

I.CHOOSE THE CORRECT ANSWER

(5 X 1 = 5)

1. Normal blood glucose level in 1dl of blood is _____.
i) 80-100 mg/dl ii) 80-120 mg/dl iii) 80-150 mg/dl iv) 70-120 mg/dl
2. The "T" lymphocytes are differentiated to resist infection in the _____.
i) parathyroid gland ii) lymph gland iii) thymus gland iv) adrenal gland
3. Neurotransmitters are released at the synapse by _____.
i) Tips of Dendrites ii) Synaptic Knobs iii) Organelles of Cyton iv) Myelin sheath of Axon
4. The hormone administered by doctors to a pregnant woman to help in childbirth during the time of natural delivery is _____.
i) Oestrogen ii) Progesterone iii) Insulin iv) Relaxin
5. Blinking when a beam of light is suddenly focussed on the eyes and sudden withdrawal of hand upon touching a hot body are some of the examples of reflex actions. Which part of the central nervous system acts as the centre these actions?
i) Forebrain ii) Spinal cord iii) Hindbrain iv) Synapse

II. WRITE SHORT ANSWER FOR THE FOLLOWING QUESTIONS.

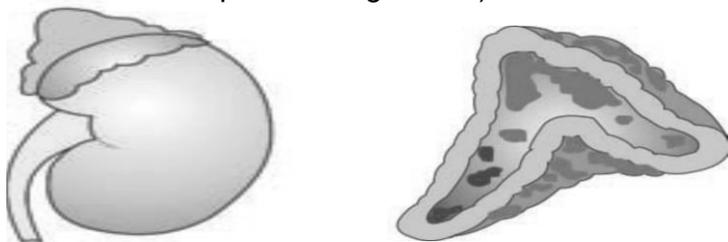
(15 X 2 = 30)

6. Name the two systems which help in the control and co-ordination of metabolic activities. Write any one difference between them.
7. Differentiate medullated neurons from non-medullated neurons. Where are they found in the nervous system?
8. What is corpora quadrigemina? Name the functions associated with it.
9. Which hormone(s) is/are called i) Personality hormone ii) fight, flight and fright hormones.
10. Name the male and female sex hormones. List out their functions.
11. The diagram is of the human brain. Shade the areas marked A and B in the parts of the brain, corresponding with the function.
A. Seat of smell B. Seat of vision

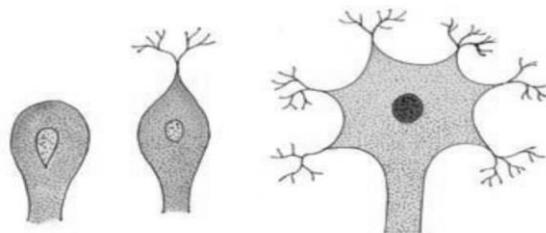


12. On the basis of the function performed, pick out the right statements.
i) Pituitary gland secretes hormones and enzymes.
ii) Thyroid gland secretes thyroxine and insulin.
iii) Leydig cells produce testosterone hormone.
iv) Pancreas produces enzymes and hormones.
13. Correct the statements, if they are wrong.
i) Alpha cells produce insulin and beta cells produce glucagon.
ii) Cortisone suppresses the immune response.
iii) Thymus gland is a lymphoid mass.
iv) Ovary produces eggs and androgen.
14. Here are a few statements about the endocrine system in man. State whether each of them is true or false. If the statement is false write the correct statement.
i) Endocrine system controls and co-ordinates the physical process of growth, reproduction and sustenance of life.
ii) Endocrine glands are duct bearing glands which secrete chemical substances called hormones.
iii) The pancreas is a dual gland. iv) Malfunctioning of the thymus gland causes goitre.
15. Copy the diagram and label the parts with the help of the clues given:

i) It is otherwise called supra renal gland. ii) It secretes two hormones, namely aldosterone and cortisone.



16. Copy and identify the types of neurons given below:



17. A person was riding a two-wheeler without wearing a helmet. He met with an accident and sustained a head injury. He was dead before he was shifted to the hospital and it was found that his death was due to breathlessness and heart failure. Which part of his brain might have been damaged? Justify your answer.

18. Match the following:

List I	List II
A. Vasopressin	I. Resist infection
B. Insulin	II. Diabetes insipidus
C. Oxytocin	III. Diabetes mellitus
D. Thymosin	IV. contraction and relaxation of uterus

19. Which gland is called the 'dual gland'? Why?

20. A 16 year old boy was brought to a doctor with a complaint of non-masculine features (lack of moustache / beard / gruff voice / broadening of shoulders etc). After keen examination, the doctor found that it was a hormonal disorder and the endocrine glands responsible were not functioning properly. Mention the glands and the hormone lacking in the boy.

II. WRITE DETAIL ANSWER FOR THE FOLLOWING QUESTIONS. (3 X 5 = 15)

21. Describe the structure of a neuron with the help of a neat, labelled diagram,

22. Name the endocrine glands and their location in the human body. Describe any two of them in detail.

23. Observe the diagram of the human brain and identify the areas mentioned:

- i) The area responsible for consciousness, intelligence, memory, imagination and reasoning.
- ii) The area responsible for regulation and co-ordination of group movements of voluntary muscles.
- iii) The area responsible for sleeping and respiration.
- iv) The area responsible for reflexes involved in the regulation of heart beat, blood vessel contraction, breathing etc.

