



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2017/2018 ACADEMIC

FIRST YEAR SECOND TRIMESTER EXAMINATION

FOR THE DEGREE OF

BACHELOR OF SCIENCE IN PHYSIOTHERAPY

COURSE CODE: BSP 223

COURSE TITLE: FIRST AID & CPR

DATE: *Tue, 24/7/12*

TIME: *9-12 00*

INSTRUCTIONS TO CANDIDATES

Answer All Questions

Section A: Multiple Choice Questions (MCQ) 20 Marks.

Section B: Short Answer Questions (SAQ) 40 Marks.

Section C: Long Answer Question (LAQ) 40 Marks

TIME: 3 Hours

*OK
Moderated 8/1/2018
JEL*

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over.

BSP 223 FIRST AID & CPR

Section A: Multiple Choice Question (MCQ)**20 Marks**

1. CPR is life transforming procedure for a victim who has the following signs of cardiac arrest except
 - A. Unresponsive
 - B. No normal breathing
 - C. No pulse
 - D. High blood pressure
2. Which statement describes sudden cardiac arrest?
 - A. When respiratory distress in adult occur and the heart rate does not change
 - B. When the heart rate is 40 to 60bpm and respiratory increases
 - C. When blood flow to the heart is blocked and the heart rate increases
 - D. When an abnormal rhythm develops and the heart stops beating unexpectedly

Use this case scenario to answer questions 3-9:

A 53- year old man suddenly collapses and becomes unresponsive. You witness him collapse and are the first rescuer to arrive at the scene. You find him lying motionless on the floor.

3. Which is the first action you should take in this situation?
 - A. Activate an emergency response system
 - B. Start high quality CPR, beginning with chest compressions
 - C. Start providing rescuer breaths
 - D. Verify that the scene is safe for you and the victim
4. The man doesn't respond when you touch his shoulders and shout, "Are you OK?" What is your best action?
 - A. Check his pulse
 - B. Start high-quality CPR
 - C. Start Providing rescue breaths
 - D. Shout for nearby help
5. Several rescuers respond, and you ask them to activate the emergency response and retrieve the AED and the emergency equipment. As you check for the pulse and breathing, you notice that the man is gasping for air and making "snorting" sounds. You do not feel a pulse. What is your best action?
 - A. Start high quality CPR, beginning with chest compressions
 - B. Monitor the victim until additional, more experienced help arrives
 - C. Provide rescue breathing by delivering 1 breath every 5 to 6 seconds
 - D. Find someone to help by retrieving the nearest AED
6. What is the ratio of chest compression to breaths when providing CPR to an adult?
 - A. 10 compressions to 2 breaths
 - B. 15 compressions to 2 breaths
 - C. 30 compressions to 2 breaths
 - D. 100 compressions to 2 breaths

7. What are the rate and depths for chest compressions on an adult?
 - A. A rate of 60 to 80 compressions per minute and a depth of about 1 inch
 - B. A rate of 80 to 100 compressions per minute and a depth of about 1½ inches
 - C. A rate of 120 to 140 compressions per minute and a depth of about 2½ inches
 - D. A rate of 100 to 120 compressions per minute and a depth of at least 2 inches
8. What action should you take when more rescuers arrive?
 - A. Assign tasks to other and rotate compressors every two minutes or more frequently if needed to avoid fatigue
 - B. Continue CPR while the AED is attached even if you are fatigued
 - C. Wait for the most experienced rescuer to provide direction to the team
 - D. Direct the team to assign a team leader and roles while you continue CPR
9. If you suspect that an unresponsive victim has head or neck trauma, what is the preferred method for opening the airway?
 - A. Head tilt-chin lift
 - B. Jaw thrust
 - C. Head tilt-neck lift
 - D. Avoid opening the airway
10. During CPR, your hands should not press against the following places except
 - A. Casualty's ribs
 - B. Middle of the breastbone
 - C. Lower tip of the breastbone
 - D. Upper abdomen
11. Which of the following is not true about first degree burns
 - A. Blisters may open and weep fluid
 - B. Appears red and dry
 - C. The area may swell
 - D. Involves epidermis
12. A woman burned her hand in the lunchroom. You should:
 - A. Cool the burn with large amounts of fresh running water
 - B. Cover the burn loosely with a dry sterile dressing
 - C. Remove her from the source of burns
 - D. All of the above
13. What is the importance of first aid?
 - A. To help people recognize and respond appropriately in an emergency
 - B. To help people make appropriate decisions when they see an emergency
 - C. To enable people to give immediate care to a suddenly injured or ill person until more advanced medical care takes over.
 - D. All of the above
14. This sudden illness results from too much or too little sugar in the person blood. What is it?
 - A. Allergic reaction
 - B. Diabetic emergency
 - C. Seizure
 - D. Stroke

15. Heat related illness include the following
 - A. Fainting and hyperglycemia
 - B. Heat cramps, heat exhaustion and heat stroke
 - C. Heat crumps, stroke and insulin decrease
 - D. Hypoglycemia and sunstroke
16. How do you care for a person with possible head, neck or spinal cord injury?
 - A. Move the injured area so that it rests above the persons heart
 - B. Move the person into a comfortable position as soon as possible
 - C. Support the head in the position you find it. Do not try to align it.
 - D. None of the above.
17. What steps will you take to control bleeding from a nosebleed?
 - A. Sit casualty down, lean forward and pinch soft part of the nose
 - B. Sit casualty down, lean backward and pinch soft part of the nose
 - C. Lie casualty down and pinch soft part of the nose
 - D. Lie casualty down and pinch top of the nose
18. Which medical condition will develop from blood loss?
 - A. Shock
 - B. Hypoglycemia
 - C. Anaphylaxis
 - D. Hypothermia
19. What is the cause of angina?
 - A. Insufficient blood reaching the lungs
 - B. Insufficient blood reaching the brains
 - C. Insufficient blood reaching the heart muscle
 - D. Insufficient blood reaching the leg muscle
20. 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

Section B: Short Answer Question (SAQ)

40 Marks

1. Explain the first aid measures in drowning casualty [5 Marks]
2. A. Discuss the three depths of burns. [10 Marks]
 B. Discuss the first aid given to the burns victim [10 Marks]
3. Name **five** importance of first aid in physiotherapy? [5 Marks]
4. A) Name **five** indicators for CPR? [5 Marks]
 B) When do you stop CPR? [5 Marks]

Section C: Long Answer Question (LAQ)**(40 Marks)**

1. Discuss the stepwise procedure of giving first aid to a victim whom you suspect has a cardiac arrest. [20 Marks]
2. Explain **ten** instrumentation used in first aid (First Aid Kit) [20 Marks]

Purpose of the Course

The student will be able to identify and manage situation of common emergencies.

Course Content:

Importance of First Aid in Physiotherapy.

Examination of Vital Signs.

First Aid in cardiac arrest

First Aid in Respiratory failure

First Aid in Burns

First Aid in Electric shock

First Aid in Drowning

First Aid in Spinal cord injury

First Aid in Hypovolemic Shock

First Aid in Poisoning

Instrumentation used in First Aid (First Aid Kit)

Indication of Cardiopulmonary Respiratory (CPR)

Assessment and technique of CPR

Artificial ventilation.

Mode of Delivery

Lectures

Tutorial

Hands on practical in the laboratory.

Instructional Material

Field visits

Audiovisuals equipment

Flip charts

Chalkboards

Handouts

Course Assessment

Written Examination

Oral Examination

Practical Examination

Core Reading Materials

First Aid in Emergency – St. John Ambulance Association.

Physiotherapy for burns and reconstruction - Glassey