

Victorian Certificate of Education
Year

SUPERVISOR TO ATTACH PROCESSING LABEL HERE

STUDENT NUMBER Letter

VCE VET HEALTH
Written examination

Day Date

Reading time: *. to *.** (15 minutes)**

Writing time: *. to *.** (1 hour 30 minutes)**

QUESTION AND ANSWER BOOK

Structure of book

<i>Section</i>	<i>Number of questions</i>	<i>Number of questions to be answered</i>	<i>Number of marks</i>
A	20	20	20
B	11	11	50
C	6	6	30
			Total 100

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners and rulers.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or correction fluid/tape.

Materials supplied

- Question and answer book of 16 pages
- Answer sheet for multiple-choice questions

Instructions

- Write your **student number** in the space provided above on this page.
- Check that your **name** and **student number** as printed on your answer sheet for multiple-choice questions are correct, **and** sign your name in the space provided to verify this.
- Unless otherwise indicated, the diagrams in this book are **not** drawn to scale.
- All written responses must be in English.

At the end of the examination

- Place the answer sheet for multiple-choice questions inside the front cover of this book.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

SECTION A – Multiple-choice questions**Instructions for Section A**

Answer **all** questions in pencil on the answer sheet provided for multiple-choice questions.

Choose the response that is **correct** or that **best answers** the question.

A correct answer scores 1; an incorrect answer scores 0.

Marks will **not** be deducted for incorrect answers.

No marks will be given if more than one answer is completed for any question.

Unless otherwise indicated, the diagrams in this book are **not** drawn to scale.

Question 1

There are four levels of organisation in the human body.

Which level of organisation is the simplest?

- A. cells
- B. organs
- C. tissues
- D. systems

Question 2

The opening of the terminal end of the digestive system is the

- A. anus.
- B. mouth.
- C. rectum.
- D. sigmoid colon.

Question 3

The foundation of a medical term is the

- A. suffix.
- B. prefix.
- C. root word.
- D. combining vowel.

Question 4

The gonads are made up of the

- A. ovaries and testes.
- B. liver and gall bladder.
- C. pancreas and small intestine.
- D. thyroid and parathyroid glands.

Question 5

Which one of the following is the suffix in the term 'hyperthyroidism'?

- A. -ism
- B. hyper-
- C. -thyroidism
- D. hyperthyroid-

Question 6

What is the effect of shivering?

- A. increased heat loss
- B. decreased sweating
- C. increased heat production
- D. dilation of blood vessels in the skin

Question 7

Which one of the following is the correct medical term for the accumulation of lymph that causes subcutaneous tissue swelling?

- A. lymphoma
- B. lymphoedema
- C. lymphocytosis
- D. lymphadenopathy

Question 8

Which one of the following is an organ of the immune system?

- A. thyroid
- B. thymus
- C. hypothalamus
- D. pituitary gland

Question 9

What is the plural of 'phalanx'?

- A. phalanxs
- B. phalangis
- C. phalanges
- D. phalances

Question 10

Which of the following shows the pathway of oxygen from the external environment to the lungs?

- A. alveoli → bronchioles → bronchi → trachea → pharynx → larynx
- B. trachea → pharynx → bronchi → larynx → bronchioles → alveoli
- C. pharynx → larynx → trachea → bronchi → bronchioles → alveoli
- D. larynx → pharynx → trachea → bronchi → bronchioles → alveoli

Question 11

The malleus, incus and stapes are known as the

- A. hearing receptors.
- B. organ of corti.
- C. cartilage.
- D. ossicles.

Question 12

Gastroenteritis is the inflammation of the

- A. stomach and rectum.
- B. stomach and intestines.
- C. small and large intestines.
- D. stomach and urinary tract.

Question 13

Which body systems play a major role in maintaining homeostasis?

- A. urinary system and digestive system
- B. nervous system and endocrine system
- C. nervous system and respiratory system
- D. endocrine system and cardiovascular system

Question 14

Erythr/o is a

- A. suffix.
- B. prefix.
- C. root word.
- D. combining form.

Question 15

Which one of the following substances makes human skin water-resistant?

- A. keratin
- B. mucous
- C. melanin
- D. carotene

Question 16

What is the period before an operation starts known as?

- A. preoperative
- B. perioperative
- C. postoperative
- D. intraoperative

Question 17

The five primary taste sensations are

- A. sweet, sour, bitter, salty and umami.
- B. sweet, sour, pungent, salty and bitter.
- C. sweet, salty, astringent, spicy and bitter.
- D. sweet, sour, bitter, umami and pungent.

Question 18

Which gland is called the master gland of the endocrine system?

- A. thymus
- B. adrenal
- C. pituitary
- D. pancreas

Question 19

'Difficulty in swallowing' is referred to as

- A. aphasia.
- B. aphagia.
- C. dysphasia.
- D. dysphagia.

Question 20

How many pairs of cranial nerves does the average adult possess?

- A. 10
- B. 12
- C. 14
- D. 17

SECTION B**Instructions for Section B**

Answer **all** questions in the spaces provided.

Unless otherwise indicated, the diagrams in this book are **not** drawn to scale.

Question 1 (6 marks)

There are three types of muscle tissue in the human body.

Complete the table below by identifying a type of muscle tissue, its location in the body and one of its characteristics. An example has been provided.

Type of muscle tissue	Location of the muscle tissue in the body	Characteristic of the muscle tissue
<i>cardiac tissue</i>	<i>heart</i>	<i>specialised to allow electrical signals to pass easily</i>

Question 2 (2 marks)

Explain the difference between the functions of the ureters and the urethra in the urinary system.

Question 3 (5 marks)

Complete the table below by identifying the word part(s) of each medical term listed. Not all medical terms will have all word parts. An example has been provided.

Medical term	Word part			
	Prefix	Root	Combining vowel	Suffix
polymyalgia	<i>poly</i>	<i>my</i>	<i>a</i>	<i>lgia</i>
urology				
pericarditis				
dermatologist				
hepatomegaly				
hypochondria				

Question 4 (6 marks)

In each of the following statements, circle the medical terms that have been spelt incorrectly. Then write each term with the correct spelling in the space provided.

- There had clearly been atrophy of the upper extremity muscles since the patient's last attendance at the orthopedic clinic.

- On examination, he was found to be hypertensive and tachycardic, with weakened peripheral pulses. Oscillation of his heart sounds was normal and his chest was clear.

- She had a 12-month history of epigastric pain associated with heartburn and belching. She was admitted for an esophogscopy.

Question 5 (4 marks)

Seven-year-old Dinesh was riding his bicycle when he hit a rock, fell off his bicycle and grazed his right knee.

- a.** Describe the body's two lines of defence in the prevention of infection. 2 marks

- b.** What is the difference between active immunity and passive immunity? 2 marks

Question 6 (4 marks)

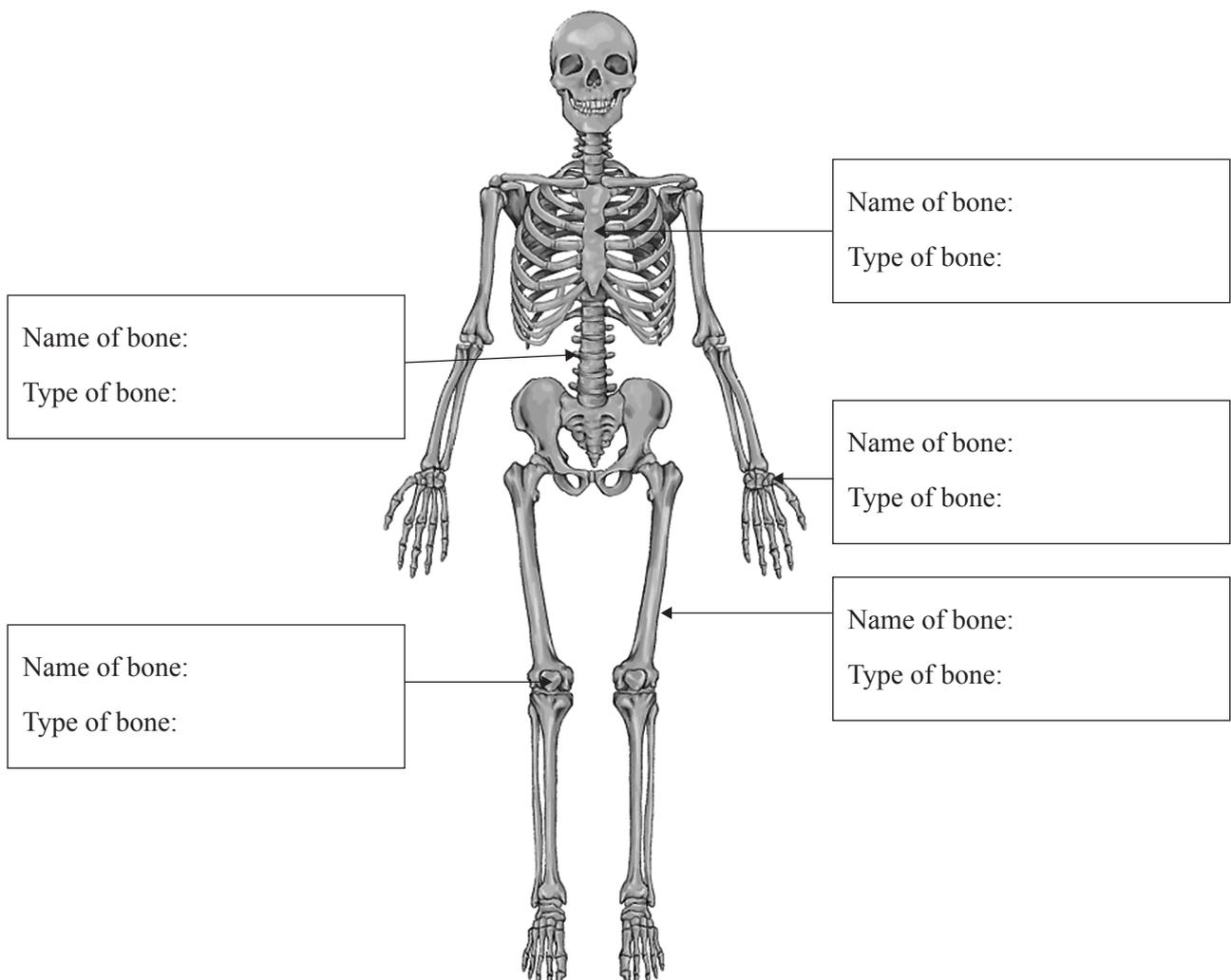
In the table below, state the medical term that matches each definition given.

Medical term	Definition
	inflammation of the kidney
	high blood sugar
	study of the structure, functions and disorders of the nervous system
	abnormally slow heartbeat

Question 7 (5 marks)

The diagram below is of a human skeleton.

In each box provided, state the name of the bone indicated and the type of bone.



Source: stihii/Shutterstock.com

Question 8 (6 marks)

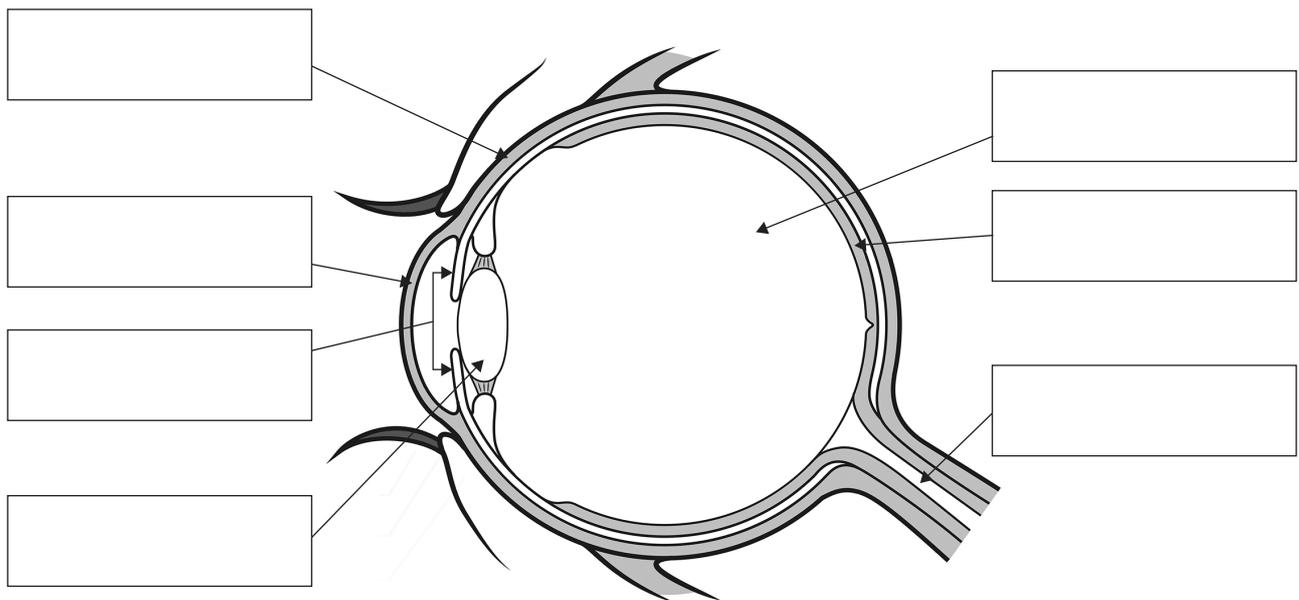
In the table below, identify which of the following prefixes/suffixes applies to each definition given.

-logy -ectomy endo- dys- ante- -osis

Prefix/Suffix	Definition
	bad, difficult
	before, forward
	abnormal condition
	study of
	surgical removal of
	within, inside, inner

Question 9 (7 marks)

The diagram below shows the structure of the human eye.



Source: Alexander_P/Shutterstock.com

Label the following seven parts of the human eye in the spaces provided on the diagram above:

- vitreous humour
- lens
- iris
- cornea
- sclera
- retina
- optic nerve

Question 10 (3 marks)

Identify **three** sources that provide further information about medical terms and abbreviations.

Question 11 (2 marks)

The epiglottis is a piece of cartilage located in front of the larynx.

What is the function of the epiglottis?

SECTION C – Case study**Instructions for Section C**

Answer **all** questions in the spaces provided.

Unless otherwise indicated, the diagrams in this book are **not** drawn to scale.

Use the following information to answer Questions 1–4.

Case study 1

Luba Kennedy is a 21-year-old female with a past medical history of anxiety. She enjoys regularly going out with her friends and binge-drinks on most weekends.

Luba presents to her general practitioner c/o heartburn, N&V, lethargy, loss of appetite, loss of weight and reports having no energy over the past month.

On examination, the general practitioner notes the following:

- weight – 51 kg
- BMI – underweight range
- TPR – 36.7, 107, 16
- BP – 95/50 mmHg
- appearance – pale, skin is dry, underweight, lack of concentration

The general practitioner orders a series of tests for Luba and receives the following results:

- UA – pH 5.5
- blood tests report states:
 - RBCs are smaller and paler than normal, vary in size and shape – consistent with anaemia
 - higher levels of sodium, potassium, urea, creatinine and nitrogen – consistent with dehydration
- gastroscopy clinical report states:
 - evidence of inflammation and damage to the stomach lining

Luba is diagnosed with gastritis, anaemia and dehydration.

The general practitioner prescribes the following Rx plan for Luba:

- medication for gastritis
- an iron supplement for anaemia
- referral to a dietitian

Question 1 (5 marks)

Select five abbreviations from Case study 1 and provide the full medical term in the context of the case study.

Abbreviation	Full medical term

Question 2 (5 marks)

Select five full medical terms from Case study 1 and provide the appropriate abbreviation in the context of the case study.

Medical term	Abbreviation

Question 3 (6 marks)

In Luba’s case, the gastrointestinal, cardiovascular and urinary systems are affected.

- a. Identify one function of each system. 3 marks

System	Function
gastrointestinal	
cardiovascular	
urinary	

- b. Explain the relationship between the three systems. 3 marks

Question 4 (4 marks)

What education could be provided to Luba to help her maintain a healthy fluid and electrolyte balance and blood pressure?

Use the following information to answer Questions 5 and 6.

Case study 2

Edith McIntosh is an obese, 58-year-old female who has been a smoker since the age of 21. She has a past medical history of type 2 diabetes and osteoporosis, and she is post-menopausal.

She recently had a fall and fractured her R) neck of femur. She underwent surgery and had a R) total hip replacement.

The day after her surgery, the physiotherapist visited Edith and began an active and passive rehabilitation program.

Question 5 (4 marks)

As part of a rehabilitation program, both active and passive exercise can be implemented.

Explain the difference between active and passive exercise, and provide an example for each type of exercise.

Question 6 (6 marks)

Identify two benefits for Edith of undertaking the rehabilitation program and explain how each benefit supports Edith’s healthy body function.

Benefit 1 _____

Benefit 2 _____

Answers to multiple-choice questions

Question	Answer
1	A
2	A
3	C
4	A
5	A
6	C
7	B
8	B
9	C
10	C
11	D
12	B
13	B
14	D
15	A
16	A
17	A
18	C
19	D
20	B