart

- 79 The lung disease characterised by destruction of alveolar walls
- a. Empyema
 - b. Bronchitis
 - c. Lung Abscess
 - d. Emphysema
- 80 Which one of the following values of Cerebrospinal fluid decreases in Bacterial meningitis?
- a. Sugar
 - b. Cells
 - c. Protein
 - d. Chloride
- 81 On auscultation, which finding suggests a right pneumothorax?
- a. Bilateral inspiratory and expiratory crackles
 - b. Absence of breath sounds in right thorax
 - c. Inspiratory wheezes in the right thorax
 - d. Bilateral pleural friction rub
- 82 According to Maslow's hierarchy of needs, which is the highest level of need of an individual?
- a. Basic physiological
 - b. Safety
 - c. Self Actualization
 - d. Self Esteem
- 83 The largest cranial nerve
- a. Facial
 - b. Oculomotor
 - c. Hypoglossal
 - d. Trigeminal
- 84 Which of the following is not a cyanotic heart defect
- a. Tetralogy of Fallot
 - b. Tricuspid Atresia
 - c. Truncus arteriosus
 - d. Coarctation of Aorta
- 85 Diabetes Insipidus is caused by deficiency of
- a. Growth hormone
 - b. Antidiuretic hormone
 - c. Insulin metabolism
 - d. ACTH hormone
- 86 Which of the following is the modifiable risk factor for cardiovascular diseases?
- a. Heredity
 - b. Age
 - c. Gender
 - d. Smoking
- 87 Disorder that results from damage to areas of brain that produce and process language
- a. Ataxia
 - b. Aphasia
 - c. Apraxia
 - d. Agnosia
- 88 What is the diameter of a infusion needle known as ?
- a. Cannula
 - b. Hub
 - c. Gauge
 - d. All of the above
- 89 Which of the following is the most common side effect of Aspirin?
- a. Gastrointestinal bleeding
 - b. Constipation
 - c. Nystagmus
 - d. Urinary Incontinence

- 90 If a patient is expected to need multiple IVs or an extended hospitalization, it is best to choose which of the following sites for the first IV?
- Antecubital fossa
 - Non dominant hand
 - Dominant forearm
 - It doesn't matter where the first IV is placed
- 91 The lung function test is determined by
- Tonometer
 - Spirometer
 - Barometer
 - Sphygomanometer
- 92 Father of Infection Control
- Ignaz Semmelweis
 - Edward Jenner
 - Alexander Fleming
 - Louis Paster
- 93 A child is admitted to the hospital with a suspected diagnosis of bacterial endocarditis. The child has been experiencing fever, malaise, anorexia and headache and diagnostic studies are performed on the child. Which studies will primarily confirm the diagnosis?
- Sedimentation test
 - Blood Culture
 - Electrocardiogram
 - White Blood cell count
- 94 Which of the following findings would the nurse most likely note in the client who is in compensatory stage of shock?
- Decreased urinary output
 - Significant hypotension
 - Tachycardia
 - Mental Confusion
- 95 When suctioning a client's tracheostomy tube, nurse should incorporate which of the following steps into the procedure?
- Oxygenate the client before suctioning
 - Insert the suction catheter about 2 inches into the cannula
 - Use a bolus of sterile water to stimulate cough
 - Use clean gloves during the procedure
- 96 The antibodies produced by the body's first response to new infection
- Ig A
 - Ig D
 - IgM
 - IgG
- 97 What is the strength of isotonic saline?
- 0.10%
 - 1%
 - 0.90%
 - 9%
- 98 A childhood disorder characterised by abnormalities in communication and social interaction , restricted repeated activities and interaction
- Phobia
 - Obsession
 - Illusion
 - Autism
- 99 The amount of air that moves in and out of lungs with each respiratory cycle
- Tidal Volume
 - Expiratory Reserve Volume
 - Vital Capacity
 - Inspiratory Respiratory Volume
- 100 The major cation in the intracellular fluid(ECF) is
- Calcium
 - Potassium
 - Magnesium
 - Sodium

DNN-DCN 2022 ACADEMIC SESSION

1	c
2	b
3	c
4	a
5	c
6	b
7	c
8	c
9	b
10	d
11	d
12	c
13	a
14	c
15	d
16	a
17	d
18	c
19	a
20	b

21	c
22	d
23	a
24	c
25	a
26	b
27	a
28	d
29	d
30	a
31	c
32	c
33	a
34	c
35	a
36	b
37	b
38	c
39	c
40	b

41	c
42	b
43	d
44	b
45	c
46	d
47	b
48	a
49	a
50	a
51	d
52	d
53	a
54	b
55	b
56	b
57	c
58	b
59	a
60	d

61	b
62	d
63	b
64	b
65	b
66	d
67	d
68	d
69	b
70	d
71	a
72	d
73	a
74	a
75	c
76	d
77	a
78	b
79	d
80	a

81	b
82	c
83	d
84	d
85	b
86	d
87	b
88	c
89	a
90	b
91	b
92	a
93	b
94	c
95	a
96	c
97	c
98	d
99	a
100	b

