higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

THE HUMAN BODY AND MIND
NQF LEVEL 3

(9020083)

7 November 2018 (X-Paper)
09:00–12:00

This question paper consists of 12 pages.

NCV

TIME: 3 HOURS
MARKS: 180

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Read ALL the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Write neatly and legibly.

NCV

QUESTION 1

1.1 Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 The skull consists of … facial bones.

A ten
B twelve
C fourteen
D eight

1.1.2 The anterior fontanelle is situated between the … bones.

A occipital and parietal
B parietal and temporal
C temporal and frontal
D frontal and parietal

1.1.3 Pain in the … region can indicate bladder infection.

A umbilical
B left iliac
C right iliac
D hypogastric

1.1.4 A vasectomy is a procedure where the … is/are severed (cut).

A spermatic cord
B testes
C vas deferens
D urethra

1.1.5 The … is the outer covering of the eye.

A sclera
B cornea
C choroid
D iris

1.1.6 Bony appendages in the mouth:

A lips
B teeth
C tongue
D soft palate

Copyright reserved

1.1.7 The … is the most important layer of the epidermis as it is responsible for generation of new cells.

A stratum corneum
B stratum germinativum
C stratum lucidum
D stratum granulosum

1.1.8 The foramen magnum is an opening in the … bone(s).

A occipital
B temporal
C parietal
D frontal

1.1.9 Immunisation assists the body with developing …

A antigens.
B antimicrobials.
C antibodies.
D antibiotics.

1.1.10 … is/are the event(s) that happen(s) after an action.

A results
B avoidance
C reward
D punishment

(10 × 1) (10)

1.2 Give ONE term for each of the following descriptions. Write only the term next to the question number (1.2.1–1.2.5) in the ANSWER BOOK.

1.2.1 Skin condition caused by blockage of sebaceous ducts in oily skin resulting in pimples and blackheads

1.2.2 Tiny hair-like structures that move backward and forward to sweep up dust and other substances

1.2.3 Blood clot that forms in the deep veins of especially the lower leg and thigh

1.2.4 Condition resulting from paralysis of the facial nerve

1.2.5 Medication used to relief the symptoms of an allergy

(5 × 1) (5)

Copyright reserved

1.3 Precious stays in an informal settlement. She has a three-month-old baby. She does not have clean running water, electricity or access to sanitation services. She often does not wash her hands after changing the baby's nappy. She does not have gas and is forced to make a fire in the shack to use for cooking and boiling water. She bottle-feeds her baby and missed the immunisation date two weeks ago. She has half a tin of milk formula left and is only receiving child grant in a week. She has a plan to stretch the milk so that it can last until she receives the child grant.

1.3.1 Describe FOUR ways in which the baby's immune system is compromised. (4 × 2) (8)

1.3.2 How do you think Precious is planning to stretch the milk? (2)

1.3.3 Recommend FIVE ways in which Precious can boost her baby's immune system. (5)

[30]

NCM

QUESTION 2

2.1 Choose a description from COLUMN B that matches a term in COLUMN A. Write only the letter (A–M) next to the question number (2.1.1–2.1.10) in the ANSWER BOOK.

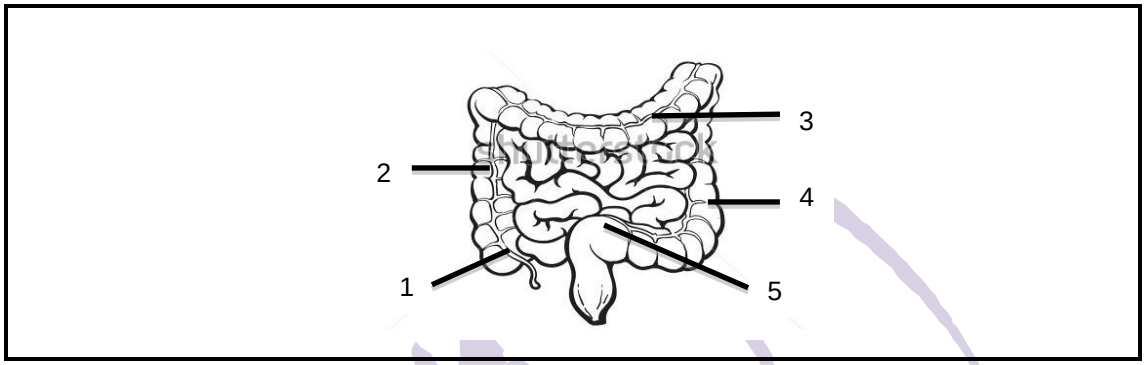
COLUMN A		COLUMN B	
2.1.1	Ovulation	A	centre tube in front of the oesophagus
2.1.2	Cervical lymph nodes	B	drain deoxygenated blood from the liver
2.1.3	Mumps	C	procedure to detect cervical cancer
2.1.4	Pap smear	D	swelling of the submandibular glands
2.1.5	Meningitis	E	inability to produce babies
2.1.6	Renal arteries	F	drain neck structures
2.1.7	External auditory meatus	G	inflammation of the layers of the brain
2.1.8	Trachea	H	release of a matured ovum from the ovary
2.1.9	Infertility	I	supply oxygenated blood to the kidneys
2.1.10	Hepatic portal veins	J	procedure to detect prostate cancer
		K	causes swelling of the parotid glands
		L	pain in iliac regions in females
		M	openings in the temporal bones

(10 × 1) (10)

Copyright reserved

2.2 Draw a mind map to illustrate the endocrine glands in the body and the hormones secreted by each gland. (15)

2.3 Identify the different parts of the large intestines below by writing only the answer next to the number (1–5) in the ANSWER BOOK.



[Source: *www.google.co.za*]

(5 × 1) (5)

[30]

QUESTION 3

3.1 Indicate whether the following statements are TRUE or FALSE. Choose the answer and write only 'True' or 'False' next to the question number (3.1.1–3.1.10) in the ANSWER BOOK.

3.1.1 The oesophagus passes through a central opening of the diaphragm into the upper end of the abdominal cavity.

3.1.2 The jugular veins are used to check heartbeat during cardiopulmonary resuscitation (CPR).

3.1.3 The mosquito is an example of a virus.

3.1.4 Gooseflesh is small pimples on the skin caused by coldness.

3.1.5 Injury to the lumbar nerves can result in quadriplegia.

3.1.6 In Piaget's preoperational stage a child can think abstractly and solve problems.

3.1.7 The sphenoid and ethmoid are the inferior bones of the cranium.

3.1.8 According to Freud the ego is the mediator between the id and the superego in personality development.

3.1.9 The longest nerve in the body is the sciatic nerve.

3.1.10 Growth refers to an increase in the size of an organism or part of an organism due to an increase in the number of cells.

(10 × 1) (10)

Copyright reserved

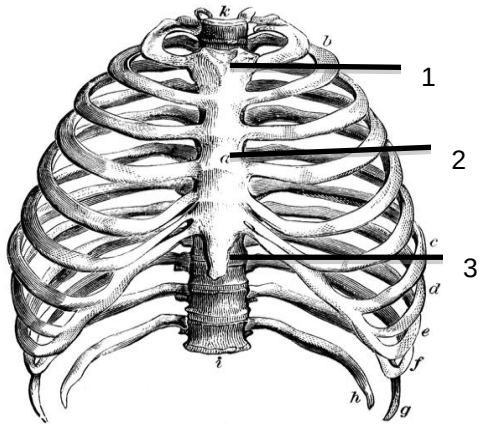
3.2 Zola is 22 years old. She just graduated from university. She has never had a boyfriend. She is very quiet and prefers to be alone. She only has one close friend. Sometimes Zola feels very alone, especially when her friend goes out with her boyfriend. She wishes she also had a boyfriend.

3.2.1 Identify the developmental stage of Erik Erikson in which Zola finds herself. (1)

3.2.2 Discuss whether Zola's feelings are normal. (3)

3.2.3 Indicate Zola's personality type. Motivate the answer. (1 + 3) (4)

3.3 Study the diagram below and answer the questions.



RIBCAGE

[Source: *www.google.co.za*]

3.3.1 Name the THREE parts of the breast bone by writing the answer next to the number (1–3) in the ANSWER BOOK. (3 × 1) (3)

3.3.2 Differentiate between the *true ribs, false ribs* and *floating ribs*. (2 + 2 + 2) (6)

3.3.3 Why do you think it is important for the thoracic organs to be well protected? (3)

[30]

QUESTION 4

4.1 Give the personality trait which is best described by each of the following statements. Write only the answer next to the question number (4.1.1–4.1.10) in the ANSWER BOOK.

4.1.1 I am totally serious and that is why I achieve top marks in my class.

4.1.2 Small things make me anxious.

4.1.3 I have an active imagination.

4.1.4 I gain energy from other people.

4.1.5 Social harmony is important to me.

4.1.6 I prefer my own company.

4.1.7 I often engage in conflict.

4.1.8 I am very disorganised.

4.1.9 I only engage in planned social activities.

4.1.10 I do not get anxious over small stressors.

(10 × 1) (10)

4.2 Explain how the first and second lines of defence of the body provide protection against microorganisms. (2 + 2) (4)

4.3 Indicate whether the following statements refer to first-line or second-line defences. Write only the answer next to the question number (4.3.1–4.3.5) in the ANSWER BOOK.

4.3.1 Sneezing when dust enters nostrils while cleaning a house

4.3.2 Swollen lymph nodes preventing bacteria from entering the bloodstream

4.3.3 Fever due to a bladder infection

4.3.4 Teary eyes when the wind blows foreign particles into the eyes

4.3.5 Redness, swelling and increased temperature after a cut in the skin

(5 × 1) (5)

Copyright reserved

4.4 It is vital that the reproductive system is well protected.

4.4.1 Name the TWO layers of the peritoneum which protect the reproductive organs. (2)

4.4.2 Name the fluid between the two layers mentioned in QUESTION 4.4.1. (1)

4.4.3 Give TWO possible results of trauma to the testes. (2)

4.4.4 Why is it important for the female reproductive system to be well protected? (3)

4.4.5 Name the THREE layers of the uterus. (3)
[30]

QUESTION 5

5.1 Complete the following sentences by using the words in the list below. Write only the missing word or words next to the question number (5.1.1–5.1.10) in the ANSWER BOOK.

positive; negative; seven; id; genital stage; unconditioned response; maturation; eight; prelogical; intuitive; rewarded; conditioned response; childhood; sensing; ego; phallic stage; egocentric

5.1.1 … reinforcement discourages certain behaviour so that it will never be repeated.

5.1.2 According to Piaget children in the preoperational stage use … ways of thinking.

5.1.3 People that rely heavily on their senses to take in information have a … personality type.

5.1.4 The formation of identity begins in …

5.1.5 The process living things go through as they grow and ultimately reach a stage when they are fully developed is called …

5.1.6 A response that has not been learnt is called …

5.1.7 The organised realistic part of the personality is called the …

5.1.8 The psychosexual stage of Freud when sexual impulse is transferred to the genitals is called the …

5.1.9 Good behaviour that is … ensures that the behaviour is repeated.

5.1.10 People who rather think than do have a … personality type.

(10 × 1) (10)

5.2 Explain the position of each of the following organs (choose any three organs):

5.2.1 Spleen

5.2.2 Ovaries

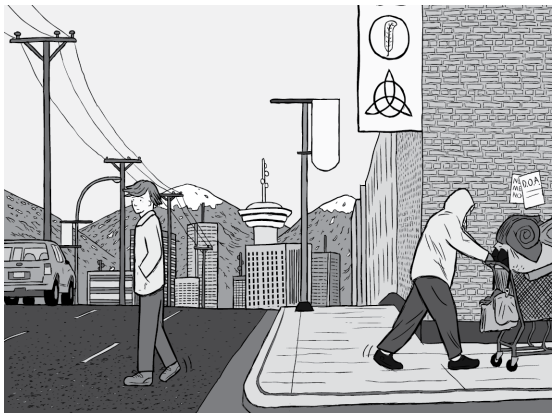
5.2.3 Pancreas

5.2.4 Liver

(4 × 3) (12)

5.3 What can cause pain in the area of the floating ribs? Motivate the answer. (3)

5.4 Study the following image and answer the questions.



[Source*: www.google.co.za*]

5.4.1 Identify the TWO senses that would protect the person in the road. Motivate the answer. (2 × 2) (4)

5.4.2 Name ONE other sense NOT mentioned in QUESTION 5.4.1. (1)

[30]

QUESTION 6

6.1 Define each of the following terms:

6.1.1 Human personality (3)

6.1.2 Varicose veins (2)

6.1.3 Volvulus (3)

6.2 Which advice would you give a woman with regard to good health habits during pregnancy? (3)

6.3 The skin plays an important role in our health. It has many protective functions and requires us to take proper care of it to perform its functions.

6.3.1 Name FIVE structures in the dermis. (5)

6.3.2 Explain FOUR ways that the skin protects the body. (4)

6.3.3 Give FIVE ways to take care of skin. (5)

6.4 San-Marie is 21 years old. She feels weak, often gets infections and is very pale. The doctor examined her and diagnosed anaemia. The doctor suspects that an unhealthy skeleton might be the cause of her problems.

Do you agree with the doctor? Motivate the answer. (5)
[30]

TOTAL: 180

Copyright reserved