

NEET MCQ

CLASS : XI

CHAPTER 20,21,22

-Dushyant Sir-

CHAPTER-20 : LOCOMOTION AND MOVEMENT

Multiple Choice Questions

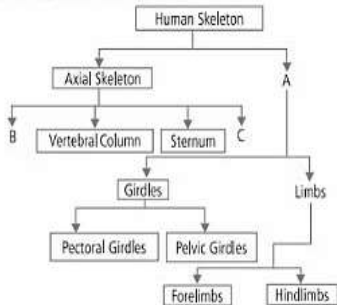
1. Which of the following mineral element is present abundantly in human skeletal muscles?
 - (a) Calcium
 - (b) Phosphorus
 - (c) Potassium
 - (d) Sodium
2. Select the mismatched pair.

(a) Actomyosin	– Contraction of muscles
(b) Ileum	– Pelvic girdle
(c) Smooth muscles	– Lungs
(d) Cori's cycle	– Lactic acid
3. On the basis of the type of movement the body muscles carry out, the biceps and triceps muscles are
 - (a) flexor and extensor respectively
 - (b) pronator and supinator respectively
 - (c) adductor and abductor respectively
 - (d) elevator and depressor respectively.
4. Select the incorrect statement.
 - (a) The part of the myofibril between two successive Z-lines is called sarcomere.
 - (b) The thick myofilaments have diameter of about 150Å.
 - (c) At the centre of I-band, a comparatively less dark zone called H-zone is present.
 - (d) The sarcomere is the functional unit of myofibril.
5. Choose the correct set of examples of hinge joint.
 - (a) Metacarpals and phalanges of fingers
 - (b) Carpals and phalanges of fingers
 - (c) Acetabulum of pelvic girdle and head of femur
 - (d) Ankle and interphalangeal joints
6. The vertebral formula of human is

(a) $C_7T_{12}L_5S_5C_{(4)}$	(b) $C_8T_{12}L_6S_{(4)}C_{(4)}$
(c) $C_7T_{14}L_5S_{(3)}C_{(4)}$	(d) $C_8T_{14}L_6S_{(4)}C_{(4)}$
7. In hurdle race, what is the major energy source of the leg muscle?
 - (a) Preformed ATP
 - (b) Glycolysis
 - (c) Pyruvate and lactate
 - (d) Oxidative metabolism
8. Which of the following statements about the mechanism of muscle contraction are correct?
 - I. Acetylcholine is released when the neural signal reaches the terminal end of axon.
 - II. Muscle contraction is initiated by a signal sent by CNS via a sensory neuron.
 - III. During muscle contraction, isotropic band gets elongated.
 - IV. Repeated activation of the muscles can lead to lactic acid accumulation.

(a) I and IV	(b) I and III
(c) II and III	(d) I, II and III
9. Select the correct statement with respect to locomotion in humans.
 - (a) The vertebral column has 10 thoracic vertebrae.
 - (b) The joint between adjacent vertebrae is a fibrous joint.
 - (c) Muscular dystrophy is caused by abnormal bone resorption by abnormal osteoclasts.
 - (d) Accumulation of uric acid crystals in joints causes their inflammation.

10. Study the following flow chart and fill up the blanks by selecting the correct option.



A B C

- (a) Thoracic skeleton Limbs Skull
 (b) Appendicular skeleton Skull Ribs
 (c) Appendicular skeleton Limbs Ribs
 (d) Lumbar skeleton Limbs Skull

11. Read the given statements and select the correct option.

Statement A : Actin filaments are more numerous than myosin filaments and six of them surround a myosin filament.

Statement B : Actin and myosin interact to form actomyosin which causes contraction of muscles.

- (a) Statement A is correct but statement B is incorrect.
 (b) Statement A is incorrect but statement B is correct.
 (c) Both statements A and B are correct.
 (d) Both statements A and B are incorrect.

12. The figure showing part of right pelvic girdle and lower limb bones is given here. Identify the parts labelled as A to E and select the correct option.



A B C D E

- (a) Sacrum Pubis Patella Metatarsal Fibula
 (b) Ilium Ischium Femur Tibia Fibula
 (c) Ilium Ischium Femur Fibula Tibia
 (d) Ischium Ilium Patella Tibia Tarsal

13. A disease in which bone loses minerals and fibres from its matrix is known as

- (a) arthritis (b) osteoarthritis
 (c) osteoporosis (d) gout.

14. Which of the following statements is not correct with respect to muscle contraction?

- (a) The H-zones and I-bands shorten but the width of A band remains constant.
 (b) In smooth muscles, the total twitch period is about 1 to 3 seconds.
 (c) In resting muscle fibre, the outside of sarcolemma is negatively charged with respect to inside of sarcolemma.
 (d) The sarcomere shortens but the length of thin and thick myofilaments do not change.

15. Which of the following pairs of the human skeletal parts is not correctly matched with their respective inclusive skeletal?

- (a) Sternum and ribs Axial skeleton
 (b) Clavicle and glenoid cavity Pelvic girdle
 (c) Humerus and ulna Appendicular skeleton
 (d) Malleus and stapes Ear ossicles

Match The Columns

16. Match Column I with Column II.

Column I

- A. Saddle joint
 B. Gliding joint
 C. Hinge joint
 D. Ellipsoid joint

Column II

- (i) Metacarpophalangeal joint
 (ii) Carpometacarpal joint of thumb
 (iii) Between tarsal bones
 (iv) Knee joint

17. Match the Column I with Column II. (There can be more than one match for items in column I.)

Column I

- A. Sternum
 B. Cori's cycle
 C. Myosin
 D. Vertebral column
 E. Troponin

Column II

- (i) HMM (Heavy meromyosin)
 (ii) Coccyx
 (iii) Xiphoid process
 (iv) Liver
 (v) Spinous process
 (vi) Lactic acid
 (vii) Manubrium
 (viii) Calcium binding
 (ix) Actin binding site
 (x) Troponin/Tropomyosin binding

Passage Based Questions

- 18.(A) Complete the given passage with appropriate words or phrases.

The sarcomere, functional unit of myofibril is a bundle of thick and thin myofilaments. The thin filament is composed

of three different proteins. (i) is a low molecular weight globular protein, which occurs in monomeric (ii) form and polymeric (iii) form. (iv) is double stranded α -helical rod, which attaches to (iii) in grooves between its filaments. Troponin is a complex of 3 polypeptides, (v) inhibits F-actin-myosin interaction and (vi) is a calcium binding polypeptide. In presence of (vii) and energy, actin and myosin interact to form (viii) which causes muscle contraction.

- (B) Read the given passage and correct the errors, wherever present. In a resting muscle fibre, the inside of sarcolemma is positively charged with respect to the outside. This potential difference across a membrane is called resting potential. A membrane with a resting potential is said to be non-polarised. It is maintained by sodium and potassium ions. Potassium ions predominate on the outside of the sarcolemma and sodium ions predominate on the inside. Sodium ions are pumped in and potassium ions are pumped out, both by passive transport. This process of moving ions along concentration gradient is called sodium pump.

Assertion & Reason

In each of the following questions, a statement of Assertion (A) is given and a corresponding statement of Reason (R) is given just below it. Of the statements, mark the correct answer as :

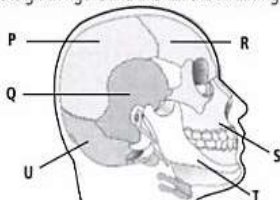
- (a) If both A and R are true and R is the correct explanation of A
 (b) If both A and R are true but R is not the correct explanation of A
 (c) If A is true but R is false
 (d) If both A and R are false.

19. **Assertion** : The last two pairs of ribs are called floating ribs.
Reason : The floating ribs help in protecting the kidneys.
20. **Assertion** : A primary myofibril is composed of a bundle of rod-like molecules of a protein myosin.
Reason : Myosin and actin together form a contractile apparatus.
21. **Assertion** : The pelvic cavity in female is wider in diameter.
Reason : The pelvic cavity accommodates the growing fetus during pregnancy in females.
22. **Assertion** : Synovial joints help in locomotion and many other movements.
Reason : Synovial joint is composed of secretory epithelial cells.
23. **Assertion** : Magnesium is the principal mineral of the muscle.
Reason : Magnesium exposes active sites on the actin molecules where myosin binds.
24. **Assertion** : Abductor muscle pulls a limb away from the mid line of the body.
Reason : It presses limb against the side.

25. **Assertion** : Muscle fibre is a syncytium.
Reason : The sarcolemma of the muscle fibre is the store house of calcium ions.
26. **Assertion** : White muscle fibres have slow rate of contraction for long periods.
Reason : White muscle fibres have more number of mitochondria in them as compared to red muscle fibres.
27. **Assertion** : Muscles experience oxygen debt during recovery after strenuous exercise.
Reason : During strenuous exercise, the muscles contract anaerobically and accumulate lactic acid.
28. **Assertion** : Spongy bone has irregular, intersecting plates or trabeculae forming the matrix.
Reason : Spongy bone is richly vascularised.

Figure Based Questions

29. Observe the given figure and answer the following questions.



- (a) Identify the given figure and its labelled parts P, Q, R, S, T and U.
 (b) Briefly explain the type of joint found between the labelled parts in the figure.
 (c) Write down the functions of the given figure.
30. Refer to the given figure of actin filament and answer the following questions.



- (a) Identify the parts labelled as A, B and C.
 (b) Briefly describe the structure and function of part A.
 (c) Which protein attaches itself to F-actin?

CHAPTER-21 : NEURAL CONTROL AND COORDINATION

Multiple Choice Questions

1. The part of brain associated with hunger and thirst is
 (a) hypothalamus (b) medulla oblongata
 (c) cerebrum (d) cerebellum.
2. Select the correct pair.
 (a) Corpus callosum – Cerebellum
 (b) Cochlea – Scala media
 (c) Post central area – Understanding speech and writing words
 (d) Rod cells – Synapses

3. Select the incorrect statement.
- Myelinated nerve fibres are enveloped with Schwann cells which form a myelin sheath around the axon.
 - The membrane of synaptic knob near the synapse is thickened and forms the presynaptic membrane.
 - The central core of the forebrain is formed by the diencephalon.
 - Absolute refractory period is the period of incomplete excitability between depolarisation and repolarisation.

4. Study the given table and select the correct option.

	Cerebrum	Cerebellum
(i)	It is a part of hindbrain.	It is a part of midbrain.
(ii)	It is concerned with intelligence and memories.	It maintains posture and equilibrium.
(iii)	Arbor vitae is present.	Arbor vitae is absent.
(iv)	It lacks Purkinje cells.	It contains Purkinje cells.

- (a) (i) and (iv) are correct. (b) (iii) and (iv) are incorrect.
 (c) (ii) and (iv) are correct. (d) (ii) and (iii) are incorrect.

5. Read the following statements and choose the correct option.

- Saltatory conduction is when impulse jumps from one node to another over myelin sheath of myelinated neurons.
 - Sympathetic stimulation causes constriction of pupil.
 - The semicircular canal and saccule are structures of equilibrium.
 - Cerebrospinal fluid decreases the weight of brain, as it gives buoyancy.
- (a) (i)-T, (ii)-T, (iii)-F, (iv)-F
 (b) (i)-T, (ii)-F, (iii)-F, (iv)-T
 (c) (i)-F, (ii)-F, (iii)-F, (iv)-T
 (d) (i)-T, (ii)-T, (iii)-F, (iv)-T

6. The nerve fibres that emerge from the taste bud pass to the brain stem through the

- olfactory and trigeminal nerves
- auditory and trigeminal nerves
- facial, glossopharyngeal and vagus nerves
- olfactory and abducens nerves.

7. What would happen to a person, if he suffers from injury localised to the hypothalamus region?

- Short-term memory loss
- Disrupted co-ordination during locomotion
- Disrupted regulation of body temperature
- Executive function such as decision making will be affected.

8. The 3rd, 6th and 11th cranial nerves are

- oculomotor nerve, abducens nerve and accessory nerve
- oculomotor nerve, trigeminal nerve and accessory nerve
- optic nerve, facial nerve and accessory nerve
- trochlear nerve, abducens nerve and vagus nerve.

9. A person entering an empty room suddenly finds a snake right in front on opening the door. Which one of the following is likely to happen in his neuro-hormonal control system?

- Sympathetic nervous system is activated releasing epinephrine and norepinephrine from adrenal medulla.
- Neurotransmitters diffuse rapidly across the cleft and transmit a nerve impulse.
- Hypothalamus activates the parasympathetic division of brain.
- Sympathetic nervous system is activated releasing epinephrine and norepinephrine from adrenal cortex.

10. While travelling to higher altitudes, people can feel pain in the ear and dizziness. Which part, among the following is involved?

- Cochlea, ear ossicles
- Tympanic membrane
- Eustachian tube, utricle, saccule and semicircular canals
- None of these

11. Neuron in which single process arises from the cyton and further divides into axon and dendrite is

- pseudounipolar neuron
- non-polar neuron
- unipolar neuron
- neurite.

12. Which of the following is an example of conditioned reflex?

- Hand withdraws when pierced with a needle
- Eyes close, when anything enters into them
- During digestion, food goes forward in alimentary canal
- Trained dog salivates when you ring a bell

13. Under prolonged starvation, brain receives energy from

- carbohydrates
- fats
- proteins
- acetoacetate.

14. During the transmission of nerve impulse through a nerve fibre, the potential on the inner side of the plasma membrane has which type of electric charge?

- First positive, then negative and continue to be negative
- First negative, then positive and continue to be positive
- First positive, then negative and again back to positive
- First negative, then positive and again back to negative

15. Select the incorrect statement regarding fovea centralis.

- The fovea centralis has cones and rods.
- It is the place of most distinct vision and rods.
- It is devoid of blood vessels.
- It is a shallow depression of the retina in the middle of macula lutea.

Match The Columns

16. Match Column I with Column II.

Column I

- A. Alzheimer's disease
B. Parkinson's disease
C. Huntington's disease
D. Epilepsy

Column II

- (i) Degeneration of neurons in the cerebral cortex
(ii) Abnormal electrical activity in the neurons
(iii) Decreased production of acetylcholine
(iv) Degeneration of dopamine releasing neurons

17. Match the Column I with Column II. (There can be more than one match for items in column I.)

Column I

- A. Neuron
B. Hindbrain
C. Forebrain
D. Ear
E. Midbrain
F. Eye

Column II

- (i) Cerebrum
(ii) Schwann cells
(iii) Corpora quadrigemina
(iv) Pons
(v) Otolith
(vi) Corpus callosum
(vii) Vitreous chamber
(viii) Crista ampullaris
(ix) Cerebellum
(x) Cerebral peduncles
(xi) Nissl's granules
(xii) Blind spot

Passage Based Questions

- 18.(A) Complete the given passage with appropriate words or phrases.

Certain components of the (i), and (ii) constitute the limbic system. Its main components are (iii), which are present behind the infundibulum; (iv) which are scattered masses of grey matter; (v) which is almond shaped and located in the tip of the temporal lobe; (vi) which roughly resembles the sea horse and is located inside the temporal lobe, and (vii), which are located within the septal area formed by the regions under corpus callosum and paraterminal gyrus.

- (B) Read the given passage and correct the errors, wherever present. Inner ear is a delicate, irregular organ which consists of bony labyrinth surrounded by membranous labyrinth and separated from it by a narrow tympanic membrane. This space contains a watery fluid called endolymph. The membranous labyrinth is filled with another fluid called perilymph. The coiled portion of the labyrinth is called pinna. It is the main hearing organ. The inner ear also contains a complex system called external auditory canal. It is responsible for maintenance of balance of the body and posture.

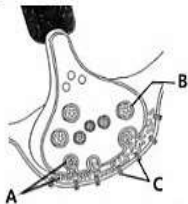
Assertion & Reason

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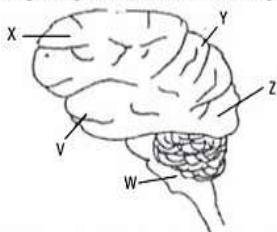
19. **Assertion** : Unconditioned reflexes are inborn and transmitted through heredity.
Reason : Learning forms the basis of unconditioned reflexes.
20. **Assertion** : Afferent neurons conduct impulses from CNS to the effectors.
Reason : They are motor in nature.
21. **Assertion** : The resting membrane of the neuron exhibits polarity of charges.
Reason : The outer surface of the resting axonal membrane possesses a positive charge while its inner surface is negatively charged.
22. **Assertion** : Cerebellum controls rapid muscular activities such as running, typing, etc.
Reason : Pneumotaxic centre is present in cerebellum.
23. **Assertion** : In Alzheimer's disease (AD) patients, there is loss of neurotransmitter acetylcholine.
Reason : Drugs that inhibit acetyl cholinesterase (AChE) improve alertness in the patients.
24. **Assertion** : Sympathetic neural system constricts arteries and raises blood pressure.
Reason : It also speeds peristalsis and increases activity of the digestive tract.
25. **Assertion** : The electrical synapse transmits impulse faster than chemical synapse.
Reason : In an electrical synapse, there is direct flow of electrical current from one neuron into the other through gap junctions.
26. **Assertion** : Cornea is a transparent portion that forms the anterior one-sixth of the eyeball.
Reason : It can be transplanted because it lacks blood vessels.
27. **Assertion** : Nociceptors respond to potentially damaging stimuli that result in pain.
Reason : Overstimulation of any receptor is painful, and over time, it starts functioning as nociceptors.
28. **Assertion** : The tympanic membrane separates the tympanic cavity from the external auditory canal.
Reason : Pinna collects sound waves and directs them into the external auditory canal.

Figure Based Questions

29. Refer to the given figure and answer the following questions.



- (a) What does the given figure show?
 (b) Label the parts marked A, B and C.
 (c) Give two examples of part A and also mention the type of neurons from which they are released.
30. Refer to the given figure and answer the following questions.

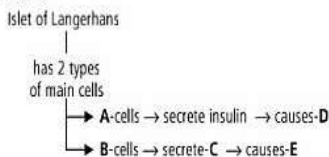


- (a) Identify the parts labelled as V, W, X, Y and Z.
 (b) Give the important areas present in the parts labelled as V, Y and Z.
 (c) Write the function of different areas found in the part labelled as X.

CHAPTER-22 : CHEMICAL COORDINATION AND INTEGRATION

Multiple Choice Questions

1. Select the set of hormones which are secreted by kidney.
 (a) Erythropoietin, Serotonin and Calcitriol
 (b) Erythropoietin, Serotonin and Duocitrin
 (c) Serotonin and Calcitriol
 (d) Erythropoietin and Calcitriol
2. Select the incorrect pair.
 (a) Intestine – Secretin
 (b) Parathyroid gland – Serotonin
 (c) Adrenal cortex – Adrenaline
 (d) Anterior lobe of pituitary – Prolactin
3. Select the option that correctly identifies A to E in the given flow chart.



- | | A | B | C | D | E |
|-----|----------|----------|----------|----------------|----------------|
| (a) | α | β | Glucagon | Hyperglycaemia | Hypoglycaemia |
| (b) | β | α | Cortisol | Hypoglycaemia | Hyperglycaemia |
| (c) | β | α | Cortisol | Hyperglycaemia | Hypoglycaemia |
| (d) | β | α | Glucagon | Hypoglycaemia | Hyperglycaemia |

4. A patient of diabetes mellitus excretes glucose in urine even when he is kept on a carbohydrate free diet. It is because
 (a) fats are catabolised in adipose tissues to form glucose
 (b) amino acids are catabolised in kidney to form glucose
 (c) amino acids are discharged in blood stream from liver
 (d) glycogen from muscles is released in blood stream.
5. Select the correct statement.
 (a) Glucagon is secreted by β -cells of islets of Langerhans.
 (b) FSH stimulates the secretion of prolactin.
 (c) Exophthalmic goitre is caused by excessive secretion of thyroid hormone.
 (d) Secretion of thymosin increases with ageing.
6. The source of somatostatin is same as that of
 (a) thyroxine and calcitonin
 (b) insulin and glucagon
 (c) somatotropin and prolactin
 (d) vasopressin and adrenaline.
7. Prostaglandins play no role in
 (a) inflammatory and allergic reactions
 (b) blood clotting
 (c) smooth muscle contraction
 (d) conduction of nerve impulses.
8. Estrogen and testosterone are steroid hormones, and most likely bind to
 (a) membrane ion channels
 (b) enzyme-linked membrane receptors
 (c) G-protein coupled membrane receptors
 (d) cytoplasmic receptors.
9. Oxytocin and androgens are respectively
 (a) peptide and steroid hormones
 (b) amino acid derivative and protein hormones
 (c) steroid and amino acid derivative hormones
 (d) protein and steroid hormones.
10. Hyperglycaemia is characterised by
 (i) polydipsia (ii) ketosis
 (iii) low blood glucose level
 (iv) increased blood cholesterol.
 (a) (i) and (iv) only (b) (ii) and (iii) only
 (c) (i), (ii) and (iv) only (d) (i), (ii), (iii) and (iv)
11. Which of the following are functions of thyroxine and tri-iodothyronine?
 (i) They help in metamorphosis of tadpole into adult larva.
 (ii) They increase the action of neurotransmitters like adrenaline and noradrenaline.
 (iii) They increase the activity of gastrointestinal tract.

- (a) (i) and (iii) only (b) (i) and (ii) only
 (c) (ii) and (iii) only (d) (i), (ii) and (iii)

12. Which of the following endocrine glands stores its secretions in the extracellular space before discharging it into the blood?

- (a) Pancreas (b) Adrenal
 (c) Testis (d) Thyroid

13. Select the incorrect statement regarding thyroid gland.

- (a) Thyroxine and triiodothyronine, produced by the thyroid gland, are synthesised from iodine and tryptophan.
 (b) Deficiency of iodine in our diet leads to hypothyroidism.
 (c) T_3 is more active and potent than T_4 .
 (d) Calcitonin is secreted by the C-cells of thyroid gland.

14. Which of the following hormones is produced by pituitary gland in both males and females but functional only in females?

- (a) Vasopressin (b) Prolactin
 (c) Somatotrophic hormone (d) Relaxin

15. Read the given statements and select the correct option.

Statement A : FSH controls the development of tissues in ovary and testis and gametogenesis.

Statement B : Leuteinising hormone (LH) controls the secretion of sex hormones.

- (a) Statement A is correct but statement B is incorrect.
 (b) Statement A is incorrect but statement B is correct.
 (c) Both the statements A and B are correct.
 (d) Both the statements A and B are incorrect.

Match The Columns

16. Match Column I with Column II.

- | Column I | Column II |
|------------------------------|--------------------------|
| A. Somatotrophic hormone (i) | Diabetes insipidus |
| B. Glucagon (ii) | Osteitis fibrosa cystica |
| C. ADH (iii) | Acromegaly |
| D. Gonadocorticoids (iv) | Cretinism |
| E. Parathormone (v) | Hyperglycaemia |
| F. Thyroid hormone (vi) | Adrenal virilism |

17. Match the Column I with Column II. (There can be more than one match for items in column I.)

- | Column I | Column II |
|------------------------|----------------------------------|
| A. Pancreas (i) | Antidiuretic effect |
| B. Pitressin (ii) | D-cells |
| C. Kidney (iii) | Cushing's syndrome |
| D. Parathyroid (iv) | Erythropoietin |
| E. Small intestine (v) | Collip's hormone |
| F. Adrenal cortex (vi) | Gastric Inhibitory Peptide (GIP) |
| G. Thyroid (vii) | C-cells |
| | (viii) Thyrocalcitonin |

- (ix) Calcitriol
 (x) Vasoactive Intestinal Peptide (VIP)
 (xi) Calcitonin
 (xii) Pressor effect
 (xiii) F-cells
 (xiv) Conn's syndrome

Passage Based Questions

18. (A) Complete the given passage with appropriate words or phrases.

The adrenal medulla secretes two hormones, (i) and (ii). These are commonly called as (iii). (i) is rapidly secreted in response to stress of any kind and during emergency situations, hence called (iv) hormone or (v). This hormone (vi) alertness, piloerection, etc. It also stimulates the breakdown of glycogen resulting in an increased concentration of (vii) in blood. This hormone also stimulates the breakdown of lipids and proteins.

(B) Read the given passage and correct the errors, wherever present.

Cushing's syndrome is caused by high level of the hormone mineralocorticoids. It is also caused by tumour of adrenal medulla. Its symptoms include low blood sugar, hyperkalemia, high Na^+ plasma and rise in blood volume. The first sign of this condition is weight loss around the trunk and face.

Assertion & Reason

In each of the following questions, a statement of Assertion (A) is given and a corresponding statement of Reason (R) is given just below it. Of the statements, mark the correct answer as :

- (a) If both A and R are true and R is the correct explanation of A
 (b) If both A and R are true but R is not the correct explanation of A
 (c) If A is true but R is false
 (d) If both A and R are false.

19. **Assertion :** Development of male mammary glands is termed as gynaecomastia.

Reason : Deficiency of testosterone in later life may cause gynaecomastia.

20. **Assertion :** The endocrine gland secretes hormones that are poured into blood or lymph.

Reason : Endocrine gland is a ductless gland.

21. **Assertion :** Melatonin concentration in the blood rises in the evening through the night, and drops to a low around noon.

Reason : It is believed to act as a 'biological clock' and produce circadian rhythms.

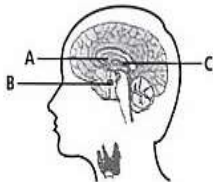
22. **Assertion :** Cortisol has an opposite effect to parathyroid hormone on calcium metabolism.

Reason : Cortisol mobilises the release of calcium ions into blood from bones.

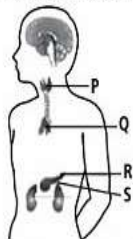
23. **Assertion** : Somatotrophin is secreted by the anterior lobe of the pituitary gland.
Reason : It inhibits the secretion of growth hormone.
24. **Assertion** : Thyroid hormones promote physical growth and development of mental faculties.
Reason : Hypothyroidism in adults causes retarded sexual development.
25. **Assertion** : Insulin is an anabolic hormone.
Reason : It promotes protein synthesis from amino acids.
26. **Assertion** : Acromegaly is characterised by disproportionate increase in size of bones of face, hands and feet.
Reason : It is caused by excess of growth hormone after adult size is reached.
27. **Assertion** : Prolactin hormone is called the "hormone of maternity".
Reason : Prolactin stimulates corpus luteum of ovary to secrete progesterone hormone.
28. **Assertion** : Hyperglycaemia is due to excess of glucagon.
Reason : Absence of β cells results in abnormal glucagon synthesis.

Figure Based Questions

29. Refer to the given figure of endocrine glands and answer the following questions.



- (a) Identify the parts A, B and C.
 (b) Name the hormones secreted by glands A and C.
 (c) Name the hormone secreted by the intermediate lobe of part B with its function.
30. Refer to the given figure and answer the following questions.



- (a) Identify P, Q, R, and S in the given figure.
 (b) What are the two diseases associated with P?
 (c) Write down the names of hormones secreted by R.