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University Examinations 2024/2025

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR
OF MEDICAL LABORATORY AND BACHELOR OF MEDICAL MICROBIOLOGY

HML 3216/HMM 3217: BASIC LIFE SUPPORT/FIRST AID

DATE: JANUARY 2025

TIME: 3 HOURS

INSTRUCTIONS:

Answer *All* questions

Ensure that all your answers are properly numbered

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

Part II: Short Answer Questions – Answer questions following each other on the answer booklet

Part III: Long Answer Questions – Answer each question on the answer booklet

SECTION A: SHORT ANSWER QUESTIONS (20 marks)

1. Answer the following questions

- | | |
|---|------|
| a) Define first Aid and Basic life support | 4Mks |
| b) List the various anatomical and physiological organization of human body | 5Mks |
| c) Describe respiratory and cardiovascular systems failure | 5Mks |
| d) Describe DRABC in primary survey as a critical first step in first aid intervention designed to address any life-threatening conditions. | 6Mks |

2. Discuss first aid under the following sub headings

- | | |
|---|------|
| a) The principles of First Aid | 5Mks |
| b) State the common conditions encountered in First Aid | 5Mks |

SECTION B: LONG ANSWER QUESTIONS (40 MARKS)

QUESTION TWO

Discuss first Aid under the following subheadings

- a) Describe ABCDE of First AID 6Mks
- b) Discuss assessment of mass casualty due building collapse for first aid 6Mks
- c) Discuss safety precautions to be considered in any first aid scene 8Mks

QUESTION THREE

Discuss how you can transport an injured casualty to nearest health facility

- a) Handling and lifting of the casualty 4Mks
- b) Casualty Triaging 4Mks
- c) Referral system 4Mks
- d) Immediate first requirement before transportation 8Mks
- e) Prioritization of casualty for referral 4Mks

QUESTION FOUR (20 MARKS)

Discuss the following as use in first aid

- a) Ethical considerations 6Mks
- b) Circulatory failure and shock 8Mks
- c) Qualities of a first aider 6Mks

SECTION C: MULTIPLE CHOICE QUESTIONS

1. How should you open the airway of an unconscious casualty?
 - a) Head tilt and chin lift
 - b) Jaw thrust
 - c) Head tilt and jaw thrust
 - d) Lift the chin

2. How long would you check to see if an unconscious casualty is breathing normally?
 - a) No more than 10 seconds
 - b) Approximately 10 seconds
 - c) Exactly 10 seconds
 - d) At least 10 seconds
3. You are a lone first aider and have an unconscious non-breathing adult; what should you do first?
 - a) Start CPR with 30 chest compressions
 - b) Give five initial rescue breaths
 - c) Call 911/112 requesting AED (defibrillator) and ambulance
 - d) Give two initial rescue breaths
4. What is the correct ratio of chest compressions to rescue breaths for CPR of an adult casualty?
 - a) 2 Compressions: 30 rescue breaths
 - b) 5 Compressions: 1 rescue breath
 - c) 15 Compressions: 2 rescue breaths
 - d) 30 compressions: 2 rescue breaths
5. Which of the following is the correct sequence for the chain of survival?
 - a) 999/911/112, CPR, Defibrillation, Advanced care
 - b) CPR, Defibrillation, 911/112, Advanced care
 - c) Defibrillation, CPR, 911/112, Advanced care
 - d) Defibrillation, 911/112, CPR, Advanced care
6. What is the cause of angina?
 - a) Blocked coronary arteries
 - b) High blood pressure
 - c) Stress and anxiety

- d) All of the above
7. Which medical condition will develop from severe blood loss?
- a) Shock.
 - b) Hypoglycaemia
 - c) Anaphylaxis
 - d) Hypothermia
8. What names are given to the three different depths of burns?
- a) Small, medium and large
 - b) First, second and third degree
 - c) Minor, medium and severe
 - d) Superficial, partial thickness, full thickness
9. What is a fainting?
- a) A response to fear
 - b) An unexpected collapse
 - c) A brief loss of consciousness
 - d) A sign of flu
10. What steps would you take to control bleeding from a nosebleed?
- a) Sit casualty down, lean forward and pinch soft part of nose
 - b) Sit casualty down, lean backward and pinch soft part of nose
 - c) Lie casualty down and pinch soft part of nose
 - d) Lie casualty down and pinch top of nose
11. What should be your first action when examining the condition of a patient?
- a) Check for breathing
 - b) Check for insurance
 - c) Speak to the victim and shake their shoulders .
 - d) Check for external injuries
12. What is the main purpose of the Heimlich maneuver?
- a) To remove a blockage in the victim's airway

- b) To ensure the victim begins to breathe again
 - c) To treat insufficient breathing
13. How can you recognize if a vein is bleeding?
- a) Blood flows equally out of the wound
 - b) Blood flows with pulses out of the wound
 - c) Blood flows slowly out of the wound
14. What should be done when someone gets a small cut?
- a) Wash with soap and water and cover with a sterile bandage
 - b) Only cover with a sterile bandage
 - c) Clean the wound with cotton wool
- C 15.
15. What is normal body temperature?
- a) 36-37.5 °C
 - b) 39 °C
 - c) 31.5 °C
 - d) None of the above
16. What is the first step in providing first aid?
- a) Apply direct pressure to the wound
 - b) Assess the scene for safety
 - c) Perform rescue breaths
 - d) Elevate the injured limb
17. Which pulse is checked in an unresponsive adult?
- a) Radial pulse
 - b) Carotid pulse
 - c) Brachial pulse
 - d) Femoral pulse
18. How do you recognize signs of a heart attack?
- a) Chest pain or discomfort, shortness of breath, nausea

- b) Dizziness, rapid heartbeat, sweating
 - c) Pale skin, weakness, confusion
 - d) Severe headache, slurred speech, numbness in one side of the body
19. What is the correct method to control severe bleeding?
- a) Apply a tourniquet above the bleeding site
 - b) Apply pressure directly to the wound with a clean cloth or your hand
 - c) Elevate the injured limb above the level of the heart
 - d) Apply ice to the bleeding area
20. What should you do if someone is choking and cannot breathe?
- a) Offer them water to drink
 - b) Perform abdominal thrusts (Heimlich maneuver)
 - c) Encourage them to cough forcefully
 - d) Slap them on the back