

**UNIVERSITY OF MALTA**  
**Faculty of Health Sciences**

**Academic Proficiency Test (Sample Questions)**

**Academic Proficiency Test for the assessment of applicants who applied to join the Preparatory Course for the Bachelor of Science (Honours) in Nursing course in terms of the 'adult learners clause'.**

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**Section A. Basic Mathematical Skills**

1. If the price of a litre of petrol increases from 3.20 to 3.68, what percent did it increase?

- a. 15%
- b. 10%
- c. 115%
- d. 12%

2. If 5 cost 2 euros, how much will 15 apples cost?

- a. 8 euros
- b. 30 euros
- c. 10 euros
- d. 6 euros

3. If 4 people can stain a deck in 2 days, how many people would be required to stain the deck in only 1 day?

- a. 8
- b. 2
- c. 4
- d. 12

4. How much time is there between 7.45am today and 3.15pm tomorrow?

- a. 7  $\frac{1}{2}$  hours
- b. 30  $\frac{1}{2}$  hours
- c. 31  $\frac{1}{2}$  hours
- d. 32  $\frac{1}{2}$  hours

  
  
  

5. If a gas tank can hold 30 litres, how many litres does it contain when it is three-fifths full?

- a. 15
- b. 12
- c. 24
- d. 18

  
  
  

6. How long will it take to reach a town 250 kilometres away if you drive 50 kilometres per hour?

- a. 4 hours
- b. 5 hours
- c. 10 hours
- d. 6 hours

  
  
  

7. Tina bought a scarf for 16.65 euros. She gave the clerk 20 euros. How much change should she get back?

- a. 4.35 euros
- b. 3.45 euros
- c. 3.35 euros
- d. 3.25 euros

8. Paul bought a 12 pack of soda for 5.40 euros. How much did he pay per can of soda?

- a. 0.45 euro
- b. 0.54 euro
- c. 0.40 euro
- d. 2.22 euro

  
  
  

9. If 40 is divided by .08, the result is

- a. 5000
- b. 500
- c. 50
- d. 5

  
  
  

10. What is 4 cubed?

- a. 12
- b. 81
- c. 128
- d. 64

## Section B. Basic English

1. Personal accounts of Amelia suggest that she was a women of courage, integrity, and she was intelligent. Which group of words would make a better revision of this sentence?

- a. Courage, integrity, and intelligent.
- b. Courage, integrity, and she was intelligent.
- c. Courage, integrity, and intelligence.
- d. Courageness, integrity, and she was intelligent.

2. Select the correct word(s) for the blank in the following sentence. \_\_\_\_\_ the best friends to have.

- a. Their
- b. There
- c. They' re
- d. They is

3. Smithco's quarterly report indicated that sales were falling, the same report showed a growth in net income. Which group of words would make a more effective revision to the beginning of this sentence?

- a. Smithco's quarterly report indicating that sales were falling,
- b. Before Smithco's quarterly report indicated that sales were falling,
- c. Although Smithco's quarterly report indicated that sales were falling,
- d. Smithco's quarterly growth in earnings report showed that sales were falling,
- e. Smithco's quarterly report that sales were falling also indicated,

4. Select the correct word(s) for the blank in the following sentence. \_\_\_\_\_ went to the movies last weekend.

- a. She and I
- b. She and me
- c. Her and I
- d. Her and me

5. Coming up on stage, the speaker announced the start of the event. Which is the best way to revise the sentence?

- a. The speaker coming up on stage
- b. Coming up, the speaker, on stage announced
- c. No revision necessary
- d. The speaker announced, coming up on stage
- e. Coming up the speaker at the stage announced

6. The student felt that the final exam was \_\_\_\_\_ than the mid term.

- a. hardest
- b. most hardest
- c. harder
- d. more hard

7. Dave and Julie had to work late so they would finish their project on time. If the sentence was rewritten to begin with "Tomorrow night," the next words would be

- a. their project had to be on time
- b. Dave and Julie will have to
- c. their work will have been
- d. their project will have been
- e. Dave and Julie have had to

8. Select the correct word(s) for the blank in the following sentence. The child has always been afraid of \_\_\_\_\_ to the dentist.

- a. to go
- b. going
- c. have gone
- d. go

  
  
  

9. If your payment is not received within the next two weeks, you will be assessed a late fee. Which is the best way to revise the sentence?

- a. No revision necessary
- b. two weeks, you would be assessed
- c. two weeks, you were assessed
- d. two weeks, you have been assessed
- e. two weeks, you will assess

  
  
  
  

10. Most students at the University enjoy their Chemistry class. Which revision should be made to this sentence?

- a. insert a comma after University
- b. change Chemistry to chemistry
- c. change students to students'
- d. change class to Class
- e. replace their with they're

**Section C - Basic Science**

1. The movement of oxygenated blood from the heart to the body is referred to as which of the following?

- a. cellular circulation
- b. pulmonary circulation
- c. systemic circulation
- d. ventricular circulation

2. In which of the following structures is nutrient absorption most likely to occur in the mammalian digestive system?

- a. epiglottis
- b. stomach
- c. duodenum
- d. cecum

3. Which of the following is considered to be a contributing factor in the decrease of infant mortality among developing countries?

- a. the marital status of the mother
- b. the education opportunities provided to women
- c. the increase in health costs
- d. the decrease in domestic violence toward pregnant women

4. Which is likely to occur following the emigration and immigration of individuals into a population near an open body of water?

- a. the population will remain the same if the rate of immigration is equal to the birth rate
- b. the population will increase if the rate of immigration is less than the rate emigration
- c. the population will increase if the rate of immigration is greater than the rate of emigration
- d. the population will decrease if the rate of immigration is greater than the rate of emigration

5. A malfunctioning aorta will result in which of the following?

- a. deoxygenated blood would not be transported to the heart
- b. deoxygenated blood would not be transported to the lungs
- c. oxygenated blood would not be transported to the heart's atria
- d. oxygenated blood would not be transported to the body's cells

6. Which of the following structures is essential in the controlling of the autonomic functions of the peripheral nervous system?

- a. pons
- b. thalamus
- c. hypothalamus
- d. medulla oblongata

7. Which of the following is a distinguishing characteristic between eukaryotes and prokaryotes?

- a. the presence of DNA
- b. the presence of a nucleus
- c. the presence of proteins
- d. the presence of ribosomes



8. Cellular respiration, the process responsible for the production of cellular energy would be performed using which of the following organelles?

- a. ribosome
- b. nucleolus
- c. chloroplast
- d. mitochondria

  
  
  

9. At the end of mitosis in the human body cell, how many cells are produced and what is the number of chromosomes in each cell?

- a. 2 cells with 23 chromosomes
- b. 2 cells with 46 chromosomes
- c. 4 cells with 23 chromosomes
- d. 4 cells with 46 chromosomes

  
  
  

10. Which of the following controls the flow of chime from the stomach into the small intestine?

- a. Pyloric sphincter
- b. Eosophageal sphincter
- c. Ileocecal valve
- d. Epiglottal flap