ROLL NUMBER				

SET	A

INDIAN SCHOOL MUSCAT
HALF YEARLY EXAMINATION 2023
BIOLOGY (044)

CLASS: XI
DATE: 20.09.2023

TIME ALLOTED : 3 HRS.
MAXIMUM MARKS: 70

GENERAL INSTRUCTIONS:

(i) *All questions are compulsory.*

(ii) *The question paper has five sections and 33 questions. All questions are compulsory.*

(iii) *Section–A has 16 questions of 1 mark each; Section–B has 5 questions of 2 marks each; Section– C has 7 questions of 3 marks each; Section– D has 2 case-based questions of 4 marks each; and Section-E has 3 questions of 5 marks each.*

(iv) *There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.*

(v) *Wherever necessary, neat and properly labeled diagrams should be drawn.*

SECTION A

1. Along with which hormone parathyroid hormone plays a significant role in Ca-balance in the body? 1
(a)T3
(b)T4
(c)TCT
(d)IAA

2. I. Age-related disorder characterized by decreased bone mass and increased chances of fracture 1
II. Causative factor deficiency of estrogen is common.
The above characters are associated with -
(a) Gout
(b) Osteoporosis
(c) Arthritis
(d) Polio

3. Which excitatory neurotransmitter is involved in the transmission of impulse at the neuro-muscular junction? 1
(a) Epinephrine
(b) Serotonin
(c) Acetyl choline
(d) Glycine

4. Pick up the correct match - 1

A False ribs	I. 1st to 7th pair
B. True ribs	II. 11th and 12th pair
C. Floating ribs	Ill. 8th to 10th pair
D. Sternum	IV. One

(a)A-1, B-Il, C-111, D-IV
(b) A- IV, B - Ill, C - II, D - I
(c) A - I, B - 111, C - II, D - IV
(d) A - 111, B - I, C - II, D – IV

5. Match each item in COLUMN I with one in COLUMN II and choose the correct answer from the codes given below: 1

COLUMN I [WBC]	COLUMN II [Function]
A. Monocyte	I. Inflammatory responses
B. Basophils	II. Allergic reactions
C. Eosinophils	Ill. Phagocytosis
D. Lymphocytes	IV. Antibodies

	A	B	C	D
(a)	Ill	I	IV	II
(b)	I	Ill	IV	II
(c)	Ill	I	II	IV
(d)	I	IV	II	Ill

6. Alertness, pupillary dilation and piloerection are due to the effect of 1
(a) Melatonin
(b) Corticoids
(c) Catecholamines
(d) Thyroxine

7. Select the correct statement. 1
(a) Expiration is initiated due to contraction of diaphragm.
(b) Expiration occurs due to external intercostal muscles.
(c) Intrapulmonary pressure is lower than the atmospheric pressure during inspiration.
(d) Inspiration occurs when atmospheric pressure is less than intrapulmonary pressure.

8. The glomerular capillary blood pressure causes filtration of blood through three layers in a sequence of. 1
(a) Endothelium --.. Basement membrane--.. Epithelium of Bowman's capsule.
(b) Epithelium of Bowman's capsule--.. Endothelium --.. Basement membrane
(c) Basement membrane--.. Endothelium --.. Epithelium of Bowman's capsule.
(d) Epithelium of Bowman's capsule--.. Basement membrane--.. Endothelium

9. Which structure passes urine to the renal pelvis? 1
(a) loop of Henle
(b) collecting duct
(c) Bowman's capsule
(d) proximal tubule

10. Nodes of Ranvier are - 1
(a) Areas of swellings of axon
(b) Found in the wall of stomach
(c) The gaps between two adjacent myelin sheath
(d) Bands in striated muscles

11. Name the pulmonary disease in which alveolar surface area involved in gas exchange is drastically reduced due to damage in the alveolar walls. 1
(a) Pneumonia
(b) Asthma
(c) Pleurisy
(d) Emphysema

12. Which of the following system relays impulse from CNS to skeletal muscles? 1
(a) Somatic neural system
(b) Sympathetic neural system
(c) Parasympathetic neural system
(d) Autonomic neural system

Directions: In the following questions, a statement of assertion is followed by a statement of reason. 1
Mark the correct choice as:
(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.
(c) If Assertion is true but Reason is false.
(d) If both Assertion and Reason are false.

13. Assertion: Nephrons are of two types, cortical and juxtamedullary according to their position in the cortex.
Reason: Juxtamedullary nephrons have short loop of Henle while cortical nephrons have long loop of Henle.

14. Assertion: Vital capacity is higher in athletes than non-athletes. 1
Reason: Vital capacity is about 3.5-4.5 liters in a normal adult person.

15. Assertion: Medulla contains centers which control respiration, cardiovascular reflexes and gastric secretions. 1
Reason: Medulla contains several neurosecretory cells which secrete hormones.

16. Assertion: Adrenaline and noradrenaline are rapidly secreted in response to stress of any kind and during emergency situations 1
Reason: Due to this reason it is called emergency hormones or hormones of Fight or Flight.

SECTION B

17. Given below is an incomplete table about certain hormones, their source glands and one major effect of each on the body in humans. Identify the correct option for the three blanks A, B, C and D. 2

Name of Gland	Hormone Secreted	Function of the Hormone
Pituitary	A	Reabsorption of water and electrolytes in kidney.
B	Thymosin	Immunity
Ovary	C	Development of follicles and female sexual characters
D	Melatonin	Sleep wake cycle

18. How both atria and ventricles of the heart are separated? 2

19. Differentiate between ureotelism and Uricotelism with examples. 2

20. What makes the synovial joints freely movable? List any three types of synovial joints. 2

21. Define erythropoiesis. Name the hormone that triggers it. 2

OR

Name two categories of hypothalamic hormones and their functions. Give one example of each.

SECTION C

22. State the different modes of CO_2 transport in blood. 3

OR

For completion of respiration process, write the given steps in sequential manner.
(a) Diffusion of gases (O_2 and CO_2) across alveolar membrane.
(b) Transport of gases by blood.
(c) Utilization of O_2 by the cells for catabolic reactions and resultant release of CO_2.
(d) Pulmonary ventilation by which atmospheric air is drawn in and CO_2 rich alveolar air is released out.
(e) Diffusion of O_2 and CO_2 between blood and tissues.

23. Complete the missing word in the statement given below 3
(a) Plasma without ..... factors is called serum.
(b) ..... and monocytes are agranulocytes.
(c) Albumins are associated with .....
(d) ..... ions play a significant role in clotting.
(e) One can determine the heart beat rate by counting the number of ..... in an ECG.

24. State the functions of the following in blood 3
(a) fibrinogen
(b) globulin
(c) neutrophils

25. The following abbreviations are used in the context of excretory functions. What do they stand for? 3
(a) ANF
(b) ADH
(c) GFR

26. Draw a neat labeled diagram of the section of an alveolus with a pulmonary capillary. 3

27. What is the cause of cretinism? Mention its characteristic symptoms. 3

28. Describe the three types of neurons based on the number of axons and dendrons and their location in human body. 3

SECTION D

29. Skeletal system consists of a framework of bones and a few cartilages. This system has a significant role in movement shown by the body. Bone and cartilage are specialized connective tissues. The former has a very hard matrix due to calcium salts in it and the latter has slightly flexible matrix due to chondroitin salts. In human beings, this system is made up of 206 bones and a few cartilages. It is grouped into two principal divisions – the axial and the appendicular skeleton. 4

1.) Which of the following connective tissue has pliable matrix?
a) Bone b) Blood c) Cartilages d) All of the above

2.) Human skull is composed of _____
a) Cranial bones b) Facial bones c) Pliable matrix d) both a and b

3. The vertebral formula of human beings is
a) C7, T12, L5, S1, C1 b) C8, T12, L5, S1, C1
c) C7, T11, L5, S1, C1 d) C7, T12, L4, S1, C1

4. The total number of bones in axial skeleton is
a) 90 b)80 c)85 d)88

OR

5.Ribs are attached ventrally to the
a) scapula b) sternum c) clavicle d) ileum

30. The brain is a complex organ that controls thought, memory, emotion, touch, motor skills, vision, breathing, temperature, hunger and every process that regulates our body. Together, the brain and spinal cord that extends from it make up the central nervous system, or CNS. Weighing about 3 pounds in the average adult, the brain is about 60% fat. The remaining 40% is a combination of water, protein, carbohydrates and salts. The brain itself is a not a muscle. It contains blood vessels and nerves, including neurons and glial cells. The brain sends and receives chemical and electrical signals throughout the body. Different signals control different processes, and your brain interprets each. Some make you feel tired, for example, while others make you feel pain. Some messages are kept within the brain, while others are 4

relayed through the spine and across the body's vast network of nerves to distant extremities. To do this, the central nervous system relies on billions of neurons (nerve cells).

(i) An injury sustained by the Hypothalamus is most likely to interrupt
(a) Coordination during locomotion
(b) Short term memory
(c) Regulation of body temperature
(d) Executive function like decision making

(ii)This statement is not associated with Midbrain
(a) The central portion of the midbrain is composed of mainly four, round swellings known as corpora quadrigemina.
(b) Located between the thalamus of the forebrain and pons of the hindbrain.
(c) The canal called the cerebral aqueduct passes through the midbrain.
(d) Hindbrain and midbrain constitute the brain stem

(iii) What connects two hemispheres of the brain?
(a) Pons
(b) Pia matter
(c) Corpus callosum
(d) Diencephalon

(iv) Which part of the brain controls balancing?
(a) Temporal lobe
(b) Frontal lobe
(c) Medulla oblongata
(d) Cerebellum

OR

(v) The amygdala is a part of
(a) cerebrum
(b) limbic system
(c) cerebellum
(d) hypothalamus

SECTION E

31. A urine sample contained increased content of glucose and ketone bodies. Answer the questions below on the basis this observation. 5
a) Name the hormone and gland associated with this condition.
b) Which cells secrete these hormones?
c) Name the condition. How can it be rectified?

OR

Kidneys of mammals have special arrangement for conserving water.
a. Discuss the structural arrangement which facilitates this water conservation.
b. Explain the mechanism that helps in the production of concentrated urine.

32. Illustrate the differences between the mechanism of action of a protein and a steroid hormone. 5

OR

Describe the sequence of events which occurs in the cardiac cycle in humans. Where and how are the sounds of 'lubb' and 'dubb' produced in the heart during this cycle?

33. Explain sliding filament theory of muscle contraction. 5

OR

Explain the process of the transport and release of a neurotransmitter with the help of a labelled diagram.

******END OF THE QUESTION PAPER******

ROLL NUMBER				

SET	B

INDIAN SCHOOL MUSCAT
HALF YEARLY EXAMINATION 2023
BIOLOGY (044)

CLASS : XI
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(iv) *There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.*

(v) *Wherever necessary, neat and properly labeled diagrams should be drawn.*

SECTION A

1. Along with which hormone parathyroid hormone plays a significant role in Ca-balance in the body? 1
(a)T3
(b)T4
(c)TCT
(d)IAA

2. Hemoglobin transports carbon dioxide in the form of 1
(a) Carboxyhemoglobin
(b) Carbonic acid
(c) Carbaminohemoglobin
(d) Carbonates

3. Match each item in COLUMN I with one in COLUMN II and choose the correct answer from the codes given below: 1

COLUMN I [WBC]	COLUMN II [Function]
A. Monocyte	I. Inflammatory responses
B. Basophils	II. Allergic reactions
C. Eosinophils	Ill. Phagocytosis
D. Lymphocytes	IV. Adaptive immunity

	A	B	C	D
(a)	Ill	I	IV	II
(b)	I	Ill	IV	II
(c)	Ill	I	II	IV
(d)	I	IV	II	Ill

4. Maximum reabsorption of water and electrolytes occurs in the 1
(a) proximal convoluted tubule
(b) descending limb of Henle's loop
(c) ascending limb of Henle's loop
(d) distal convoluted tubule

5. Name the pulmonary disease in which alveolar surface area involved in gas exchange is drastically reduced due to damage in the alveolar walls. 1
(a) Pneumonia
(b) Asthma
(c) Pleurisy
(d) Emphysema

6. Nodes of Ranvier are - 1
(a) Areas of swellings of axon
(b) Found in the wall of stomach
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7. Pick up the correct match - 1

A False ribs	I. 1st to 7th pair
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(b) A- IV, B - Ill, C - II, D - I
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(d) A - 111, B - I, C - II, D – IV

8. The glomerular capillary blood pressure causes filtration of blood through three layers in a sequence of . 1
(a) Endothelium --.. Basement membrane--.. Epithelium of Bowman's capsule.
(b) Epithelium of Bowman's capsule--.. Endothelium --.. Basement membrane
(c) Basement membrane--.. Endothelium --.. Epithelium of Bowman's capsule.

(d) Epithelium of Bowman's capsule--.. Basement membrane--.. Endothelium

9. The hormone which regulates the basal metabolism of the body is secreted from 1
(a) hypothalamus
(b) pituitary
(c) pancreas
(d) thyroid

10. The receptor sites for neurotransmitters are present on 1
(a) presynaptic membrane
(b) synaptic vesicle
(c) postsynaptic membrane
(d) tip of dendrites

11. Unmyelinated nerve fiber is commonly found in 1
(a) Somatic neural system
(b) spinal nerves
(c) Autonomous neural system
(d) both (b) and (c)

12. Which of the following contractile proteins of the muscle functions as ATPase? 1
a) Myosin
b) Tropomyosin
c) Actin
d) Troponin

Directions: In the following questions, a statement of assertion is followed by a statement of reason. 1
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SECTION B

17. Define erythropoiesis. Name the hormone that triggers it. 2

OR

Name two categories of hypothalamic hormones and their functions. Give one example of each.

18. Differentiate between Ammonotelism and Uricotelism. 2

19. Given below is an incomplete table about certain hormones, their source glands and one major effect of each on the body in humans. Identify the correct option for the three blanks A, B, C and D. 2

Name of Gland	Hormone Secreted	Function of the Hormone
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Ovary	C	Development of follicles and female sexual characters
D	Melatonin	Sleep wake cycle

20. What is stroke volume? What is its value? 2

21. Which joint is present in cranium? How is it different from that of synovial joint? 2

SECTION C

22. Complete the missing word in the statement given below 3
(a) Plasma without ..... factors is called serum.
(b) ..... and monocytes are agranulocytes.
(c) Albumins are associated with .....
(d) ..... ions play a significant role in clotting.
(e) The most abundant WBC in our blood is _____.

23. Describe normal ECG with the help of a diagram. What does each peak indicate? 3

24. Describe the three types of neurons based on the number of axons and dendrons and their location in human body. 3

25. Draw a neat labeled diagram of the section of actin filament. 3

26. List any three functions of androgens. 3

27. State the different modes of CO_2 transport in blood. 3

OR

For completion of respiration process, write the given steps in sequential manner.
(a) Diffusion of gases (O_2 and CO_2) across alveolar membrane.
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SECTION D

29. Skeletal system consists of a framework of bones and a few cartilages. This system has a significant role in movement shown by the body. Bone and cartilage are specialized connective tissues. The former has a very hard matrix due to calcium salts in it and the latter has slightly flexible matrix due to chondroitin salts. In human beings, this system is made up of 206 bones and a few cartilages. It is grouped into two principal divisions – the axial and the appendicular skeleton. 4

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3. The total number of bones in axial skeleton is
a) 90 b)80 c)85 d)88

4. The smallest bones in our body are
a) ribs b) ear ossicles c) vertebrae d) skull bones

OR

5.Ribs are attached ventrally to the
a) scapula b) sternum c) clavicle d) ileum

30. The brain is a complex organ that controls thought, memory, emotion, touch, motor skills, vision, breathing, temperature, hunger and every process that regulates our body. Together, the brain and spinal cord that extends from it make up the central nervous system, or CNS. Weighing about 3 pounds in the average adult, the brain is about 60% fat. The remaining 40% is a combination of water, protein, carbohydrates and salts. The brain itself is a not a muscle. It contains blood vessels and nerves, including neurons and glial cells. The brain sends and receives chemical and electrical signals throughout the body. Different signals control different processes, and your brain interprets each. Some make you feel tired, for example, while others make you feel pain. Some messages are kept within the brain, while others are relayed through the spine and across the body's vast network of nerves to distant extremities. To do this, the central nervous system relies on billions of neurons (nerve cells). 4

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(iv) Which part of the brain controls balancing?
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OR

(v) The amygdala is a part of
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(b) limbic system
(c) cerebellum
(d) hypothalamus

SECTION E

31. A urine sample contained increased content of glucose and ketone bodies. Answer the questions below on the basis this observation. 5
a) Name the hormone and gland associated with this condition.
b) Which cells secrete these hormones?
c) Name the condition. How can it be rectified?

OR

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a. Discuss the structural arrangement which facilitates this water conservation.
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32. Illustrate the differences between the mechanism of action of a protein and a steroid hormone. 5

OR

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OR

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HALF YEARLY EXAMINATION 2023
BIOLOGY (044)

CLASS: XI
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SECTION A

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(b) collecting duct
(c) Bowman's capsule
(d) proximal tubule

2. Which of the following system relays impulse from CNS to skeletal muscles? 1
(a) Somatic neural system
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3. Which excitatory neurotransmitter is involved in the transmission of impulse at the neuro-muscular junction? 1
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4. The glomerular capillary blood pressure causes filtration of blood through three layers in a sequence of . 1
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(b) Epithelium of Bowman's capsule--.. Endothelium --.. Basement membrane
(c) Basement membrane--.. Endothelium --.. Epithelium of Bowman's capsule.
(d) Epithelium of Bowman's capsule--.. Basement membrane--.. Endothelium

5. Select the correct statement. 1
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7. Name the pulmonary disease caused mainly by cigarette smoking. 1
(a) Pneumonia
(b) Asthma
(c) Pleurisy
(d) Emphysema

8. Match each item in COLUMN I with one in COLUMN II and choose the correct answer from the codes given below: 1

COLUMN I [WBC]	COLUMN II [Function]
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B. Basophils	II. Allergic reactions
C. Eosinophils	Ill. Phagocytosis
D. Lymphocytes	IV. Adaptive immunity

	A	B	C	D
(a)	Ill	I	IV	II
(b)	I	Ill	IV	II
(c)	Ill	I	II	IV
(d)	I	IV	II	Ill

9. Leucocytes and macrophages exhibit _____ movement. 1
(a) amoeboid
(b) ciliary
(c) muscular
(d) flagellar

10. Cerebral cortex is the 1
(a) outer layer of cerebrum, called grey matter
(b) outer layer of cerebrum called white matter
(c) inner layer of cerebrum called grey matter
(d) inner layer of cerebrum called white matter

11. Calcitonin, a thyroid hormone 1
(a) Increases calcium level in blood
(b) Decreases calcium level in blood
(c) Elevates potassium level in blood
(d) Controls Na-K balance

12. Alertness, pupillary dilation and piloerection are due to the effect of 1
(a) Melatonin
(b) Corticoids
(c) Catecholamines
(d) Thyroxine

Directions: In the following questions, a statement of assertion is followed by a statement of reason.
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SECTION B

17. Given below is an incomplete table about certain hormones, their source glands and one major effect of each on the body in humans. Identify the correct option for the three blanks A, B, C and D. 2

Name of Gland	Hormone Secreted	Function of the Hormone
Pituitary	A	Regulates growth of mammary glands and milk secretion
Pars intermedia	B	Regulates pigmentation
C	Estrogen	Development of follicles and female sexual characters
D	Melatonin	Sleep wake cycle

2

18. What is cardiac output? What is its value?

19. Identify/specify the joints present 2
    a) Between Atlas and Axis
    b) Between cranial bones
    c) Between vertebrae
    d) Between carpels and metacarpals

20. Differentiate between ureotelic and ammoniotelic organisms. 2

21. Define erythropoiesis. Name the hormone that triggers it. 2

OR

Name two categories of hypothalamic hormones and their functions. Give one example of each.

SECTION C

22. What is meant by double circulation? Write its significance. 3

23. The following abbreviations are used in the context of excretory functions. What do they stand for? 3
    (a) ANF
    (b) ADH
    (c) GFR

24. State the different modes of CO_2 transport in blood. 3

OR

For completion of respiration process, write the given steps in sequential manner.
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(c) Utilization of O_2 by the cells for catabolic reactions and resultant release of CO_2.
(d) Pulmonary ventilation by which atmospheric air is drawn in and CO_2 rich alveolar air is released out.
(e) Diffusion of O_2 and CO_2 between blood and tissues.

25. Draw a neat labeled diagram of the section of an alveolus with a pulmonary capillary. 3

26. Describe the three types of neurons based on the number of axons and dendrons and their location in human body. 3

27. Complete the missing word in the statement given below 3
(a) Plasma without ..... factors is called serum.
(b) ..... and monocytes are Agranulocytes.
(c) Albumins are associated with ..... .
(d) ..... ions play a significant role in clotting.
(e) One can determine the heart beat rate by counting the number of ..... in an ECG.

28. A pregnant woman was diagnosed with hypothyroidism. Mention any three complications or abnormalities expected in the new born baby. 3

SECTION D

29. Skeletal system consists of a framework of bones and a few cartilages. This system has a significant role in movement shown by the body. Bone and cartilage are specialized connective tissues. The former has a very hard matrix due to calcium salts in it and the latter has slightly flexible matrix due to chondroitin salts. In human beings, this system is made up of 206 bones and a few cartilages. It is grouped into two principal divisions – the axial and the appendicular skeleton. 4

1.) Which of the following is the connective tissue has pliable matrix?
a) Bone b) Blood c) Cartilages d) All of the above

2.) Human skull is composed of _____
a) Cranial bones b) Facial bones c) Pliable matrix d) both a and b

3. The vertebral formula of human beings is
a) C7, T12,L5,S1,C1 b) C8, T12,L5,S1,C1
c) C7, T11,L5,S1,C1 d) C7, T12,L4,S1,C1

3. The total number of bones in axial skeleton is
a) 90 b)80 c)85 d)88

4. The smallest bones in our body are
a) ribs b) ear ossicles c) vertebrae d) skull bones

OR

5.Ribs are attached ventrally to the
a) scapula b) sternum c) clavicle d) ileum

30. The brain is a complex organ that controls thought, memory, emotion, touch, motor skills, vision, breathing, temperature, hunger and every process that regulates our body. Together, the brain and spinal cord that extends from it make up the central nervous system, or CNS. Weighing about 3 pounds in the average adult, the brain is about 60% fat. The remaining 40% is a combination of water, protein, carbohydrates and salts. The brain itself is a not a muscle. It contains blood vessels and nerves, including neurons and glial cells. The brain sends and receives chemical and electrical signals throughout the body. Different signals control different processes, and your brain interprets each. Some make you feel tired, for example, while others make you feel pain. Some messages are kept within the brain, while others are 4

relayed through the spine and across the body's vast network of nerves to distant extremities. To do this, the central nervous system relies on billions of neurons (nerve cells).

(i) An injury sustained by the Hypothalamus is most likely to interrupt
(a) Coordination during locomotion
(b) Short term memory
(c) Regulation of body temperature
(d) Executive function like decision making

(ii)This statement is not associated with Midbrain
(a) The central portion of the midbrain is composed of mainly four, round swellings known as corpora quadrigemina.
(b) Located between the thalamus of the forebrain and pons of the hindbrain.
(c) The canal called the cerebral aqueduct passes through the midbrain.
(d) Hindbrain and midbrain constitute the brain stem

(iii) What connects two hemispheres of the brain?
(a) Pons
(b) Pia matter
(c) Corpus callosum
(d) Diencephalon

(iv) Which part of the brain controls balancing?
(a) Temporal lobe
(b) Frontal lobe
(c) Medulla oblongata
(d) Cerebellum

OR

(v) The amygdala is a part of
(a) cerebrum
(b) limbic system
(c) cerebellum
(d) hypothalamus

SECTION E

31. Illustrate the differences between the mechanism of action of a protein and a steroid hormone. 5

OR

Describe the sequence of events which occurs in the cardiac cycle in humans. Where and how are the sounds of 'lubb' and 'dubb' produced in the heart during this cycle?

32. Explain sliding filament theory of muscle contraction. 5

OR

Explain the process of the transport and release of a neurotransmitter with the help of a labelled diagram.

33. A urine sample contained increased content of glucose and ketone bodies. Answer the questions below on the basis this observation. 5
a) Name the hormone and gland associated with this condition.
b) Which cells secrete these hormones?

c) Name the condition. How can it be rectified?

OR

Kidneys of mammals have special arrangement for conserving water.

a. Discuss the structural arrangement which facilitates this water conservation.

b. Explain the mechanism that helps in the production of concentrated urine.

******END OF THE QUESTION PAPER******