



CONTROL AND COORDINATION

Revision Module



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CONTROL AND COORDINATION
CBSE-X
MCQ'S Revision Module
CBSE-BIOLOGY

WORKSHEET 1

(1.) Artificial ripening of fruits is carried out by

- (1) Auxin (2) Gibberellin
 (3) Abscisic acid (4) Ethylene

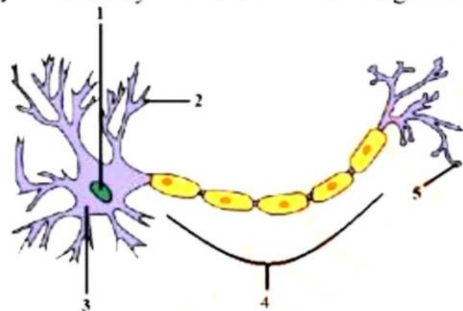
(2.) If the tip of a seedling is cut off, growth, as well as bending, ceases due to hampered:

- (1) Perception of light stimulus
 (2) Transpiration
 (3) Respiration
 (4) Photosynthesis

(3.) The Schwann sheath is :-

- (1) A non myelinated nerve fibre
 (2) Associated with myelin sheath
 (3) A connective tissue cell
 (4) Associated with myelinated & non myelinated nerve fibre

(4.) Identify the labels of the diagram.



- (1) 1 - Nucleus, 2 - Dendrite, 3 - Cell body, 4 - Axon, 5 - Nerve ending
 (2) 1 - Axon, 2 - Cell body, 3 - Nucleus, 4 - Dendrite, 5 - Nerve ending
 (3) 1 - Nucleus, 2 - Cell body, 3 - Axon, 4 - Dendrite, 5 - Nerve ending
 (4) 1 - Nerve ending, 2 - Nucleus, 3 - Dendrite, 4 - Cell body, 5 - Axon

(5.) Longest cell in the human body is

- (1) Nerve cell (2) Leg muscle cell
 (3) Bone cell (4) Heart muscle cell

(6.) Brain is the main centre of the body.

- (1) Peripheral (2) Nervous
 (3) Chemical (4) Physical

(7.) Synapse is

- (1) gap between two neurons.
 (2) gap between two dendrites.
 (3) gap between two axons.
 (4) gap between two impulses.

(8.) Which among the following is the correct definition of taxis?

- (1) The movement of a body towards or away from the stimulus is called taxis
 (2) The movement of a body away from the stimulus is called taxis
 (3) The movement of a body towards the stimulus is called taxis
 (4) None of these

(9.) The role of the axon is to

- (1) integrate signals from the dendrites
 (2) release neurotransmitter
 (3) conduct the action potential to the synaptic terminal
 (4) synthesize cellular components

(10.) What is the role of gibberellins in plant growth and development?

(11.) Main parts of a neuron are and

- (1) Cell body, axon
 (2) Axon hillock, synaptic knob
 (3) Cell body, synaptic knob
 (4) Myelin sheath, axon

(12.) The pineal body is considered as

- (1) an endocrine gland
 (2) an organ concerned with voluntary actions
 (3) an organ concerned with vision

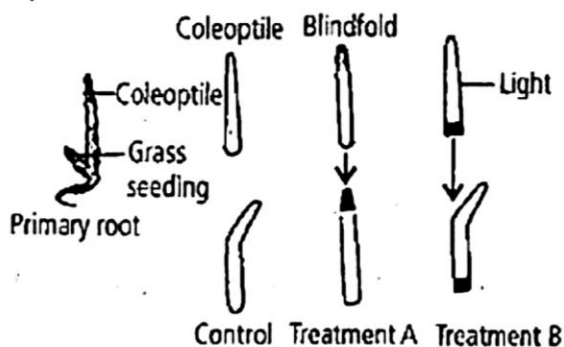
- (4) a vestige of third eye and endocrine gland
(13.) If the stem grows towards sunlight and root grows just opposite to it, the stem movement is called as

- (1) Negative phototropic movement
- (2) Phototropic movement
- (3) Positive phototropic movement
- (4) None of the above

- (14.)** Charles Darwin and his son Francis experimented with phototropism of grass seedlings by placing a metal foil blindfold over different parts of the seedling's coleoptile.

A simplified version of their results is shown in above image.

Which of the following statements best explains their results?

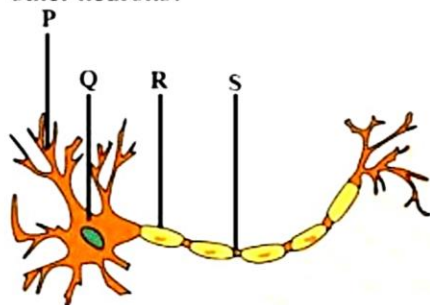


- (1) The light signal is perceived a few millimetres below the tip, and these cells cause the coleoptile to grow toward the light.
- (2) Both the seedling root and coleoptile perceive and respond to light in the same manner.
- (3) A chemical messenger must travel from the base of the coleoptile to the tip.
- (4) The light signal is perceived at the tip of the coleoptile, but the growth response occurs a few millimetres below the tip.

- (15.)** Cerebellum is concerned with :-

- (1) Co-ordination of muscular movement
- (2) Memory
- (3) Vision
- (4) Reflex action

- (16.)** Which of the following labelled parts in the figure given receives nerve impulses from other neurons?



- (1) P
- (2) Q
- (3) R
- (4) S

- (17.)** The component of the peripheral nervous system called the _____ controls breathing, digestion, sweating and shivering.

- (1) peripheral nervous system
- (2) autonomic nervous system
- (3) centralized nervous system
- (4) diffused nervous system

- (18.)** Central nervous system consists of

- (1) Brain
- (2) Spinal cord
- (3) Nerves and ganglia
- (4) Both A and B

- (19.)** Name the two main parts of the human nervous system along with their functions.

- (20.)** Roots of plants grow away from light. Which type of tropism is this?

ANSWER

WORKSHEET 1

(1.)	4	(2.)	1	(3.)	4
(4.)	1	(5.)	1	(6.)	2
(7.)	1	(8.)	1	(9.)	3
(10.)		(11.)	1	(12.)	4
(13.)	3	(14.)	4	(15.)	1
(16.)	1	(17.)	2	(18.)	4
(19.)		(20.)			

WORKSHEET 2

(21.) Which of the following statements are true about the brain? (i) The main thinking part of brain is hindbrain. (ii) The centres of hearing, smell, memory, sight, etc., are located in forebrain. (iii) Involuntary actions like salivation, vomiting, blood pressure are controlled by the medulla in the hindbrain. (iv) Cerebellum does not control the posture and balance of the body.

- (1) (i) and (ii) (2) (i), (ii) and (iii)
 (3) (ii) and (iii) (4) (iii) and (iv)

(22.) Auxins play a key role in tropism

- (1) True (2) False

(23.) Gibberellin was first extracted from

- (1) Gibberella (2) Gellidium
 (3) Gracillaria (4) Aspergillus

(24.) All information from our environment is detected by the specialized cells.

- (1) Nerve (2) Nephron
 (3) Glial (4) Companion

(25.) State whether the given statement is True or False:
 The only layer of protection on the brain is cranium.

- (1) True (2) False

(26.) In reflex action, the reflex arc is formed by

- (1) brain o spinal cord o muscles
 (2) receptor o spinal cord o muscles
 (3) muscle o receptor o brain
 (4) muscles o spinal cord o receptor

(27.) State the importance of tropic movement in plants.

(28.) In nerve cells, proteins are synthesised in _____.

- (1) Cell body (2) Axon
 (3) Dendron (4) Synapses

(29.) Which of the following is the correct sequence of the components of a reflex arc?

- (1) Receptors → Muscles → Sensory neuron → Motor neuron → Spinal cord
 (2) Receptors → Motor neuron → Spinal cord → Sensory neuron → Muscle
 (3) Receptors → Spinal cord → Sensory neuron → Motor neuron → Muscle
 (4) Receptors → Sensory neuron → Spinal cord → Motor neuron → Muscle

(30.) Production of ADH, monitor of temperature and blood pressure, is mainly controlled by

- (1) cerebellum (2) cerebrum
 (3) hypothalamus (4) medulla

(31.) Cytokinin and auxin are antagonistic in which of the following function?

- (1) Cell division (2) Phototropism
 (3) Apical dominance (4) Geotropism

(32.) The term synergistic action of hormones refers to

- (1) When two hormones act together but bring about opposite effects.
 (2) When two hormones act together and contribute to the same function.
 (3) When one hormone affects more than one
 (4) When many hormones bring about any one function.

(33.) Temporal lobe of cerebrum is the region for reception.

- (1) Auditory (2) Olfactory
 (3) Visual (4) Both A and B

(34.) What are tropic movement ? Given one example of each.

- (35.) Writing is regulated by _____.
 [Introduction to Control and Coordination]
- (1) Voluntary muscle
 - (2) Involuntary muscle
 - (3) Both A and B
 - (4) Sometimes voluntary or involuntary muscles
- (36.) Negative phototropism occurs in:
- (1) Root
 - (2) Stem
 - (3) Leaf
 - (4) Flower
- (37.) STATEMENT-1: Morphactin inhibits mitosis.
 STATEMENT-2: Morphactin is derived from fluorene-9-carboxylic acid.
 Select the correct option regarding given statements:
 [Hormones]
- (1) STATEMENT-1 is True, STATEMENT-2 is True; STATEMENT-2 is a correct explanation for STATEMENT-1
 - (2) STATEMENT-1 is True, STATEMENT-2 is True; STATEMENT-2 is NOT a correct explanation for STATEMENT-1
 - (3) STATEMENT-1 is True, STATEMENT-2 is False
 - (4) STATEMENT-1 is False, STATEMENT-2 is True
- (38.) Dwarfism results due to
- (1) excess secretion of thyroxin.
 - (2) less secretion of growth hormone.
 - (3) less secretion of adrenaline.
 - (4) excess secretion of growth hormone.
- (39.) Insulin and glucagon are produced in the
- (1) liver
 - (2) thyroid
 - (3) Islets of Langerhans present in the pancreas.
 - (4) spleen
- (40.) Which of the following is not natural occurring plant hormone :-
- (1) 2, 4-D
 - (2) Cytokinin

- (3) Gibberellin
- (4) I.A.A

WORKSHEET 2

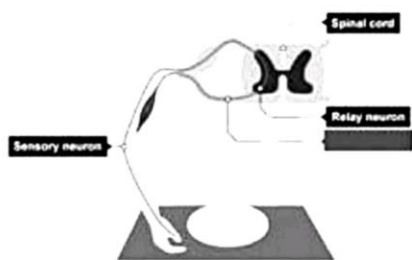
(21.)	3	(22.)	1	(23.)	1
(24.)	1	(25.)	2	(26.)	2
(27.)		(28.)	1	(29.)	4
(30.)	3	(31.)	3	(32.)	2
(33.)	4	(34.)		(35.)	1
(36.)	1	(37.)	2	(38.)	2
(39.)	3	(40.)	1		

WORKSHEET 3

(41.) Meninges surrounding the brain of human from outside to inside are :-

- (1) Duramater, arachnoid, piamater
- (2) Piamater, arachnoid, duramater
- (3) Duramater, piamater, arachnoid
- (4) Piamater, duramater, arachnoid

(42.) Identify the unlabelled part of the diagram.



- (1) Reflex arc
- (2) Impulse
- (3) Motor neuron
- (4) Interneuron

(43.) Draw a neat diagram of human brain and label any four parts.

(44.) Storage sprouting of potato can be prevented by

- (1) Malic hydrazide
- (2) Cytokinins
- (3) Gibberellins
- (4) IAA

(45.) Synaptic vesicles are seen

- (1) at the ends of dendrites and axons
- (2) at the ends of axons only
- (3) along the length of all long fibres
- (4) all of the above

(46.) a. What do you mean by seismonastic movement?
 b. Name the types of movements in plants. Give one example of each movement.

(47.) Which hormone is not found in plants?

- (1) Gibberellin
- (2) Auxin
- (3) Cytokinin
- (4) Glucagon

(48.) What is Vernalin?

(49.) A plant placed near a window bends outward because

- (1) Its tip is able to obtain more light
- (2) Its tip is able to receive necessary warmth
- (3) The auxin content on the shaded side is higher than that on the lighter side
- (4) Its tip can get more oxygen

(50.) State whether the given statement is True or False:

Uncoordinated movement of the body can occur during old age.

[Introduction to Control and Coordination] [Easy]

- (1) True
- (2) False

(51.) Stem elongation is affected by

- (1) gibberellin and florigen.
- (2) auxin and gibberellin.
- (3) florigen and kinin.
- (4) kinin and auxin.

(52.) Neurons are packed around with some cells. What are these cells called?

(53.) Name the plant hormone responsible for the following.

Growth of stem

(54.) Define bolting.

[Easy]

(55.) The main effect of cytokinin in plants is to

- (1) improve the quality of fruits
- (2) prevent the growth of lateral buds
- (3) regulate opening and closing of stomata
- (4) stimulate cell division

(56.) Which of the following gland has both exocrine and endocrine parts :-

- (1) Thyroid
- (2) Pituitary
- (3) Adrenal
- (4) None of these

(57.) Which of the following is not a natural occurring plant hormone?

- (1) 2, 4-D (2) Cytokinin
 (3) Gibberellin (4) Indole acetic acid

(58.) Hyposecretion of thyroxine in children causes :-

- (1) Dwarfism (2) Gigantism
 (3) Acromegly (4) Cretinism

(59.) Florist sprinkled a plant hormone to prevent wilting of leaves. Name the hormone he must have used. Give two more examples of plant hormones and also write their functions.

(60.) What are the three main parts of human nervous system? What are their main functions?



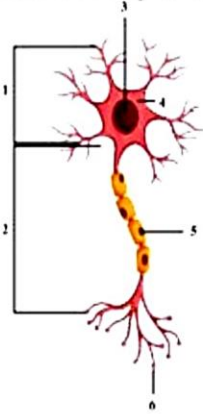
WORKSHEET 3

(41.)	1	(42.)	3	(43.)	
(44.)	1	(45.)	2	(46.)	
(47.)	4	(48.)		(49.)	3
(50.)	1	(51.)	2	(52.)	
(53.)		(54.)		(55.)	4
(56.)	4	(57.)	1	(58.)	4
(59.)		(60.)			

WORKSHEET 4

(61.) Study the diagram given below and the answer the questions that follow:

- (a) Identify the cell.
 (b) Name the parts labelled 1,2,3,4,5, and 6.
 (c) Where is this cell likely to be found in the human body and what is its function?



(62.) Tropic movements in response to the stimulus of chemicals is called:

- (1) Geotropism (2) Hydrotropism
 (3) Chemotropism (4) None of the above

(63.) During depolarisation of neuron

- (1) K^+ channels remain open
 (2) Na^+ gets inside through ion channels
 (3) Na^+ gets outside through ion channels
 (4) All the above

(64.) The hindbrain controls which of the following actions?

- (1) Movement (2) Balance
 (3) Salivation (4) Vision

(65.) Male hormone is

- (1) Adrenalin (2) Estrogen
 (3) Testosterone (4) TSH

(66.) The growth movements of plants in response to the force of gravity is called:

- (1) Hydrotropism (2) Geotropism
 (3) Chemotropism (4) Phototropism

(67.) The junction between two neurons is called

- (1) cell junction
 (2) neuromuscular junction
 (3) neural joint
 (4) synapse

(68.) Match List-I with List-II.

List I

1 Glucose
 2 Insulin
 3 DNA
 4 SH_2
 5 NCH_2
 6 CH_2
 7 $COOH$
 8 SS

List II

1 Carbohydrate
 2 Protein
 3 Neither carbohydrate nor protein
 4 Hormone
 [Hormones]

(69.) Which of the following are the types of neurons in human body? (i) Sensory nerves (ii) Motor nerves (iii) Rotator nerves (iv) Mixed nerves Select the correct option from the following.

- (1) (i), (ii) and (iii) (2) (i), (ii) and (iv)
 (3) (ii) and (iv) (4) All the above

(70.) Which of the following is a plant hormone?

- (1) Insulin (2) Thyroxine
 (3) Oestrogen (4) Cytokinin

(71.) The movement of sunflower in accordance with the path of sun is due to

- (1) phototropism (2) geotropism
 (3) chemotropism (4) hydrotropism

(72.) Cytokinins are the group of chemicals which influence

- (1) Bud formation
 (2) Root formation
 (3) Fruit formation
 (4) Cell division and shoot formation

(73.) Cucurbitaceae is good example of

- (1) Haptotropism (2) Thigmotropism
 (3) Both (A) and (B) (4) None of the above

(74.) The above experiment demonstrates which type of tropism?



- (1) Chemotropism (2) Hydrotropism
 (3) Geotropism (4) Phototropism

(75.) The movement of stems and roots in response to pull of gravity is known as:

- (1) Geotropism (2) Hydrotropism
 (3) Thigmotropism (4) Chemotropism

(76.) Plant stems bend toward a light source as a result of increased:

- (1) Chlorophyll synthesis on the side of the stem near the light source.
 (2) Cell division on the side of the stem near the light source.
 (3) Cell elongation on the side of the stem away from the light source.
 (4) Cell elongation on the side of the stem toward from the light source.

(77.) Which cell organelle is absent in neuron?

- (1) Mitochondria (2) Ribosomes
 (3) Centrioles (4) Nucleus

(78.) At most of the synapses,

- (1) an electric current jumps a gap.
 (2) there is contact between two neurons.
 (3) heat is produced.
 (4) neurohumors or neurohormones are released.

(79.) How does chemical coordination occur in plants?

(80.) **Assertion (A)** : A person has lost most of its intelligence memory and judgement.

Reason (R): A person has operated a tumour located in the cerebrum.

- (1) If both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
 (2) If both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
 (3) If Assertion is correct but Reason is incorrect.
 (4) If Assertion is incorrect but Reason is correct.

WORKSHEET 4

(61.)		(62.)	3	(63.)	2
(64.)	3	(65.)	3	(66.)	2
(67.)	4	(68.)		(69.)	2
(70.)	4	(71.)	1	(72.)	4
(73.)	3	(74.)	2	(75.)	1
(76.)	4	(77.)	3	(78.)	2
(79.)		(80.)	1		

WORKSHEET 5

(81.) Which of the following protects the brain from shock?

- (1) Durameter
- (2) Cerebrospinal fluid
- (3) Arachnoid membrane
- (4) Cranium

(82.) Which of the following substance acts as stimulator?

[Hormones]

- | | |
|--------------|-------------------|
| (1) vitamins | (2) enzymes |
| (3) hormones | (4) carbohydrates |

(83.) Which of the following breaks the dormancy of seeds :-

- | | |
|--------------|-------------------|
| (1) IAA | (2) GA |
| (3) Ethylene | (4) All the above |

(84.) Name the hormone which causes senescence and results in the closing of stomata.

(85.) Name any one hormone which increases femaleness in plants?

(86.) Tropic movement in response to the stimulus of chemical is called

- | | |
|--------------------|-------------------|
| (1) Geotropism. | (2) Hydrotropism. |
| (3) Thigmotropism. | (4) Chemotropism. |

(87.) A plant placed near a window bends outward because:

- (1) Its tip is able to obtain more light.
- (2) Its tip is able to receive necessary warmth.
- (3) 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.
- (4) Its tip is able to get more oxygen.

(88.) Choose the incorrect statement about insulin.

- (1) It is produced from pancreas.
- (2) It regulates the growth and development of the body.
- (3) It regulates the blood sugar level.
- (4) Insufficient secretion of insulin will cause diabetes.

(89.) Plant hormones can be used by farmers to manage plant growth. Give two examples of the commercial value of plant hormones.

(90.) Haustral movement in *Cuscuta* is

- (1) Hapto / thigmotropism
- (2) Aerotropism
- (3) Hydrotropism
- (4) Thermotropism

(91.) Which of the following plant hormones is not acidic in nature?

- | | |
|-----------------|-----------|
| (1) Gibberellin | (2) Auxin |
| (3) Cytokinin | (4) ABA |

(92.) A farmer suggested his friend to spray gibberellins to sugar cane plants because it

- (1) Increases length
- (2) decreases the length
- (3) reduces the girth
- (4) reduces the juice

(93.) Tropic movements are growth movements of plants in response to a stimulus from a specific direction.

- | | |
|----------|-----------|
| (1) True | (2) False |
|----------|-----------|

(94.) What is control and coordination?

(95.) Diurnal change in flower and leaves is known as

- (1) Nyctinasty or sleep movement
- (2) Haptonasty
- (3) Photonasty
- (4) None of the above

(96.) Which cell stops dividing after birth ?

- (1) Neuron (2) Glial
 (3) Epithelium (4) Liver

(97.) Which of the following is not a human hormone?

- (1) Insulin (2) Thyroxin
 (3) Oestrogen (4) Cytokinin

(98.) Write a and b in the given flow chart of neuron through which information travels as an electrical impulse.

Dendrite → a → b → End point of neuron

(99.) Injecting a tadpole with thyroxine would lead to :-

- (1) giant but normal tadpoles
 (2) precocious metamorphosis
 (3) stoppage of metamorphosis
 (4) atrophy of gonads

(100.) Read the given statements and identify the plant hormones X, Y and Z.

(i) Hormone Y suppresses flowering in mango and also promotes rapid internode/petiole elongation in deep water rice plants and hence helping leaves or upper part of shoot to remain above water.

(ii) Hormone X promotes root growth and root hair formation.

(ii) Hormone Z inhibits the seed germination, increases the tolerance of plant to various stresses, play important role in seed development maturation and dormancy.

- (1) Y- Abscisic acid, X-Auxin, Z-Gibberellin
 (2) Y-Ethylene, X-Auxin, Z-Gibberellin
 (3) Y-Auxin, X-Ethylene, Z-Gibberellin
 (4) Y-Gibberellin , X-auxin, Z-Abscisic acid

WORKSHEET 5

(81.)	2	(82.)	3	(83.)	2
(84.)		(85.)		(86.)	4
(87.)	3	(88.)	2	(89.)	
(90.)	1	(91.)	3	(92.)	1
(93.)	1	(94.)		(95.)	1
(96.)	1	(97.)	4	(98.)	
(99.)	2	(100.)	4		

WORKSHEET 6

(101.) Nerve impulse is a

- (1) physical process
- (2) chemical process
- (3) effected process
- (4) electron-chemical process

(102.) Coordination via the nervous system tends to differ from that produced by the endocrine system because the nervous system

- (1) is quick, precise, and localized
- (2) is slower and more pervasive
- (3) does not require conscious activity
- (4) has long-lasting effects

(103.) State which of the following incidents are involuntary in nature.

- i. Rehan running in a 100-meter race.
- ii. Preeti sneezing due to cold.
- iii. Rahul pricked his finger by the needle while sewing his shirt.

- | | |
|----------------------|--------------------|
| (1) All of the above | (2) (i) and (iii) |
| (3) (i) and (ii) | (4) (ii) and (iii) |

(104.) Fill in the blanks and rewrite the completed statements :

- (i) The nervous system is absent in
- (ii) Both the parents contribute equal amount of material to the offspring.

[Easy]

(105.) Draw neat labelled diagrams of lateral view of human brain.

[Hard]

(106.) The growth of the pollen tube towards the ovule induced by a sugary substance as stimulus is

- | | |
|-------------------|------------------|
| (1) Phototropism | (2) Chemotropism |
| (3) Thigmotropism | (4) Geotropism |

(107.) Identify the incorrect matched pair.

- (1) Auxin - Phototropism
- (2) Gibberellin - Foolish seeding disease of rice
- (3) Ethylene - Induces fruit ripening

(4) Cytokinin's - Promotes apical dominance

(108.) Roots of plants grow away from light due to

- | | |
|------------------|------------------|
| (1) Gravitropism | (2) Chemotropism |
| (3) Heliotropism | (4) Phototropism |

(109.) Nissl's granules are seen in?

- | | |
|-------------|-------------|
| (1) Synapse | (2) Cyton |
| (3) Axon | (4) Dendron |

(110.) The gap between two myelin sheath is known as:

- | | |
|----------------------|--------------------|
| (1) Nodes of Ranvier | (2) Synaptic cleft |
| (3) Schwann cells | (4) Synaptic knob |
| (5) Neural plate | |

(111.) When a person is suffering from severe cold, he or she cannot

- (1) differentiate the taste of an apple from that of an ice cream.
- (2) differentiate the smell of a perfume from that of an agarbatti.
- (3) differentiate red light from green light.
- (4) differentiate a hot object from a cold object.

(112.) Positive phototropism is due to elongation of cells:

- (1) More on illuminated side and less on shaded side
- (2) More on shaded side and less on illuminated side
- (3) Less on illuminated side and normal on shaded side
- (4) Normal on illuminated side and less on shaded side

(113.) What are tropic movements in plants? Why does the shoot of the plant bend towards light when it is kept in a cardboard box with a small hole on one of its side?

(114.) What is phototropism? Show phototropism in plant with the help of a labelled diagram.

(115.) The cerebellum is concerned with :-

- (1) Preception
- (2) Vision
- (3) Coordinate and movement
- (4) Memory

(116.) Secretion of ductless gland is called as

- (1) Hormones
- (2) Enzymes
- (3) Plasma
- (4) Blood

(117.) Which among the following is an example of chemotropism?

- i. Formation of tendrils
- ii. Fertilization of flowers by pollen
- iii. Growth of plant roots
- iv. Falling of leaves

- (1) (ii) and (iii)
- (2) (i) and (iv)
- (3) (i) and (ii)
- (4) All of these

(118.) The number of cranial nerves is

- (1) ten pairs in man and ten pairs in a toad.
- (2) thirteen pairs in man and ten pairs in a toad.
- (3) twelve pairs in man and ten pairs in a toad.
- (4) twelve pairs in man and twelve pairs in a toad

(119.) Movement of tendrils is

- (1) Hydrotropism
- (2) Chemotropism
- (3) Thigmotropism
- (4) Geotropism

(120.) Lateral ventricles of brain are connected to the third ventricle by

- (1) Spinal canal
- (2) Corpus callosum
- (3) Cerebellum
- (4) None of the above

WORKSHEET 6

(101.)	4	(102.)	1	(103.)	4
(104.)		(105.)		(106.)	2
(107.)	1	(108.)	1	(109.)	2
(110.)	1	(111.)	2	(112.)	2
(113.)		(114.)		(115.)	3
(116.)	1	(117.)	1	(118.)	3
(119.)	3	(120.)	4		

WORKSHEET 7

- (121.) Name the part of the neuron where information is acquired.
- (122.) The structure important for basic vital life functions such as breathing and heartbeat is _____
- (1) Brain stem (2) Cerebrum
 (3) Cerebellum (4) None of these
- (123.) Hypothalamus controls the following function of the body, excluding
- (1) sleep
 (2) body temperature
 (3) osmoregulation
 (4) analysis of stimuli received through sense organs.
- (124.) Brain is derived from
- (1) Ectoderm (2) Mesoderm
 (3) Endoderm (4) Mesendoderm
- (125.) In humans, the life processes are controlled and regulated by
- (1) reproductive and endocrine systems.
 (2) respiratory and nervous systems.
 (3) endocrine and digestive systems.
 (4) nervous and endocrine systems.
- (126.) Which of the following receptors is incorrectly paired with what it senses?
- (1) Chemoreceptors – chemicals
 (2) Photoreceptors – pain
 (3) Thermoreceptors – heat
 (4) Nociceptors – pain
- (127.) Many discoveries in science have been accidental. This is true for plant hormones also. Can you justify this statement by giving an example? Also, what term is used for such accidental findings?
- (128.) Roots of plants are hydrotropic.

- (1) True (2) False
- (129.) State whether the given statement is True or False:
 The pituitary gland is responsible for maintaining the posture.
- (1) True (2) False
- (130.) The movement of plant organs in response to unilateral effect of light is known as
- (1) Geotropism. (2) Hydrotropism.
 (3) Thigmotropism. (4) Phototropism.
- (131.) Which of the following statements is correct for the pollen tube
- (1) It shows chemotactic movement
 (2) It shows only tip growth
 (3) It is composed of three non-cellular zones
 (4) It shows radial cytoplasmic streaming
- (132.) All movements in response to the environment can be carefully controlled.
- (1) True (2) False
- (133.) Describe the structure of human brain.
- (134.) Parasympathetic nervous system increases the activity of
- (1) Gut, iris and urinary bladder
 (2) Heart, adrenal and sweat gland
 (3) Heart, pancreas and lachrymal gland
 (4) Lachrymal gland and sweat gland
- (135.) Cortisone is used for the treatment of inflammation, allergy and arthritis. Which of the following endocrine glands produces cortisone?
- (1) Thyroid (2) Pancreas
 (3) Adrenal (4) Gonads
- (136.) Which of the following statements is correct about reflex arc?

- (i). Reflex arcs are efficient quick responses.
- (ii). Reflex arcs are evolved for functioning in the absence of true thought processes.
- (iii). A reflex arc is a neural pathway that controls reflex action.

- (1) (i), (ii) and (iii) (2) Only (i)
 (3) Only (ii) (4) Only (i) and (ii)

(137.) Give the function of the meninges.

(138.) Which of the following comments applies to the brains of most animals?

- (1) Within the brain, neurons exchange information with one another.
- (2) Brains usually lie as near as possible to the important sensory structures in an animal.
- (3) Brains send action potentials to the hindmost portion of the animal by means of major nerves.
- (4) All of the above

(139.) Match list I with list II and choose the correct option.

Tropism Stimulus

- A Phototropism I Water gradient
 B Geotropism II Chemical substance
 C Chemotropism III Gravity
 D Hydrotropism IV Light

- (1) A - I, B - IV, C - III, D - II
- (2) A - II, B - I, C - IV, D - III
- (3) A - III, B - II, C - I, D - IV
- (4) A - IV, B - III, C - II, D - I

(140.) The style in Arachis before fertilization is

- (1) Positive phototropic
- (2) Negative phototropic
- (3) Positive geotropic
- (4) None of the above

WORKSHEET 7

(121.)		(122.)	1	(123.)	4
(124.)	1	(125.)	4	(126.)	2
(127.)		(128.)	1	(129.)	2
(130.)	4	(131.)	1	(132.)	1
(133.)		(134.)	1	(135.)	3
(136.)	1	(137.)		(138.)	4
(139.)	4	(140.)	1		

WORKSHEET 8

(141.) geotropism is seen in plants.

- (1) Positive (2) Negative
 (3) Neutral (4) Both A and B

(142.) Olfactoreceptors help to respond to :-

- (1) Sound (2) Touch
 (3) Smell (4) Taste

(143.) Auxanometer is meant for

- (1) photosynthetic activity
 (2) growth activity
 (3) the amount of auxins
 (4) respiratory activity

(144.) Name the part of neuron through which information travels as an electrical impulse away from the cell body.

- (1) Dendrites (2) Axon
 (3) Schwann cells (4) None of these

(145.) Plant signaling pathway is antagonistically regulated by?

- (1) Abscisic acid and Gibberellins.
 (2) Cytokinin and Gibberellins.
 (3) Auxin and Cytokinin.
 (4) Ethylene and Abscisic acid.

(146.) We do not sense any pain when we clip our nails or cut our hair. Why?

- (1) They are made up of dead cells.
 (2) These parts cannot respond to touch.
 (3) They can tolerate pain.
 (4) None of these.

(147.) Choose the correct answer from the alternatives given.
 Grey matter is

- (1) located on the outside of the spinal cord
 (2) restricted to the brain
 (3) populated by cell bodies of neurons
 (4) found in the ventricles of the vertebrate brain

(148.) Growth of plant in response to external factors is called:

- (1) Tropic movement (2) Movement
 (3) Secondary growth (4) Primary growth

(149.) Avena coleoptile test to find out growth promoting hormones was performed by :-

- (1) Went (2) Lysenko
 (3) Butler (4) Borthwick

(150.) The stem and leaves of the plant grow upwards, away from the soil, is an example of

- (1) Negative geotropism
 (2) Positive geotropism
 (3) Negative phototropism
 (4) Positive hydrotropism
 (5) Negative hydrotropism

(151.) Name the membranes that cover the brain of human beings.

(152.) At intervals, myelinated nerve fibres possess unmyelinated areas called _____.

(153.) Mimosa (touch me not plant) shows which of the following characteristics?

- (1) Thigmotropism movement
 (2) Chemotactic movement
 (3) Thigmonasty
 (4) Seismonasty

(154.) Which of the following are parts of human brain? (i) Cerebrum (ii) Pons (iii) Medulla (iv) Diencephalon Select the correct option from the following.

- (1) (i) and (iii) (2) (i), (ii) and (iii)
 (3) Only (i) (4) All the above

(155.) Nissl granules are absent in

- (1) Axon (2) Cyton
 (3) Dendron (4) Both A and B

(156.) Which one of the following is primarily concerned with cell division?

- (1) GA_3 (2) IAA
 (3) Cytokinin (4) NAA

(157.) In tropic movements, plant parts move

- (1) away from the stimulus
 (2) towards the stimulus
 (3) either towards or away from the stimulus
 (4) only towards water

(158.) The adrenal glands consist of :

[Hormones]

- (1) lower adrenal and upper suprarenal sections
 (2) ACTH and BCTH sections
 (3) the inner and outer layer of the kidney
 (4) the inner medulla and the outer cortex

(159.) Draw the diagram of neuron and label any two parts.

(160.) Breathing rate in mammals is controlled by a part of the brain called the

- (1) Thalamus
 (2) Hypothalamus
 (3) Medulla oblongata
 (4) Cerebellum

WORKSHEET 8

(141.)	4	(142.)	3	(143.)	2
(144.)	2	(145.)	1	(146.)	1
(147.)	3	(148.)	1	(149.)	1
(150.)	1	(151.)		(152.)	
(153.)	4	(154.)	4	(155.)	1
(156.)	3	(157.)	3	(158.)	4
(159.)		(160.)	3		

WORKSHEET 9

(161.) How many lobes are present in cerebellum :-

- (1) 1 (2) 3 (3) 5 (4) 7

(162.) Give a brief account on neurons.

(163.) Select the mismatched pair from the following:

- (1) Adrenaline - Pituitary gland
 (2) Testosterone - Testes
 (3) Estrogen - Ovary
 (4) Thyroxine - Thyroid gland

(164.) Junction of two neurons is called :-

- (1) Synapse (2) Synapsis
 (3) Joint (4) Junction

(165.) What will happen if a plant is placed near the window of your classroom? What is this process called as?

(166.) Very short answer type.

Name the hormone that makes plants more tolerant to various stresses.

(167.) Give reasons.

The brain is covered by the skull.

(168.) 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

- (1) cerebrum (2) hypothalamus
 (3) cerebellum (4) medulla oblongata

(169.) Name the plant hormone that are present in greater concentration in fruits and seeds. What is its function?

(170.) Non-excitabile variously shaped cells found between neurons are _____.

- (1) Glial cells (2) Nodes of Ranvier
 (3) Dendrites (4) Nissl bodies

(171.) Curling of tendrils is due to [Hard]

- (1) Thigmotropism (2) Phototropism
 (3) Chemotropism (4) Nyctinasty

(172.) If cerebellum of man gets damaged, his movement become :-

- (1) Shaky & speech become defective
 (2) Unbalanced, walk uncontrolled, defective speech & intention tremor
 (3) Jerky & defective speech
 (4) Jerky & walked uncontrolled

(173.) Which is not a reflex action?

- (1) Swallowing of food
 (2) Shivering in cold
 (3) Salivation at choicest food
 (4) Closure of eyes lids by flashing light

(174.) The stimulus for phototropic movements is

- (1) Light (2) Dark
 (3) Water (4) Touch

(175.) Which part of the human body is called the 'tender mother'?

- (1) Alpha mater (2) Pia mater
 (3) Alma mater (4) Beta mater

(176.) Playing football does not require coordination, true or false?

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- (1) True (2) False

(177.) _____ is the growth movement of plant in response to certain chemicals.

- (1) Autotropism (2) Chemotropism
 (3) Phototropism (4) Heterotropism

(178.) Largest cavity in brain is called :-

- (1) Diocoel (2) Paracoel
 (3) Metacoel (4) Rhinocoel

(179.) The speed at which impulses are conducted increases with

- (1) Increase in diameter of the soma
 (2) Increase in diameter of the axon
 (3) Increase in number of dendrites
 (4) Increase in branching of the dendrites

(180.) Which of the following statement/s is/are incorrect?

- (1) Auxin is synthesized at shoot tip
 (2) Due to auxin, plant appears to bend towards dark
 (3) Gibberellins help in the growth of stem
 (4) cell division is promoted by cytokinin

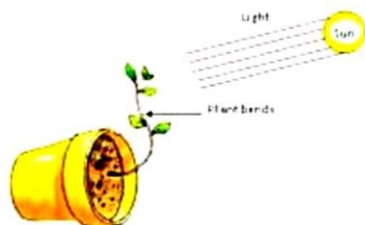
WORKSHEET 9

(161.)	2	(162.)		(163.)	1
(164.)	1	(165.)		(166.)	
(167.)		(168.)	2	(169.)	
(170.)	1	(171.)	1	(172.)	2
(173.)	1	(174.)	1	(175.)	2
(176.)	2	(177.)	2	(178.)	2
(179.)	2	(180.)	2		

WORKSHEET 10

(181.) Study the figure and answer the following

- What is depicted in the figure.
- Explain the process?
- How does the plant move towards the light?



(182.) Closure of stomata is caused by

- | | |
|---------------|-------------------|
| (1) Auxin | (2) Gibberellin |
| (3) Cytokinin | (4) Abscisic Acid |

(183.) Dwarfism occurs due to

- Excess secretion of thyroxine
- Less secretion of growth hormone
- Less secretion of adrenaline
- Excess secretion of growth hormone

(184.) Which of the following statements about transmission of nerve impulse is incorrect?

- Nerve impulse travels from dendritic end towards axonal end.
- At the dendritic end, electrical impulses bring about the release of some chemicals which generate an electrical impulse at the axonal end of another neuron.
- The chemicals released from the axonal end of one neuron crosses the synapse and generates a similar electrical impulse in a dendrite of another neuron.
- A neuron transmits electrical impulses not only to another neuron but also to muscle and gland cells.

(185.) Which of the following is not part of a neuron?

This question has multiple correct options

- | | |
|-----------|----------|
| (1) Cyton | (2) Axon |
|-----------|----------|

- | | |
|---------------------|-----------------|
| (3) Skeletal tissue | (4) Gland cells |
|---------------------|-----------------|

(186.) State whether the given statement is True or False:

Whispering is a voluntary action.

[Introduction to Control and Coordination]

- | | |
|----------|-----------|
| (1) True | (2) False |
|----------|-----------|

(187.) In reflex action the reflex arc is formed by

- Brain → spinal cord → muscles
- Receptor → spinal cord → muscles
- Muscles → receptor → brain
- Muscles → spinal cord → receptor

(188.) Brain is a part of :-

- Peripheral nervous system
- Central nervous system
- Autonomous nervous system
- Cranial nerves

(189.) Which of the following is a bony cover box in the skull that protects the brain?

- | | |
|---------------|---------------|
| (1) Hindbrain | (2) Midbrain |
| (3) Cranium | (4) Forebrain |

(190.) Which is the functional unit of nervous system?

- | | |
|------------|-----------------|
| (1) Brain | (2) Spinal cord |
| (3) Nerves | (4) Neurons |

(191.) Nissl granules are found in

- | | |
|-----------------|-----------------|
| (1) Liver cells | (2) Nerve cells |
| (3) Kidney | (4) Heart |

(192.) Antiauxin used in picking cotton balls is

- | | |
|----------|----------------------|
| (1) NPA | (2) 2-4D |
| (3) TIBA | (4) Both (a) and (c) |

(193.) The growth of pollen tube toward the ovule is an example of

- (1) Phototropism (2) Hydrotropism
 (3) Thigmotropism (4) Chemotropism

(194.) An apparatus used to demonstrate phototropism is

- (1) Luxmeter
 (2) Solarometer
 (3) Clinostat
 (4) Heliotropic chamber

(195.) The control of blood sugar level, osmoregulation and thermoregulation are the function of

- (1) Medulla oblongata
 (2) Cerebellum
 (3) Hypothalamus
 (4) Diencephalon

(196.) Pneumatophores are

- (1) Negatively geotropic
 (2) Positively geotropic
 (3) Negatively phototropic
 (4) Thigmotropic

(197.) Mimosa (touch me not plant) shows:-

- (1) Thigmotropism movement
 (2) Chemotactic movement
 (3) Thigmonasty
 (4) Seismonasty

(198.) Rate of decreases when fruits are kept in cold storage.

(199.) **Assertion:** Antherozoids of *Funaria* show chemotropic movement

Reason: This is a paratonic movement of locomotion

- (1) Both Assertion and Reason are correct and Reason is the correct explanation for Assertion.
 (2) Both Assertion and Reason are correct but Reason is not the correct explanation for Assertion.
 (3) Assertion is correct but Reason is incorrect.
 (4) Assertion is incorrect but Reason is correct.

(200.) _____ hormone promotes cell division in plants.

WORKSHEET 10

(181.)		(182.)	4	(183.)	2
(184.)	2	(185.)	3,4	(186.)	1
(187.)	2	(188.)	2	(189.)	3
(190.)	4	(191.)	2	(192.)	4
(193.)	4	(194.)	4	(195.)	3
(196.)	1	(197.)	4	(198.)	
(199.)	4	(200.)			