higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

THE HUMAN BODY AND MIND
NQF LEVEL 3

(9020083)

4 November 2022 (X-paper)
09:00–11:30

This question paper consists of 13 pages.

069Q1N2204

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TIME: 2.5 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. Start each section on a new page.
5. Use only a black or blue pen.
6. Write neatly and legibly.

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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 epidermis of the skin consists of … layers.

A one
B two
C three
D four

1.1.2 An organ situated in the hypogastric region.

A Heart
B Bladder
C Liver
D Kidney

1.1.3 The adrenal glands are situated … to the kidneys.

A superior
B anterior
C lateral
D inferior

1.1.4 The central nervous system consists of the brain and the …

A cranial nerves
B vertebral column
C spinal cord
D thyroid

1.1.5 The heart consists of … layers.

A one
B three
C two
D four

1.1.6 The mammary glands are part of the … system.

A lymphatic
B respiratory
C digestive
D endocrine

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1.1.7 The … prevents dryness of the eye.

A conjunctiva
B sclera
C cornea
D iris

1.1.8 … is an example of a fungal infection

A HIV
B Athlete's foot
C Worms
D Mosquitos

1.1.9 Sweating on a hot day, is an example of a/an …

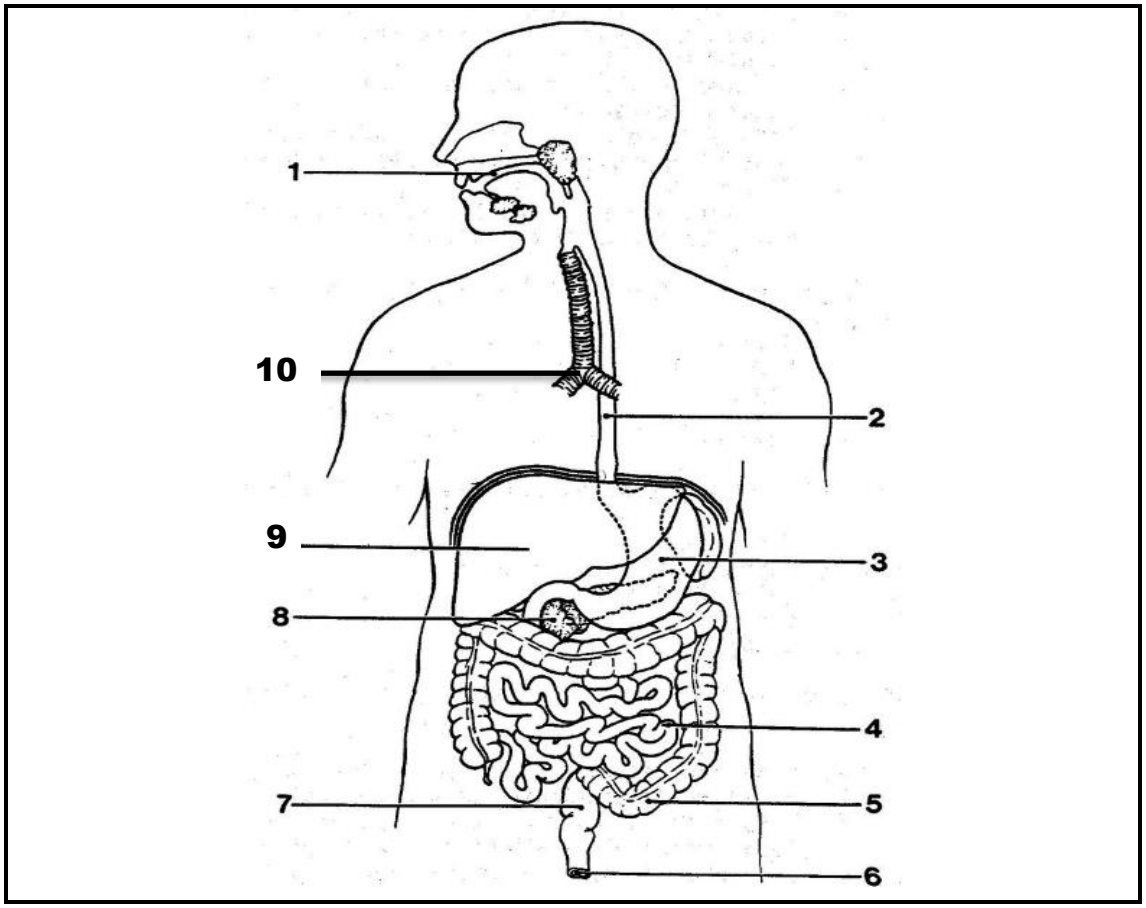
A positive reinforcement
B conditioned response
C unconditioned response
D negative reinforcement

1.1.10 … is a key concept of the psychodynamic approach

A Maturation
B Response
C Needs cycle
D Consciousness

(10 × 1) (10)

1.2 Study the image below and answer the questions that follow.



[Source: https://www.google.com/search?q=image+digestive]

1.2.1 Identify the parts labelled 1–7. (7)

1.2.2 Name the part labelled number 10. (1)

1.2.3 Give the function of the part labelled number 10. (2 × 1) (2)

1.2.4 Explain the position of the organ labelled number 9. (3)

1.2.5 Name the organ labelled number 8. (1)

1.2.6 Discuss why our health is at risk if the organ labelled number 8 fails to perform its function. Substantiate your answer. (4 × 1) (4)

1.3 Discuss why a person who has HIV is likely to get opportunistic infections. (2 × 1) (2)

[30]

QUESTION 2

2.1 Choose a/an item/word from COLUMN B that matches a description 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	An opportunistic infection	A	adipose
2.1.2	A muscle of the forearm	B	inguinal lymph nodes
2.1.3	The heart valve situated between the right atrium and right ventricle	C	Jean Piaget
2.1.4	A structure that separates the heart into left and right sides	D	viruses
2.1.5	An organ that is ± 5 m long	E	septum
2.1.6	Tissues found in the hypodermis of the skin	F	fungi
2.1.7	A lymphatic organ	G	phallic stage
2.1.8	Dangerous microorganisms which have a window period	H	herpes simplex
2.1.9	A psychodynamic theorist	I	Sigmund Freud
2.1.10	A theorist who believed that children learn in their environment	J	tricuspid
		K	brachioradialis
		L	small intestine
		M	colon

(10 × 1) (10)

2.2 Identify the psychosexual stage of Sigmund Freud in each picture and discuss how each picture relates to the stage that you choose. Write the answer next to the question number (2.2.1–2.2.5) in the ANSWER BOOK.

2.2.1



[Source: *https://www.google.com/search?q=image+baby+siting+on+a+potty*]

2.2.2



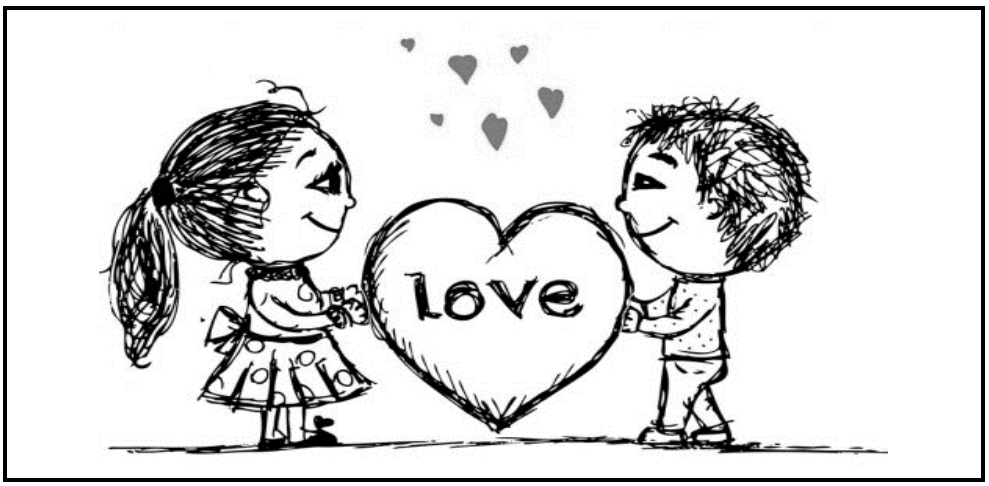
[Source: *https://www.google.com/search?q=image+young+girls+playing+skipping*]

2.2.3



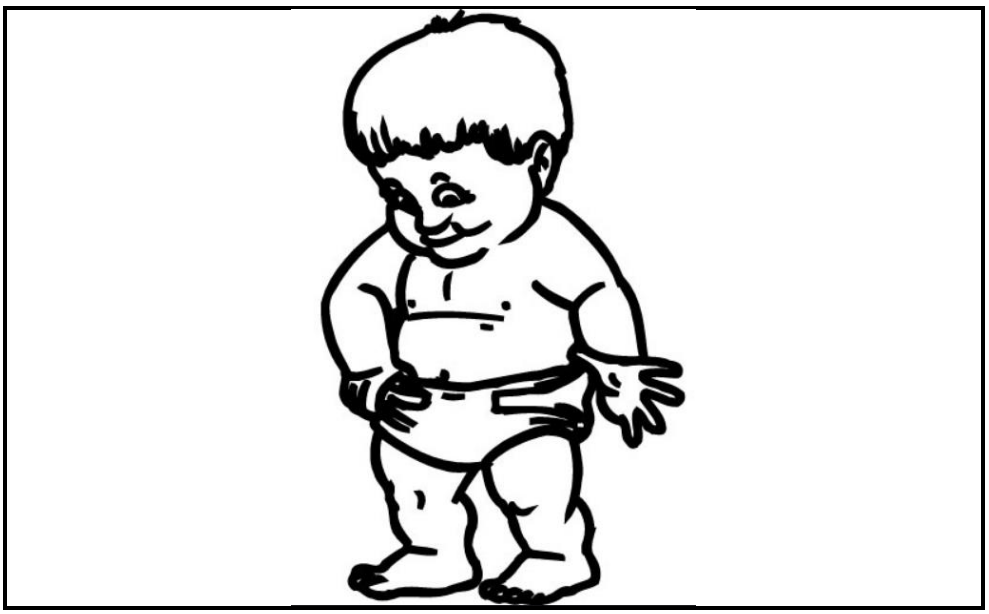
[Source: *https://www.google.com/search?q=image+baby+sucking+thumb+cllip+art*]

2.2.4



[*Source: https://www.google.com/search?q=image+teenage+boy+and+girl*]

2.2.5



[Source: *https://www.google.com/search?q=image+baby+pulling+on+diaper*]

(5 × 2) (10)

2.3 Discuss FIVE ways in which you can look after your skin. (5 × 2) (10)

[30]

QUESTION 3

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

3.1.1 Gas exchange takes place in the bronchi.

3.1.2 Erik Erikson is well known for his dream studies.

3.1.3 At Jean Piaget's concrete operational stage, children become less egocentric.

3.1.4 The temporal bones are posterior skull bones.

3.1.5 The trapezius muscle is an anterior neck muscle.

3.1.6 A clean environment is important for a strong immune system.

3.1.7 A blind person's sense of sight will provide protection when a building is on fire.

3.1.8 Negative reinforcement is aimed at eliminating undesirable behaviour.

3.1.9 B.F. Skinner is well known for his experiments with dogs.

3.1.10 Thinking you are the smartest person on earth, is an example of the ego. (10 × 1) (10)

3.2 Indicate whether the following are examples of a CONDITIONED or UNCONDITIONED response by writing only 'Conditioned' or 'Unconditioned' next to the question number (3.2.1–3.2.5) in the ANSWER BOOK.

3.2.1 Hunger in response to the smell of food.

3.2.2 Being scared of dogs after being bitten by a dog.

3.2.3 Jumping at the sound of a loud noise.

3.2.4 Salivating in response to a sour taste.

3.2.5 A fear of driving after being in a terrible road accident. (5 × 1) (5)

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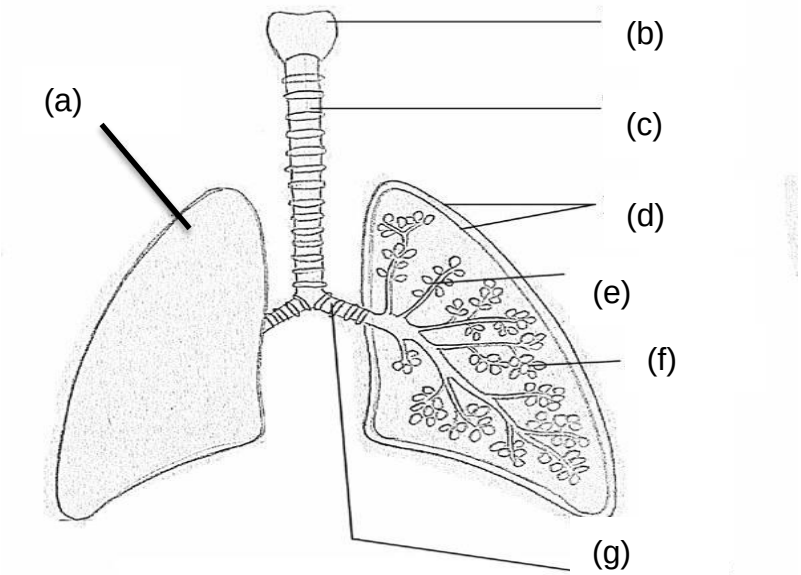
3.3 Study the image below and label the parts. Write only the answer next to the letter (a)–(g) in the ANSWER BOOK.



[Source: *https://za.pinterest.com/pin/53269208072935855/*] (7)

3.4 Discuss FOUR ways in which the immune system and blood will respond to a lung infection. (4 × 2) (8)

[30]

QUESTION 4

4.1 Choose ONE word or term from the list below for each of the following descriptions and write it next to the question number (4.1.1–4.1.10) in the ANSWER BOOK.

hyperthermia; pharynx; levator palpebrae superioris; thymus; radial artery; trigeminal nerve; brachial artery; hypothermia; results; manubrium; ; maturation; pia mater; gooseflesh; carotid arteries; femoral nerve

4.1.1 Muscles that open the eyes.

4.1.2 The top part of the sternum is called the …

4.1.3 The … is the inner membrane that protects the brain.

4.1.4 A nerve that supplies impulses to the face.

4.1.5 Abnormally high temperatures.

4.1.6 The events that happen after an action.

4.1.7 A respiratory structure situated in the neck.

4.1.8 An immune organ which protects the body against invasions by producing white blood cells.

4.1.9 Growth and development and the ability to react in an emotionally appropriate way.

4.1.10 A main artery that supplies oxygen-rich blood to the arm. (10 × 1) (10)

4.2 Draw a mind map to show the structures that protect the thoracic organs. (10 × 1) (10)

4.3 Discuss FIVE ways in which people in your community weaken their immune system. (5 × 2) (10)
[30]

QUESTION 5

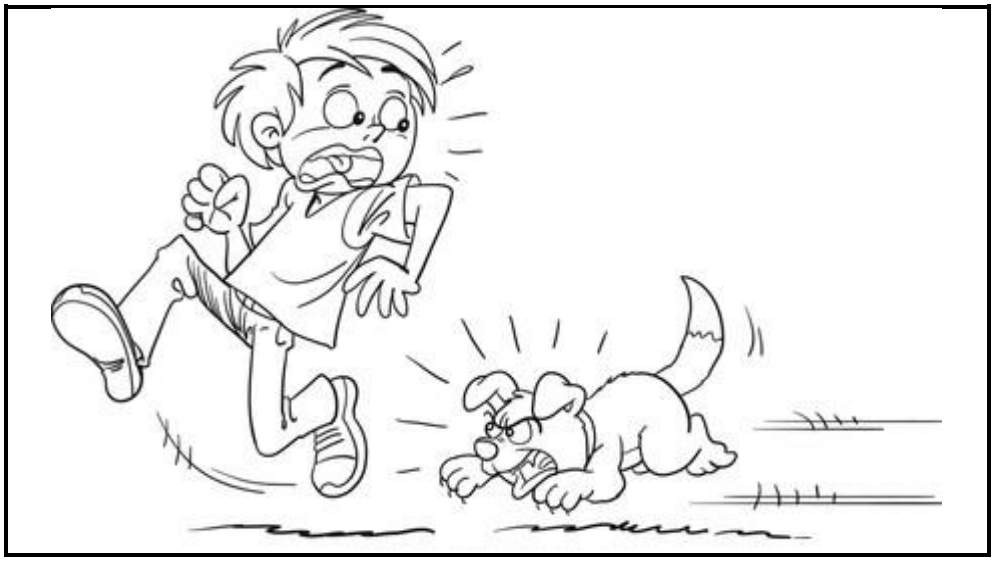
5.1 Complete the table below. Write only the answer next to the question number (5.1.1–5.1.10) in the ANSWER BOOK.

ENDOCRINE SYSTEM		
GLAND	**HORMONE**	**FUNCTION**
5.1.1	Thyroxin	5.1.2
Adrenal gland	5.1.3	5.1.4
5.1.5	5.1.6	Milk production
5.1.7	Oestrogen, progesterone	5.1.8
Testes	5.1.9	5.1.10

(10 × 1) (10)

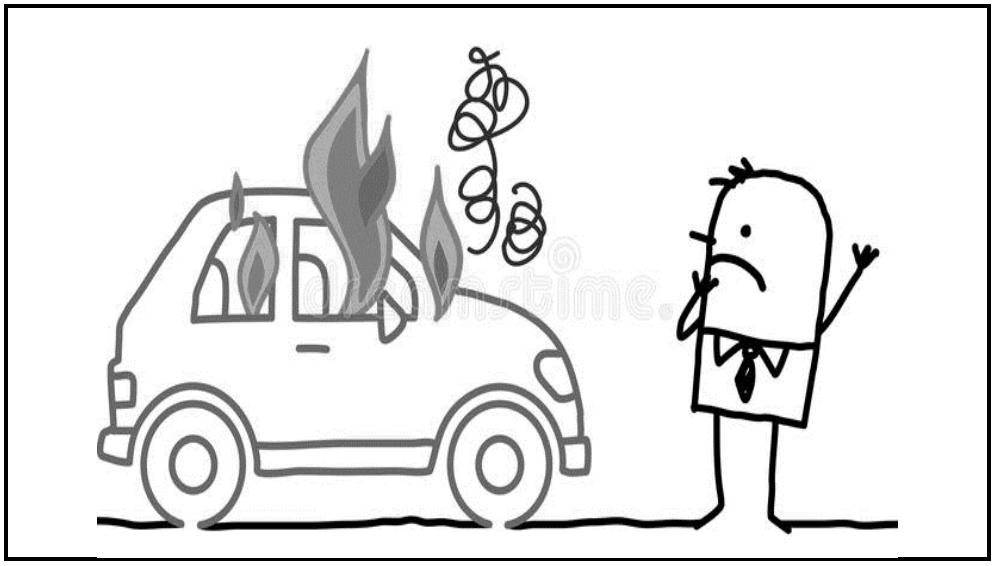
5.2 Identify and discuss the protection of TWO senses in each picture. Write only the answer next to the question number (5.2.1–5.2.3) in the ANSWER BOOK.

5.2.1



[Source: *https://www.shutterstock.com/image-vector/boy-being-chased-by-dog-1543283207*]

5.2.2



[Source: *https://www.dreamstime.com/illustration/burning-car.html]*

5.2.3



[Source: *https://www.indiaparenting.com/coloring-pages/wallpapers/5fe1a2cb16a88/E/Rainy-Day-Happy-Guy*]

(3 × 4) (12)

5.3 Personality is the combination of characteristics or qualities that form an individual's distinctive character.

5.3.1 List THREE different personality types. (3)

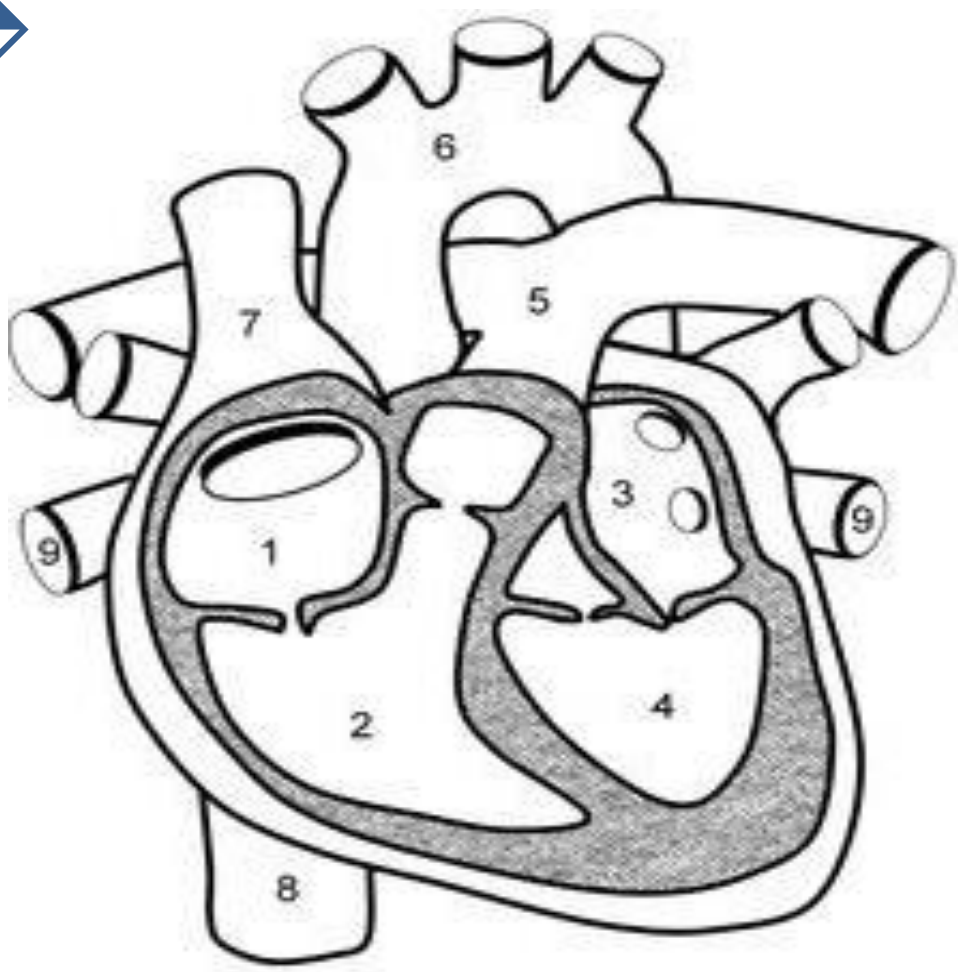
5.3.2 State FIVE strengths a person with an extroverted personality trait would have in the workplace. (5 × 1) (5)

[30]

QUESTION 6

6.1 Study the image below and answer the questions that follow.

THE HEART



[Source: *https://za.pinterest.com/pin/319263061069299517/]*

6.1.1 Write the names of the different parts of the heart labelled 1–9. (9)

6.1.2 List FOUR valves that are found in the heart. (4)

6.1.3 What will happen if the heart stops beating? (6 × 1) (6)

6.2 List the THREE layers that provide protection to the testes. (3)

6.3 Give SIX functions of the skeleton. (6)

6.4 What is the name of first stage of Erik Erikson's developmental theory? (2)

[30]

TOTAL: 180

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