

**Bachelor of Science (Honours) in Nursing
Values Based Test – Model Paper
Academic Year 2022 / 2023**

Answer ALL questions.

Time allowed: 90 minutes.

SECTION A – HEALTH LITERACY

Read the following scenario and answer the 8 questions that follow. Some of the questions may contain more than 1 correct answer. You are required to select ALL the options that you think are correct. Each correct answer carries 1 mark. This section carries a total of 20 marks.

Joseph is a 58-year-old widower who lives on his own in a small house in Valletta, the capital city of Malta. He has one son who lives with his own family in another village, about a 15-minute drive away. Since his wife died, his diet has become exceedingly unhealthy and the long hours that he works in a shop means that his lifestyle includes very little physical activity. As a result of this Joseph's body mass index (BMI) has risen to 32m².

1) Which of the following variables are used to compute the BMI?

- a) Weight
- b) Height
- c) Age
- d) Gender
- e) Lean body weight

2) Which BMI value indicates that a person is overweight according to World Health Organisation (WHO) specifications?

- a) 24
- b) 28
- c) 15
- d) 31
- e) 17

3) Which of the following should Joseph avoid in an effort in managing weight?

- a) Trans fatty food
- b) Saturated fatty food
- c) High carbohydrate food
- d) Wholegrain food
- e) Vegetables

4) Which of the following are recommended as part of a healthy diet?

- a) Consumption of 6 units of alcoholic beverages everyday
- b) Fruit and vegetables
- c) Oily fish
- d) Cured meats
- e) Mixed nuts

5) Obesity is a risk factor for many diseases such as type 2 Diabetes Mellitus. Which of the diseases below are associated with type 2 Diabetes Mellitus?

- a) Cancer
- b) Poor circulation
- c) Heart disease
- d) Influenza
- e) Eczema

6) What information is necessary to develop an effective plan that enable Joseph to adopt a healthy diet?

- a) Getting information on how his diet has changed since his wife died and his reasons for this change
- b) Use validated dietary assessment tools to get to know about the dietary pattern
- c) Ask whether Joseph has anyone who can support him in preparing food
- d) Ask about his smoking habits
- e) Ask about his engagement in physical activity

7) What is the weekly minimum aerobic moderate-intensity physical activity that WHO recommends for adults?

- a) 20 minutes
- b) 60 minutes
- c) 150 minutes
- d) 340 minutes
- e) 400 minutes

8) Joseph has a busy lifestyle. Give four suggestions of how Joseph can use everyday activities related to work, transportation, leisure or house-chores to increase / engage in more physical activity.

SECTION B – FIRST AID

This section contains 5 questions. Each question contains only 1 correct answer, and you are required to select only 1 option for each question. This section carries a total of 5 marks.

9) Which of the following telephone numbers is used to call for an ambulance?

- a) 112
- b) 196
- c) 199
- d) 999
- e) 911

10) Which of the following is the most appropriate first aid action for an unresponsive but breathing person?

- a) Place the person on his / her side, in the recovery position
- b) Lay the person on the floor and elevate his / her legs
- c) Put the person comfortably on a bed
- d) Provide reassurance, but do not move the casualty until medical help arrives
- e) Help the person into a comfortable sitting position to facilitate breathing

11) Which of the following is the appropriate intervention for someone unresponsive and not breathing?

- a) Turn the person in the recovery position
- b) Start CPR (cardiopulmonary resuscitation)
- c) Perform abdominal thrusts
- d) Help the person in an upright sitting position
- e) Put the person in the shock position with the legs elevated

12) Which of the following is the best first aid action for a person who is bleeding seriously from a cut on his / her arm?

- a) Wash the hand with mild soap and water, and cover the wound
- b) Apply direct pressure on the wound, and elevate the arm
- c) Wash the hand with antiseptic soap and water, and cover the wound
- d) Wash the hand with mild soap and water, and apply first aid antiseptic cream
- e) Pour some flour or sugar into the wound to clog the bleeding, and cover the wound

13) Which of the following first aid interventions is appropriate for someone suffering from severe (complete) choking?

- a) Back slaps and Abdominal thrusts
- b) Back slaps and Chest thrusts
- c) Remove the foreign body manually
- d) Turn the casualty in the recovery position
- e) Chest compressions

SECTION C: SCOPE OF NURSING PRACTICE

This section contains 9 questions. Some of the questions may contain more than 1 correct answer. You are required to select ALL the options that you think are correct. Each correct answer carries 1 mark. This section carries a total of 20 marks.

14) What is the main scope of a Code of Ethics for nurses?

- a) Sets standards for ethical practice and values
- b) Tells nurses what to do in all situations
- c) Provides a framework of accountability and responsibility
- d) Gives guidance to the public on what they can expect about the way nurses behave and care for them
- e) Is an employment contract

15) The Maltese Code of Ethics for Nurses and Midwives states that "*the patient/client is a unique person and should be treated with dignity and respect irrespective of...*" Complete this sentence with 4 examples.

16) The Maltese Code of Ethics for Nurses and Midwives states that the nurse must uphold professional responsibilities and accountability. What do you understand by the term 'accountability'?

17) The Code says the nurse should "*safeguard and protect all information*", but does this apply in all situations? Imagine that you are a student nurse on the ward and a patient asks to tell you something, but you have to promise that you will tell no one. What would your response be?

- a) I am only a student nurse, so I have to report everything that you tell me to my seniors
- b) I cannot promise you that I won't tell anyone if I believe that what you tell me could be harmful to you, or some-one else
- c) Okay, I give you my word that I won't tell anyone
- d) I am only a student nurse, so it is no use for you to tell me anything because I won't know how to answer or help you. It would be best to tell a qualified nurse.
- e) What fun, I love secrets

18) The Code says the nurse should "*refuse gifts where the patient is trying to seek preferential treatment*". Which of the following statements is NOT an example of this?

- a) A patient who presents some flowers/sweets to the staff when discharged from hospital
- b) A patient in a clinic where you are on duty, offers you a trip on his luxury boat if you let him skip the queue because he has a social engagement he cannot miss
- c) A patient who asks you to take and share a box of biscuits with the staff, as this was given to her and that she shouldn't eat them because of her diabetes

19) Theresa has dementia. Which are the three most important areas of ethical concern when she is urgently admitted to hospital with a urine infection?

- a) Her ability to consent to treatment
- b) That she should be treated equally to all other persons
- c) That information should be shared with her according to her ability to understand it
- d) Ask the residential home for her dietary preferences
- e) Ask the residential home for her personal items

20) Maria, Theresa's daughter, is also her legal guardian. Maria starts asking you many questions about her mother's current condition and treatment. As a student nurse, you do not know all of the answers. Which of the following answers are appropriate?

- a) I am only a student nurse, so I do not know. Please ask someone else.
- b) I am afraid I do not have the information you require. I will check these out and come back with the correct answers
- c) Do not answer and start change the subject by asking Maria questions about Theresa's dementia instead
- d) I am afraid I do not know. Let me ask the nurse looking after Theresa to come to talk to you
- e) I think it would be best if you ask her consultant

21) A man from Eritrea is admitted to the emergency department in evident abdominal pain, but neither he nor his wife accompanying him, can speak English or Maltese. A translator is not available, and the charge nurse asks the wife to go to the waiting room to find someone who can help translate. She comes back again with another Eritrean man, who they do not know. Which of the following 2 ethical concepts are possibly being breached in this situation?

- a) The principle of equality
- b) Maintaining appropriate professional boundaries
- c) Respecting a patient's wish not to pursue any further treatment
- d) Maintaining patient trust
- e) Respect for patient's privacy and confidentiality

22) Is the following statement true or false? *Nurses and nursing students are not expected to disclose to their seniors/managers any health condition and concern that they may have, which might influence their competence to provide care.*

- a) True
- b) False

27) A physician has prescribed a drug at a dose of 5mcg/kg (i.e. 5mcg for each kg of body weight). The patient weighs 72kg. What is the dose in mg that the patient requires?

ANSWER = _____

28) A physician has prescribed a 1L intravenous infusion (drip) of a fluid to be administered over 8 hours. What is the hourly rate (in mL/h)?

ANSWER = _____

29) 5% Dextrose contains 5g/100mL of Dextrose. How much Dextrose is there in 1L of 10% Dextrose?

ANSWER = _____

30) Below is an example of a fluid balance chart for 12 hours between midnight and midday. The chart shows:

- the volume of fluid that a patient is drinking and/or taking intravenously (by drip)
- the volume of fluid that a patient is excreting (through urine), and
- the balance between them.

In this question, you are required to calculate the volumes for the five shaded boxes (Ans 1 – 5) in the fluid balance chart.

TIME	INPUT (mls)			OUTPUT (mls)		RUNNING BALANCE (mls)
	VOLUME TAKEN BY MOUTH	VOLUME TAKEN BY DRIP	RUNNING TOTAL INPUT	URINE OUTPUT	RUNNING TOTAL OUTPUT	
0000 hrs	--	--		--		
0100 hrs	--	--		--		
0200 hrs	--	--		--		
0300 hrs	--	250	250	200	200	50
0400 hrs	--	--		--		
0500 hrs	--	--		--		
0600 hrs	water 50	250	550	220	420	130
0700 hrs	water 100	--	650	--		230
0800 hrs	tea 150	--	800	--		380
0900 hrs	--	250	1050	250	670	380
1000 hrs	juice 100	--	1150	--		480
1100 hrs	water 50	--	(Ans 1)	--		(Ans 4)
1200 hrs	soup 200	250	(Ans 2)	320	(Ans 3)	(Ans 5)

The 'running total input' is the total input that the patient had since midnight **by mouth or through a drip**. This is calculated and documented every time that an individual input entry is documented.

The 'running total output' is the total output that the patient had since midnight. This is calculated and documented every time that an individual output entry is documented.

The 'running balance' is the difference between the 'running total input' and 'running total output', and is documented every time a running total input or output entry is made. This is obtained by subtracting the last 'running total output' from the last 'running total input'.

ANSWER 1: _____, ANSWER 2: _____, ANSWER 3: _____,

ANSWER 4: _____, ANSWER 5: _____.

SECTION E: SCIENCE AND BIOLOGY

This section contains 10 questions and carries a total of 10 marks. There is only 1 correct answer for each question.

31) Which of the following is the chemical symbol of water?

- a) H₂O
- b) NaCl
- c) C₆H₅OH
- d) KCl
- e) CO₂

32) The normal pH of arterial blood is between 7.35 and 7.45. Is this an acidic or alkaline pH?

ANSWER: _____

33) How many chambers are there in the heart?

ANSWER: _____

34) What is the name of the main arteries that supply blood to the brain?

ANSWER: _____

35) Where would you feel for a radial pulse?

- a) Neck
- b) Near the ankle
- c) in the groin
- d) junction of the upper and lower arm
- e) wrist

36) Finish the sentence: In diffusion, gases move from areas of...

- a) higher to lower concentration.
- b) lower to higher concentration.

37) Which of the following is not part of the circulatory system?

- a) Heart
- b) Arteries
- c) Veins
- d) Lungs
- e) Blood

38) Which of the following bones are not found in the leg?

- a) The femur
- b) The tibia
- c) The fibula
- d) The humerus
- e) The calcaneum

39) Where is the patella found?

- a) In the elbow
- b) In the shoulder
- c) In the knee
- d) In the ankle
- e) In the wrist

40) How much does 1 L of water weigh in kg?

ANSWER: _____

SECTION F: OBSERVATION CHART

This section contains 5 short-answer questions and carries a total of 5 marks.

Theresa has been admitted to hospital with fever because of a urinary tract infection. This is an extract from her vital signs chart. Look at the chart and answer the questions that follow.

DATE	TIME	TEMP (°C)	BLOOD PRESSURE (mmHg)	RESP RATE (breaths/min)	HEART RATE (beats/min)
DAY 1	0200 hrs	38.5	180 / 90	29	90
	0300 hrs	38.0	175 / 95	30	90
	0400 hrs	38.3	180 / 100	29	92
	0600 hrs	38.0	170 / 90	28	90
	0800 hrs	38.0	175 / 90	27	88
	1000 hrs	38.0	165 / 95	26	90
	1400 hrs	37.8	150 / 80	24	88
	1800 hrs	37.5	155 / 85	22	82
	2200 hrs	37.5	160 / 90	22	80
	DAY 2	0200 hrs	37.2	155 / 85	20
0600 hrs		37.2	150 / 80	18	71
1000 hrs		37.0	155 / 85	20	72

These are the typical vital signs values of a person of her age.

- *Body Temperature: 36.5 – 37.2°C*
- *Heart Rate: 60 – 80 beat/min*
- *Respiratory Rate: 12 – 18 breaths/min*
- *Blood Pressure: 120 / 80 mmHg*

41) What was her temperature at 6am on Day 1? ANSWER: _____

42) What was her blood pressure 6pm on Day 1? ANSWER: _____

43) Was Theresa's heart rate normal or abnormal at 10 am on Day 1? ANSWER: _____

44) What happened to the heart rate and the respiratory rate when the temperature decreased to normal values?

ANSWER: _____

