



# MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

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## UNIVERSITY EXAMINATIONS 2020/2021

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

### NND 3211- MEDICAL SURGICAL NURSING I

DATE: APRIL 2021

TIME: 2 HOURS

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**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.

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### SECTION A: Multiple Choice Questions (20 MARKS)

1. The factors associated with development of extrinsic asthma include;
    - a) Early childhood, hypersensitivity to identifiable allergens, genetic predisposition
    - b) Inhalation of allergens, hypersensitivity to aspirin, chronic bronchitis
    - c) Late adulthood, genetically determined idiopathic cause
    - d) House mites, sensitivity to penicillin, atopic hypersensitivity
  2. Pulmonary disorders that cause finger-clubbing include:-
    - a) Pneumonia, asthma emphysema
    - b) Lung-cancer, lung-abscess, bronchiectasis
    - c) Cystic fibrosis, pulmonary hypertension, pneumothorax
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- d) Pleural effusion, beryllium disease, chronic atelectasis
3. Complications of viral pneumonia include;
- a) Lung-cavitation, haemorrhage , lung infarction
  - b) Shock, pleural effusion, pericarditis
  - c) Cyst formation, emphysema, pericarditis
  - d) Super-imposed bacterial infections, bronchopneumonia
4. Micro-organisms responsible for hospital acquired pneumonia are:-
- a) Streptococcus pneumonia, haemophilus influenza, legionella pneumophila
  - b) Chlamydia pneumonia, mycoplasma , para-influenza virus
  - c) Pseudomonas aeruginosa, staphylococcus aureus, klebsiella pneumonia
  - d) Pneumocystis carinii, cytomegalovirus, Aspergillus fumigates
5. Surgical management of peptic ulcers is indicated in:-
- a) Severe Helicobacter-Pylori infection, H2 receptor antagonist resistance
  - b) Failure to heal after 12 to 16 weeks of treatment , Zollinger-Ellison syndrome
  - c) NSAID- induce ulcers, stress ulcers.
  - d) Cushing's ulcers, Curling ulcers
6. When using balloon tamponade to control oesophageal bleeding, it is safe to :-
- a) Inflate balloon in the stomach with 400 to 500ML of air
  - b) Deflate the gastric balloon first, then deflate the oesophageal balloon several hours later
  - c) Do endotracheal intubation before insertion of the tube
  - d) Always give oral fluids following endoscopy with or without the return of gag reflex
7. The management of a patient with severe flail chest following rib fracture include:-
- a) Chest-strapping to immobilize the rib fracture, intercostal nerve block
  - b) Encouraging deep breathing, suctioning to clear the airway
  - c) Pulmonary physiotherapy, high thoracic epidural block
  - d) Endotracheal intubation, mechanical ventilation
8. Inadequate chest expansion that leads to respiratory acidosis is most likely caused by:-
- a) Lordosis

- b) Emphysema
  - c) Prolonged bed rest
  - d) Scoliosis
9. Tension pneumonia develops when:-
- a) Blood is lost into the thoracic cavity as a result of blunt trauma
  - b) An air leak in the lung or chest wall causes the lung to collapse
  - c) Air accumulates in the pleural space causing a rise in intrathoracic pressure
  - d) An infectious process leads to the accumulation of pus in the pleural space
10. A deficiency in glucose 6 phosphate dehydrogenase results in :-
- a) RBCs' ability to produce their own glucose for energy metabolism
  - b) RBCs' ability to carry the usual amount of oxygen to the tissues
  - c) The RBCs' being more susceptible to demand and early hemolysis
  - d) The RBCs' being deficient in an enzyme that stabilizes their cell walls
11. Discharge instructions for the client who has had an intestinal obstruction due to fecal impaction include:-
- a) Encouragement to report episodes of diarrhea
  - b) Information about analgesics such as oxycodone hydrochloride (percodan)
  - c) Reminding clients to limit activities
  - d) Providing a written description of low fiber diet
12. In teaching a patient about allergic rhinitis, it is most important for the nurse to inform the patient that :
- a) Use of decongestant nasal spray for more than 3 days may make the symptoms worse
  - b) Allergic reactions can be prevented if antihistamines are taken before exposure to allergens
  - c) Corticosteroids nasal sprays are the only topical drugs recommended for treatment of hay fever.
  - d) Prescription drugs should be requested because over-the-counter preparations are ineffective for allergic rhinitis

13. Following assessment of a patient with pneumonia, the nurse identifies a nursing diagnosis of ineffective airway clearance. The nurse basis this nursing diagnosis on the findings of :
- Oxygen saturation of 85%
  - Respiratory rate of 28
  - Presence of greenish sputum
  - Crackles in the right
14. To promote airway clearance in a patient with pneumonia, the nurse instructs the patient to:
- Splint the chest when coughing
  - Maintain a semi-fowlers position
  - Wear a nasal oxygen cannula at all times
  - Use relaxation technique to reduce anxiety
15. The nurse identifies the nursing diagnosis of activity intolerance for a patient with asthma. A common aetiologic factor for this nursing diagnosis is :
- Work of breathing
  - Fear of suffocation
  - Anxiety and restlessness
  - Side effects of medication
16. Wheezing and dyspnea in asthma are related to the pathophysiologic feature of :
- Work of breathing
  - Fear of suffocation
  - Anxiety and restlessness
  - Side effects of medication
17. The clinical features of emphysema are caused by:
- An overproduction of the antiprotease  $\alpha_1$ -antitrypsin
  - Hyperinflation of alveoli and destruction of alveolar wall
  - Hypertrophy and hyperplasia of goblet cells in the bronchi
  - Collapse and hyperventilation of the terminal respiratory unit

18. The nurse knows that the interventions carried out to promote airway clearance in the patient with chronic obstructive pulmonary disease are successful based on finding that the ;
- a) Patient has no dyspnea
  - b) Patient's mental status is improved
  - c) Patient has effective and productive coughing
  - d) PaCO<sub>2</sub> is within the normal range for the patient
19. The nurse emphasizes the need for especially close monitoring while taking antitubercular drugs in the patient who has a history of :
- a) Liver disease
  - b) Renal disease
  - c) Heart disease
  - d) Bowel disease
20. The nurse establishes tension pneumothorax when assessment findings reveal:
- a) Absence of lung sounds on the affected side
  - b) Inability to auscultate tracheal breath sounds
  - c) Deviation on the trachea toward the side opposite the pneumothorax
  - d) A shift of the point of maximal impulse to the left with bounding pulses.

**SECTION B: Short Answer Questions (40 marks)**

1. Describe the role of chemoreceptors in the control of respiration (6 Marks)
2. Outline five indications of endotracheal intubation (5 Marks)
3. Describe the pathophysiology of chronic obstructive pulmonary disease (5 Marks)
4. Explain the management of rhinitis (5 Marks)
5. Compare and contrast Hepatitis A and Hepatitis B (5 Marks)
6. State 4 clinical features of malabsorption (4 Marks)

**SECTION B: Short Answer Questions (40 marks)**

Ri aged 60 comes alone to your casualty with bi-lobar pneumonia. The doctor's orders include oxygen (O<sub>2</sub>) at 2 litres per minute.

Vital signs:BP 108/50 mmHg,P-100 beats/minute, R-36 breaths /minute , T-39°C. Each time you offer the oxygen mask, she pulls away having a fearful look. You don't speak her language.

- a) State the actions you will take to administer oxygen to Ri ( 4 Marks)
- b) Indicating the rationale, describe other interventions that will ease her distress(13 Marks)
- c) State three complications you would assess for (3 Marks)