

1. A plant placed near a window bends outward because
 (A) its tip is able to obtain more light
 (B) its tip is able to receive necessary warmth
 (C) the auxin content on the shaded side is higher than that on the lighter side and as a result the shaded side elongate more than the cells on the illuminated side and the tip bends outward.
 (D) its tip is able to get more oxygen
2. Phototropic and geotropic movements in plants have been traced to be linked with
 (A) enzymes (B) starch (C) gibberellins (D) auxins
3. Phototropic movements of roots and stems are due to
 (A) action of gravity (B) effect of light
 (C) differential hormonal effect (D) epinasty and hyponasty
4. Bending of growing shoot towards sunlight is called
 (A) heliotropism (B) hydrotropism (C) photonasty (D) phototropism
5. Clinostat is the apparatus, which is used to
 (A) measure growth of stem
 (B) eliminate the effect of gravity causing geotropism
 (C) identify the chemicals present in stem tip
 (D) measure growth rate
6. Thigmotropism is best exhibited by
 (A) tendrils (B) stem apex (C) root apex (D) leaf apex
7. Pneumatophores are
 (A) positive geotropic (B) negative phototropic
 (C) thigmotropic (D) ageotropic
8. Indian telegraph plant commonly known as
 (A) Desmodium gyrans (B) Croton tiglium
 (C) Butea monosperma (D) Malva indica
9. The closure of lid of pitcher in pitcher plant is
 (A) a paratonic movement (B) a tropic movement
 (C) a turgor movement (D) an autonomous movement
10. Auxanometer is meant for
 (A) photosynthetic activity (B) growth activity
 (C) the amount of auxins (D) respiratory activity
11. Movements of leaves of the sensitive plant Mimosa pudica is due to
 (A) thermonasty (B) seismonasty (C) photonasty (D) nyctinasty
12. Which of the following movements in plants is NOT related to changes in auxin levels?
 (A) Nyctinastic leaf movements
 (B) Movement of roots towards soil
 (C) Movement of sunflower tracking the direction of sun
 (D) Movement of shoot towards light

13. Movement of hairs in *Drosera* is
(A) photonastic (B) thermonastic (C) thigmonastic (D) seismonastic
14. Leaves of many grasses are capable of folding and unfolding because they
(A) are isobilateral (B) have specialised bulliform cells
(C) have parallel vascular bundles (D) are very thin
15. Agent orange is a herbicide that contains synthetic
(A) auxin (B) cytokinin (C) gibberellins (D) pigments
16. Avena coleoptile test to find out growth promoting hormones was performed by:-
(A) Went (B) Lysenko (C) Butler (D) Borthwick
17. Which of the following effects of auxins is of wide application:-
(A) Induction of fruit development (B) Induction of root initiation
(C) Prevention of abscission (D) All of the above
18. Stem elongation is affected by :-
(A) Gibberellin and florigen (B) Auxin and gibberellin
(C) Florigen and kinin (D) Kinin and auxin
19. Apical dominance means:
(A) Suppression of growth of apical bud by axillary buds
(B) Suppression of growth of axillary buds by the presence of apical bud
(C) Stimulation of growth of axillary buds by removal of apical bud
(D) Inhibition of growth of axillary buds by removal of apical bud
20. Which of the following is not natural occurring plant hormone:-
(A) 2, 4-D (B) Cytokinin (C) Gibbrellin (D) I.A.A
21. Parthenocarpy is the production of :-
(A) Fruits with pollination (B) Fruits without fertilization
(C) Seeds with fertilization (D) Only seeds and no fruits
22. Phytohormone term was coined by -
(A) Gregory and Purvis (B) F.W. Went (C)
Thimann (D) L.J. Audus
23. Cytokinin:-
(A) Is a hormone whose main function is to induce the cell division
(B) Is the process of cell division
(C) Retards cell division
(D) Causes dormancy
24. Gibberellin was first extracted from -
(A) *Gibberella* (B) *Gellidium* (C) *Gracillaria* (D) *Aspergillus*

25. Which of the following breaks the dormancy of seeds-
(A) IAA (B) GA (C) Ethylene
(D) All of the above
26. Absciscic acid induces-
(A) Shoot elongation (B) Cell elongation and cell wall formation
(C) Cell division (D) Leaf fall and dormancy
27. Which of the following is a hypothetical hormone-
(A) Gibberellin (B) Auxin (C) Cytokinin (D) florigen
28. Which plant is LDP -
(A) Tobacco (B) Glycine (C) Mirabilis (D) Spinach
29. Mimosa (touch me not plant) shows:-
(A) Thigmotropism movement (B) Chemotactic movement
(C) Thigmonasty (D) Seismonasty
30. The two systems that regulate the activities of other systems of an animal are-
(A) nervous system and muscular system (B) endocrine system and respiratory system
(C) nervous system and endocrine system (D) muscular system and sense organs
31. In which direction does the nerve impulse travel once it is received by the receptor?
(A) Terminal branches, axon, cell body and dendrite
(B) Dendrite, axon, cell body and terminal braches
(C) Axon, dendrite, axon, cell body and terminal branches
(D) Cell body, axon, dendrite and terminal branches
32. The effect of myelin sheath on an impulse is
(A) to affect the speed of the incoming impulse
(B) to moderate the speed of the incoming impulse
(C) to increase the speed of conduction of the impulse
(D) It is insulating material and has nothing to do with the speed of the impulse
33. At most of the synapses-
(A) an electric current jumps a gap (B) there is contact between two neurons
(C) heat is produced (D) neurohumors or neurohormones are released
34. Learning, abstract thinking, memory and behaviour of a person are governed by:-
(A) cerebellum (B) cerebrum (C) thalamus (D) medulla
35. The cerebellum is concerned with:-
(A) coordination of muscular movements (B) memorization of facts

- (C) perception
lungs
- (D) regulation of the working of the heart and lungs
36. Reflex action in a body is not :-
 (A) inborn (B) automatic and quick
 (C) protective in nature (D) voluntary
37. The number of cranial nerves is :-
 (A) ten pairs in man and ten pairs in a toad (B) thirteen pairs in man and ten pairs in a toad
 (C) twelve pairs in man and ten pairs in a toad (D) twelve pairs in man and twelve pairs in a toad
38. The following are not the functions of medulla of the brain:-
 (A) control of voluntary actions, memory and judgement
 (B) respiration and coughing
 (C) circulation and heart beat
 (D) swallowing and vomiting
39. Neurohumors released by the terminal branches of neurons are:-
 (A) acetylcholine and noradrenaline (B) sympathin and thyroxine
 (C) acetylcholine and cholinesterase (D) cholinesterase and noradrenaline
40. Maximum developed cerebrum is found in :
 (A) sharks (B) rabbit (C) man (D) whale
41. Dorsal nerve cord is characteristic of :-
 (A) earthworm (B) hydra (C) amoeba (D) primates
42. The conditioned reflex was discovered by :-
 (A) Watson and Crick (B) Pavlov
 (C) Morgan (D) Mendel
43. The main portion (s) of a neuron is /are :-
 (A) cyton with dendrites (B) axon with or without sheath
 (C) terminal branch (D) All of the above
44. Grey matter of the brain contains:-
 (A) cell bodies
 (B) cell bodies with processes
 (C) cell bodies with processes and a large number of synapses
 (D) sensory and motor nerve cells
45. Hypothalamus controls the following function of the body, excluding:-
 (A) sleep (B) body temperature

- (C) osmoregulation received through sense organs (D) analysis of stimuli
46. The longest cell in the body of an animal is
(A) osteocytes (B) neuron
(C) chromatophores (D) lymph corpuscles
47. Which cell stops dividing after birth?
(A) Glial cells (B) Epithelium (C) Liver (D) Neuron
48. The largest number of cell bodies of neurons in our body is found in :-
(A) brain (B) spinal cord (C) tongue (D) retina
49. Which of the following is NOT a function of neuron ?
(A) Receive information (B) Conduct a signal
(C) Form the myelin sheath (D) Co-ordinate metabolic activities
50. Hearing is controlled by :-
(A) temporal lobes (B) cerebrum (C)
hypothalamus (D) parietal lobe
51. Thermostat is an instrument by which one can regulate the temperature of an oven, a heater or a refrigerator. Functionally a similar mechanism is located in the mammalian brain in the region of the
(A) cerebrum (B) hypothalamus
(C) cerebellum (D) medulla oblongata
52. Spinal cord passes through:-
(A) obturator foramen (B) condylar canal
(C) sphenopalatine foramen (D) foramen magnum
53. Receptors of pressure present in deep layers of skin are:-
(A) Krause's end bulb (B) Meissner's corpuscles
(C) Corpuscles of Ruffini (D) Pacinian corpuscles
54. The speed at which impulses are conducted increase with :-
(A) increasing diameter of the soma (B) increasing diameter of the axon
(C) increasing number of dendrites (D) increasing branching of the dendrites
55. Which hormone when secreted increases heart beats-
(A) Insulin (B) Adrenalin (C) Cortisone
(D) Testosterone
56. Nissl's body found in neuron are-
(A) made up of DNA (B) made up of ribosomes & RER
(C) helps in formation of neurofibrils (D) mass of mitochondria
57. Insulin and glucagon are produced in the :-

- (A) liver (B) thyroid
- (C) Islets of Langerhans present in the pancreas (D) spleen
58. Insulin is :-
 (A) an enzyme which digests protein (B) a hormone which helps metabolism of sugar
 (C) a hormone which promotes growth of glucose (D) an enzyme which convert invertase into glucose
59. Injecting a tadpole with thyroxine would lead to :-
 (A) giant but normal tadpoles (B) precocious metamorphosis
 (C) stoppage of metamorphosis (D) atrophy of gonads
60. A very high level of calcium in the blood suggest malfunction of the :-
 (A) parathyroid (B) thyroid (C) thymus (D) adrenal gland
61. Cortisone is used for the treatment of infammation, allergy and arthritis. Which of the following endocrine glands produces cortisone-
 (A) Thyroid (B) Pancreas (C) Adrenal (D) Gonads
62. Proprioceptors are:-
 (A) meant for detecting pressure in the skin
 (B) for magnifying sound in the internal ear
 (C) internal sense organs which occur most frequently in muscles
 (D) for the detection of direction of waves in fishes
63. Production of ADH, monitor of temperature and blood pressure, is mainly controlled by:-
 (A) cerebellum (B) cerebrum (C) hypothalamus (D) medulla
64. The amount of glucose in the blood is controlled by:-
 (A) water (B) combined action of insulin and adrenaline
 (C) adrenaline alone (D) insulin alone
65. Islets of Langerhans produce:-
 (A) insulin and secretin (B) glucagon and adrenaline
 (C) insulin and glucagon (D) ACTH and noradrenaline
66. The type of behaviour in which a substitute stimulus evokes the same response as the original stimulus is called :-
 (A) reflex action (B) conditioned reflex action
 (C) operon (D) habit
67. The gland whose hormones affects the functions of many other endocrine glands is

- (A) thyroid gland (B) pituitary gland (C) pancreas (D) parathyroid
68. A man suddenly sees a tiger. His heartbeat goes up, blood pressure increases, etc. Which hormone is released at this time in his body:-
 (A) Parathormone (B) Adrenaline (C) Corticoid (D) Thyroxine
69. The first hormone to be isolated was:-
 (A) thyroxine (B) testosterone (C) epinephrine
 (D) secretin
70. According to the accepted concept of hormone action, if receptor molecules are removed from target organs :-
 (A) the target organ will continue to respond to the hormone without any difference
 (B) the target organ will continue to respond to the hormone but will require higher
 (C) the target organ will not respond to the hormone
 (D) the target organ will continue to respond to the hormone but in the opposite way.
71. In an accident the anterior pituitary of a four year old boy was severely damaged but the boy survived. What is likely to happen:-
 (A) High levels of thyroxine will be released
 (B) Spermatogenesis will be released
 (C) The boy will not grow much in height
 (D) The growth of mammary glands will be stimulated
72. A gorilla like man with huge hand and legs. This is due to the abnormal secretion of :-
 (A) pituitary FSH (B) pituitary LH (C) pituitary GH (D) thyroid
73. LH and FSH are called :-
 (A) antistress hormones (B) gonadotropic hormones
 (C) emergency hormone (D) neurohormones
74. FSH is to estrogen as LH is to :-
 (A) vasopressin (B) testosterone (C) progesterone
 (D) LTH
75. Failure of insulin production results in :-
 (A) Addison's disease (B) Cushing's disease
 (C) diabetes insipidus (D) diabetes mellitus
76. Deficiency of the thyroxine / hypothyroidism in adults results in
 (A) diabetes mellitus (B) diabetes insipidus
 (C) myxedema (D) exophthalmic goitre & adrenal
77. Which of the following process occurs only in animals-
 (A) Hormonal control (B) Respiration
 (C) Nervous control (D) Nutrition
78. Diabetes is due to -

- (A) Hormonal deficiency (B) Sodium deficiency
- (C) Iodine deficiency (D) Enzyme deficiency
79. A human hormone reducing blood flow to the digestive system and skin during stress is
(A) Thyroxin (B) Adrenaline (C) Growth hormone (D) Insulin
80. Hormone associated with gonads
(A) Testosterone (B) Estrogen (C) Auxin (D) Both (A) and (B)
81. Name the hormone which controls the basal metabolic rate in animals
(A) Adrenaline (B) Thyroxine (C) Aldosterone (D) Oxytocin
82. _____ is responsible for maintaining biological clock of body
(A) Pineal (B) Kidney (C) Thyroid (D) Adrenal
83. Deficiency of _____ cause dwarfism
(A) GH (B) FSH (C) LH (D) All of these
84. A person consuming sea food is least likely to develop
(A) Diabetese (B) Goiter (C) Both A and B (D) Heart Diseases
85. A patient of diabetes is not producing
(A) Insulin (B) Thyroxin (C) Oestrogen (D) Adrenaline
86. Growth hormone is produced by
(A) Adrenal (B) Pituitary (C) Pancreas (D) Thyroid
87. Which of the following gland is unpaired?
(A) Adrenal (B) Testis (C) Pituitary (D) Ovary
88. Which of the following is commonly known as 'birth hormone'?
(A) Prolactin (B) Oxytocin (C) ADH (D) FSH

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|-------|-------|-------|-------|-------|
| 1. C | 2. D | 3. C | 4. A | 5. B |
| 6. A | 7. D | 8. A | 9. A | 10. B |
| 11. B | 12. A | 13. C | 14. B | 15. A |
| 16. A | 17. D | 18. B | 19. B | 20. A |
| 21. B | 22. C | 23. A | 24. A | 25. B |
| 26. D | 27. D | 28. D | 29. D | 30. C |
| 31. B | 32. C | 33. D | 34. B | 35. A |
| 36. D | 37. C | 38. A | 39. A | 40. C |
| 41. D | 42. B | 43. D | 44. C | 45. D |
| 46. B | 47. D | 48. A | 49. D | 50. A |
| 51. B | 52. D | 53. D | 54. B | 55. B |
| 56. B | 57. C | 58. B | 59. B | 60. A |
| 61. C | 62. C | 63. C | 64. B | 65. C |
| 66. B | 67. B | 68. B | 69. D | 70. C |
| 71. C | 72. C | 73. B | 74. C | 75. D |
| 76. C | 77. C | 78. A | 79. B | 80. D |
| 81. C | 82. A | 83. A | 84. B | 85. A |
| 86. B | 87. C | 88. B | | |