



Chapter Coordination and Control

17

TOPIC WISE MULTIPLE CHOICE QUESTIONS COORDINATION IN PLANTS

KIP MCQs

- (1) Which of the following is not correct about plants?
(a) They behave (b) They react
(c) They grow (d) They are always with vascular tissue
- (2) Comparing plants with animals, one having slow speed of response is:
(a) Rose (b) Amoeba
(c) Euglena (d) Sponge
- (3) Highly organized growth galls are tumors induced by:
(a) Fungi (b) Virus
(c) Bacteria (d) Nematodes
- (4) Environmental changes that are cyclic in nature are:
(a) Days (b) Tides
(c) Seasons (d) All of above
- (5) The diurnal rhythms occurs:
(a) Twice in a year (b) Annually
(c) After about 24 hours (d) After about 365 days
- (6) The basic biological clock is innate, this was first experimentally proved by:
(a) Thomas H Morgan (b) Ervin Bunning
(c) Thorpe (d) Pavlov
- (7) Highly organized growth galls are tumors induced by:
(a) Fungi (b) Virus
(c) Bacteria (d) Nematode

PAST PAPERS MCQs

- (8) Etiolated Plants grow without: (BWP 2018)
(a) Water (b) Light
(c) O₂ (d) CO₂

PLANT HORMONES

KIPS MCQs

- (9) One which kill broad leaved species selectively.
(a) IAA (b) NAA
(c) 2, 4 D (d) 2, 4, 5 T
- (10) Gibberellins are antagonistic of:
(a) Auxins (b) Cytokinins
(c) ABA (d) Ethene
- (11) α -amylase production is stimulated by:
(a) IPA (b) GA
(c) GA3 (d) Cytokinins

- (12) To delay the aging of fresh leaf crops the functional hormone is:
 (a) ABA (b) Cytokinin
 (c) Ethane (d) IAA
- (13) Hormone / Hormones having no role in stomata physiology is/are:
 (a) Cytokinins (b) Gibberellins
 (c) ABA (d) Both a and b
- (14) Hormone used to convert raw mangoes to ripen one is:
 (a) IAA (b) GA
 (c) ABA (d) Ethene

PAST PAPERS MCQs

- (15) Plant growth hormone that promotes bolting of some rosette plants is the: (BWP 2017)
 (a) Gibberellins (b) Auxins
 (c) Cytokinins (d) Ethene
- (16) A selective weed killer is: (SWL 2021)
 (a) NAA (b) 2,4 D
 (c) Ethene (d) Abscic acid
- (17) Plant hormones, which are indole acid or its variants are: (GRW 2021)
 (a) Auxins (b) Gibberellins
 (c) Ethene (d) Absciscic acid
- (18) Ethane promotes flowering in _____. (MTN 2021)
 (a) Pineapple (b) Pears
 (c) Tomatoes (d) Rubber plant
- (19) The hormone which releases the lateral buds from apical dominance is: (BWP 2021)
 (a) Auxins (b) Gibberellins
 (c) Cytokinins (d) Absciscic Acid
- (20) Leaf Abscission is promoted by: (BWP 2021)
 (a) Auxins (b) Gibberellins
 (c) Cytokinins (d) Absciscic Acid
- (21) Absciscic acid can be sprayed on tree crops to regulate: (MTN 2022)
 (a) Fruit drop (b) Leaf drop
 (c) Shoot drop (d) Flower drop
- (22) Which of this commercially produced hormone promotes malting? (SWL 2022)
 (a) GA₃ (b) GA
 (c) 2,4 D (d) N,A,A

NERVOUS COORDINATION

KIPS MCQs

- (23) The elements of nervous system working in co-ordination is/are:
 (a) Receptors (b) Neurons
 (c) Effectors (d) All of above
- (24) The receptors may be:
 (a) Cell (b) Neuron endings
 (c) Receptor organs (d) All of above
- (25) Stretch receptors in the carotid and aortic arteries of tetrapods have important role in:
 (a) Hunger (b) Sleep
 (c) Balance (d) Blood pressure
- (26) In skin different types of sensory endings involved in touch stimulus reception are:
 (a) 5 types (b) 3 types
 (c) 2 types (d) 4 types

- (27) **If the received stimulus is intense, then:**
 (a) Repeated impulses are initiated (b) More fibres are stimulated
 (c) **Both a and b** (d) None of these
- (28) **Pain receptors are _____ time more than cold receptors in human skin.**
 (a) 10 (b) 27
 (c) 270 (d) 100
- (29) **Pressure, heat & cold receptors are:**
 (a) Modified sensory neuron (b) Naked nerve endings
 (c) Modified cellular corpuscles (d) **Both a and c**
- (30) **Stretch receptors in the carotid and aortic arteries of tetrapods have important role in:**
 (a) Hunger (b) Sleep
 (c) Balance (d) **Blood pressure**

PAST PAPERS MCQs

- (31) **Neuroglia cells provide the neuron with all of the following except:** (RWP 2017)
 (a) Protection (b) Support
 (c) **Locomotion** (d) Nutrition
- (32) **Which of the following receptors produce the sensation of pain:** (LHR 2018)
 (a) **Nociceptors** (b) Chemoreceptors
 (c) Pacinian corpuscles (d) Mechanoreceptors
- (33) **The corpuscles situated quite deep in the body and are in form of encapsulated neurons ending receive deep pressure stimulus are:** (FSD 2018)
 (a) Meissner's (b) **Pacinian**
 (c) Nissl's (d) White blood cells
- (34) **The cytoplasmic process/fibres which carry impulse towards cell body is called:** (MTN 2018)
 (a) **Dendron** (b) Axons
 (c) Nissl's granules (d) Neurofibrils
- (35) **Nociceptors produce the sensation of:** (BWP 2019)
 (a) **Pain** (b) Light
 (c) Taste (d) Hearing
- (36) **The corpuscles situated quite deep in the body and are in form of encapsulated neurons ending, receive deep pressure stimulus are:** (FSD 2019)
 (a) Meissner's (b) **Pacinian**
 (c) Nissal's (d) White blood cells
- (37) **The receptors which produce the sensation of pain are called:** (MTN 2021)
 (a) Chemo receptors (b) Photo receptors
 (c) **Nociceptors** (d) Thermo receptors
- (38) **The receptors which have an differentiated ending and produce sensation of pain are called:** (FSD 2021)
 (a) Chemo-receptors (b) **Nociceptors**
 (c) Mechano-resptors (d) Thermo-receptors

ENTRY TEST BASED MCQs

- (39) **Pick out the pressure receptors:** (MDCAT 2017-Retake)
 (a) Chemoreceptors (b) Photoreceptors
 (c) **Mechanoreceptors** (d) Thermoreceptors

- (40) Which of the following produce response? (MDCAT 2017-Retake)
 (a) Effectors (b) Nerve
 (c) Stimulators (d) Brain
- (41) Taste buds on the tongue are example of (MDCAT 2018)
 (a) Thermoreceptors (b) Pressure receptors
 (c) Photoreceptors (d) Chemoreceptors

NEURONS AND REFLEX ARC

KIPS MCQS

- (42) Both neurons & neuroglia are found in:
 (a) All animals (b) Higher animals
 (c) Humans (d) Both humans & higher animal
- (43) In neuron if cytoplasm fibre carry impulse towards cell body it is termed as:
 (a) Dendrite (b) Dendron
 (d) Axon (d) All of above
- (44) Microtubules, neurofibrils, RER and mitochondria are present throughout _____ of neuron.
 (a) Cytoplasm (b) Axoplasm
 (c) Dendroplasm (d) Cell body
- (45) The direction of stimulus is from:
 (a) Receptors to effectors
 (b) Receptors to brain & then to effector
 (c) Receptor to sensory neuron to associative neuron to motor neuron
 (d) All components of “c” + effectors
- (46) A polarized neuron is:
 (a) Neuron at rest (b) More positive out side than inside
 (c) Not conducting (d) All of above
- (47) The main nutritional part of neuron is:
 (a) Cell body (b) Axon
 (c) Dendron (d) Neuroglia
- (48) The _____ is a crucial relay center among the senses, the limbic system and cerebral cortex:
 (a) Thalamus (b) Hypothalamus
 (c) Pons (d) All of above
- (49) Which is not the part of associative neuron?
 (a) Cell body (b) Axon
 (c) Dendrite (d) Dendron
- (50) The cells which form myelin sheath are:
 (a) Neurons (b) Schwann cells
 (c) Neuroglia (d) Both b and c
- (51) The chief structural and functional unit of nervous system is:
 (a) Neuron (b) Schwann cells
 (c) Neuroglia (d) Receptor
- (52) The main nutritional part of neuron is:
 (a) Cell body (b) Axon
 (c) Dendron (d) Neuroglia

PAST PAPERS MCQs

- (53) Nissl’s granules are group of: (LHR 2021)
 (a) Mesosomes (b) Lysosomes
 (c) Ribosomes (d) Chromosomes

ENTRY TEST BASED MCQS

- (54) The reflex action is the phenomena which only involves: (MDCAT 2019)
 (a) Brain, receptors, spinal cord (b) Receptors, neurons, brain
 (c) Receptors, effectors and spinal cord (d) Receptors and effectors
- (55) There is no clear difference between dendrites and axons in sensory neurons, except: (UHS 2022)
 (a) Thickness (b) Length
 (c) Terminal portions (d) None of above

NERVE IMPULSE**KIP MCQS**

- (56) Cell membrane of neuron contains:
 (a) Na-K pump (b) Na & K gates
 (c) Both a and b (d) None of these
- (57) When ATP is broken by ATPase, $\text{Na}^+\text{-K}^+$ _____.
 (a) Pumps work (b) Gates work
 (c) Both work (d) None works
- (58) Inside of a resting neuron is more:
 (a) Positive than outside (b) Negative than outside
 (d) Neutral (d) Some times negative and some times positive
- (59) If four K^+ are actively transported inward how many Na^+ are moving out by Na-k pump:
 (a) Three (b) Four
 (c) Five (d) Six
- (60) Recovery from active membrane potential to resting membrane potential takes:
 (a) 1-2 sec (b) 2-3sec
 (c) 2-3 milli sec (d) 1-2 milli sec
- (61) When ATP is broken by ATPase, $\text{Na}^+\text{-K}^+$:
 (a) Pumps work (b) Gates work
 (c) Both work (d) None works
- (62) Recovery from active membrane potential to resting membrane potential takes:
 (a) 1-2 sec (b) 2-3sec
 (c) 2-3 milli sec (d) 1-2 milli sec

PAST PAPERS MCQS

- (63) Cell membrane of neuron is slightly permeable to: (DGK 2017)
 (a) K^+ (b) Na^+
 (c) Ca^{++} (d) Fe^{++}
- (64) The normal speed of nerve impulse in human _____ per second. (LHR 2022)
 (a) 100 m/sec (b) 120 m/sec
 (c) 150 m/sec (d) None of these

ENTRY TEST BASED MCQS

- (65) The nerve impulse which jumps from node to node in myelinated neurons is called as: (MDCAT 2017)
 (a) Resting membrane potential (b) Threshold stimulus
 (c) Saltatory nerve impulse (d) Initial nerve impulse

- (66) When a nerve impulse jumps from one node of Ranvier to the next in a myelinated neuron, it is called _____. (MDCAT 2018)
 (a) Saltatory conduction (b) Resting potential
 (c) Synapses (d) Membrane potential
- (67) How many sodium ions are pumped out in response to two potassium ions transported into the membrane? (MDCAT 2018)
 (a) 4 (b) 1
 (c) 2 (d) 3
- (68) In an action potential, the permeability of sodium ions in the neuron increases due to: (MKDCAT 2019)
 (a) Repolarization
 (b) The opening of sodium channels/gates
 (c) The action of the acetylcholinesterase enzyme
 (d) Sodium ions forming an ionic bonding
- (69) If stimulation is above _____, impulses travel to the brain along the sensory neuron. (MDCAT 2019)
 (a) Action Potential (b) Resting Potential
 (c) Threshold (d) Recovery Period

SYNAPSE

KIPS MCQS

- (70) Action potential _____ jump from one neuron to next in line.
 (a) Can (b) Cannot
 (c) May (d) May not
- (71) Action potential in post synaptic membrane is triggered by:
 (a) Neurotransmitters (b) Na⁺ ions
 (c) Stimulus (d) None of these
- (72) Which of the following is main transmitter for synapses outside the CNS?
 (a) Adrenaline (b) Acetylcholine
 (c) Dopamine (d) Serotonin

PAST PAPERS MCQS:

- (73) The reception for neurotransmitter molecules are found in: (DGK 2022)
 (a) Neurolemma (b) Sarcolemma
 (c) Presynaptic membrane (d) Postsynaptic membrane

ENTRY TEST BASED MCQS

- (74) In nervous system, chemical messengers are called _____. (MDCAT 2018)
 (a) Enzymes (b) Chemoreceptors
 (c) Neurotransmitters (d) Hormones
- (75) Acetylcholine and noradrenaline are two types of _____ used in our nervous system. (MDCAT 2019)
 (a) Hormones
 (b) Channel and carrier proteins in the cell membrane of a neuron
 (c) Enzymes
 (d) Neurotransmitters
- (76) The main neurotransmitter for synapses is _____ which lie outside the central nervous system. (MDCAT 2019)
 (a) Choline (b) Acetaldehyde
 (c) Acetylcholine (d) Phosphatidylcholine

- (77) The neurotransmitter active outside CNS (Central Nervous System) is: (UHS 2022)
 (a) Acetylcholine (b) Dopamine
 (c) Glutamate (d) Serotonin

EVOLUTION OF NERVOUS SYSTEM

KIPS MCQs

- (78) The first main type of nervous system is:
 (a) CNS (b) PNS
 (c) Diffused type (d) Autonomic nervous system

PAST PAPERS MCQs

- (79) Which animals has diffused nervous system? (GRW 2018)
 (a) Octopus (b) Earthworm
 (c) Planaria (d) Jelly fish

**CENTRAL NERVOUS SYSTEM
 (BRAIN AND SPINAL COR (d))**

KIPS MCQs

- (80) The first main type of nervous system is:
 (a) CNS (b) PNS
 (c) Diffused type (d) Autonomic nervous system
- (81) Brain and spinal cord are protected by:
 (a) Single layer of meninges (b) Double layer of meninges
 (c) Triple layer of meninges (d) Skull

PAST PAPERS MCQs

- (82) In human beings memory is due to: (SGD 2017)
 (a) Amygdala (b) Hypothalamus
 (c) Hippocampus (d) Thalamus
- (83) The structure of human brain that control sleep-week cycle is: (GRW 2017)
 (a) Amygdala (b) Hippocampus
 (c) Thalamus (d) Hypothalamus
- (84) The thalamus carries sensory information to the limbic system and: (RWP 2017)
 (a) Cerebellum (b) Cerebrum
 (c) Cerebral (d) Cerebral Cortex
- (85) The part of human limbic system: (LHR 2018)
 (a) Amygdala (b) Thalamus
 (c) Cerebrum (d) Pons
- (86) The largest part of brain is called: (SGD 2018)
 (a) Cerebellum (b) Medulla
 (c) Thalamus (d) Cerebrum
- (87) Which one is the not a part of limbic system? (GRW2019)
 (a) Thalamus (b) Hypothalamus
 (c) Amygdala (d) Hippocampus
- (88) The number of spinal nerves in man: (SGD 2019)
 (a) 24 (b) 62
 (c) 12 (d) 31

- (89) The part of the brain which is best developed in birds: (LHR 2021)
 (a) Cerebellum (b) Medulla
 (c) Hippocampus (d) Pons

ENTRY TEST BASED MCQs

- (90) The CNS is protected by: (MDCAT 2017)
 (a) Three layers of meninges (b) 4 layers of meninges
 (c) One layer of meninges (d) 2 layers of meninges
- (91) Spinal cord is protected by how many layers of meninges: (MDCAT 2017-Retake)
 (a) 1 (b) 3
 (c) 2 (d) 4
- (92) White matter of spinal cord is made up of: (MDCAT 2017)
 (a) Sensory nerve fibres (b) Motor nerve fibres
 (c) Myelinated nerve fibres (d) Mixed nerve fibres
- (93) Band of axons between two hemispheres is called: (MDCAT 2017-Retake)
 (a) Corpus callosum (b) Synapsis
 (c) Corpus luteum (d) Synapse
- (94) Reflexes of eyes is detected by which part of brain: (MDCAT 2017-Retake)
 (a) Midbrain (b) Hindbrain
 (c) Forebrain (d) Cerebral hemisphere
- (95) The middle layer of meninges is: (UHS 2022)
 (a) Arachnoid mater (b) Pia mater
 (c) Dura mater (d) Cranium
- (96) The part of brain which guides smooth and accurate motions and maintains body position is: (UHS 2022)
 (a) Cerebrum (b) Cerebellum
 (c) Pons (d) Medulla

PERIPHERAL NERVOUS SYSTEM**KIPS MCQs**

- (97) Nervous system controlling voluntary movements is:
 (a) Autonomic nervous system (b) Somatic nervous system
 (c) Sympathetic nervous system (d) Para sympathetic nervous system
- (98) Ganglia are:
 (a) Concentration of neurons (b) Concentration of cell bodies of neuron
 (c) Concentration of fibres of neurons (d) Synapse of neuron
- (99) The system associated with relaxed state i.e. contraction of pupil etc. is:
 (a) Sympathetic nervous system (b) Para sympathetic nervous system
 (c) Autonomic nervous system (d) Peripheral nervous system
- (100) In human the cranial nerves are:
 (a) 10 pairs (b) 11 pairs
 (c) 12 pairs (d) 31 pairs
- (101) In human the spinal nerves are:
 (a) 10 pairs (b) 11 pairs
 (c) 12 pairs (d) 31 pairs
- (102) A nerve is a:
 (a) Collection of neurons
 (b) Concentration of dendrites and axons
 (c) Bundles of axons or dendrites of neurons
 (d) Bundle of axons or dendrites bounded by connective tissue

PAST PAPERS MCQS

- (103) The number of spinal nerves in man: (SGD 2021)
 (a) 24 (b) 62
 (c) 12 (d) 31
- (104) The number of spinal nerves in man is: (BWP 2022)
 (a) 32 pairs (b) 31 pairs
 (c) 24 pairs (d) 62 pairs

NERVOUS DISORDERS**KIPS MCQs**

- (105) Rapid electric discharges are symptoms of:
 (a) Epilepsy (b) Parkinson's disease
 (c) Alzheimer's disease (d) All of above
- (106) Onset of epilepsy usually occurs before the age of:
 (a) 25 years (b) 50 years
 (c) 60 years (d) 30 years
- (107) Rapid electric discharges are symptoms of:
 (a) Epilepsy (b) Parkinson's disease
 (c) Alzheimer's disease (d) All of above

PAST PAPERS MCQS:

- (108) The onset of epilepsy usually occurs before the age of: (LHR 2017)
 (a) 25 years (b) 50 years
 (c) 30 years (d) 35 years
- (109) Alzheimer's disease is characterized by the decline in the functions of: (LHR 2017)
 (a) Liver (b) Brain
 (c) Kidney (d) Stomach

CHEMICAL COORDINATION & PITUITARY GLAND**KIPS MCQs**

- (110) Which of the following is not correct about all hormones?
 (a) They are transferred by blood (b) They are protein in nature
 (c) They stimulate or inhibit the function (d) They affect different target cells
- (111) Both oxytocin and vasopressin are believed to be produced in:
 (a) Pituitary (b) Thalamus
 (c) Hypothalamus (d) Amygdala
- (112) ICSH stimulate the secretion of:
 (a) Luteinizing hormone (b) Testosterone
 (c) Cortisol (d) Corticosteroid
- (113) Excess of _____ hormone is secreted in Addison's disease.
 (a) FSH (b) MSH
 (c) LTH (d) TSH

ENTRY TEST BASED MCQS

- (114) Which hormone causes the contractions in wall of uterus during the process of birth? (MDCAT 2018)
 (a) STH (b) LTH
 (c) FSH (d) Oxytocin
- (115) _____ hormone is released from posterior lobe of pituitary gland. (MDCAT 2018)
 (a) Thyroid stimulating hormone (b) FSH
 (c) Adrenaline (d) Antidiuretic hormone

- (116) A hormone that plays a major role in social bonding, childbirth, milk ejection and sexual reproduction is: (UHS 2022)
- (a) Estrogen (b) Oxytocin
(c) Prolactin (d) Secretin

THYROID GLAND AND PARATHYROID GLAND

KIPS MCQs

- (117) Metamorphosis in amphibians is under control of:
- (a) Sex hormones (b) Pituitary hormone
(c) Thyroid hormone (d) Parathyroid hormone
- (118) Goiter is:
- (a) Due to the deficiency of iodine (b) Enlargement of thyroid gland
(c) More frequent in hilly areas (d) All of above
- (119) Which of the following are antagonistic?
- (a) Insulin – glucagon (b) Insulin - cortisol
(c) Calcitonin – Parathormone hormone (d) All of above

PAST PAPERS MCQs

- (120) Excess thyroxine produces a disease called: (MTN 2017)
- (a) Addison's (b) Cretinism
(c) Graves' (d) Epilepsy
- (121) Excess thyroxine produces a condition called: (MTN 2021)
- (a) Cretinism (b) Dwarfism
(c) Grave's disease (d) Cushing's disease

ISLETS OF LANGHERNS AND ADRENAL GLAND

KIPS MCQs

- (122) Addison's disease is due to:
- (a) Destruction of the adrenal cortex (b) Excess secretion of MSH
(c) Both of these (d) None of these
- (123) Which of the following constricts blood vessels:
- (a) Adrenaline (b) Acetylcholine
(c) Nor adrenaline (d) Histamine
- (124) Islets of Langerhans are under control of:
- (a) STH from pituitary (b) ACTH from pituitary
(c) Blood glucose level (d) All of above

PAST PAPERS MCQs

- (125) A pair of adrenal glands is present on top of each. (DCK 2017)
- (a) Ear (b) Kidney
(c) Eye (d) Testis
- (126) Alpha cells of pancreas secrete: (FSD 2017)
- (a) Glucagon (b) Insulin
(c) Pancreatic juice (d) Secretin
- (127) Alpha cells of Pancreas secrete: (MTN 2018)
- (a) Insulin (b) Pancreatic juice
(c) Glucagon (d) Secretin
- (128) Excess of which hormone causes Addison's disease: (DGK 2018)
- (a) FSH (b) MSH
(c) LTH (d) TSH

- (129) The disease caused due to destruction of adrenal cortex is: (LHR 2019)
 (a) Cushing (b) Diabetes
 (c) Alzheimer (d) Addison

GUT, GONADS AND FEEDBACK MECHANISM

KIPS MCQs

- (130) Gastrin is produced by mucosa of:
 (a) Whole stomach (b) Pyloric region
 (c) Cardiac region (d) Duodenum
- (131) Oestrogen:
 (a) Bring about development of secondary sex characters
 (b) Cause thickening of uterine wall
 (c) Aids in healing and repair of uterine wall after menstruation
 (d) All of above
- (132) The feedback mechanism is:
 (a) Controlled by brain (b) Controlled by the hormone
 (c) Controlled by the end product (d) Controlled by external stimulation

PAST PAPERS MCQs

- (133) Which hormone in male stimulates the production of testosterone? (SWL 2018)
 (a) TSH (b) FSH
 (c) LH (d) ICSH
- (134) Corpus luteum secretes a hormone called: (MTN 2018)
 (a) Progesterone (b) Oxytocin
 (c) Testosterone (d) Estrogen
- (135) Corpus luteum starts secreting a hormone called: (DGK 2018)
 (a) Oestrogen (b) Progesterone
 (c) Oxytocin (d) Testosterone
- (136) Hormone that suppresses ovulation is: (MTN 2021)
 (a) Testosterone (b) Oestrogen
 (c) Progesterone (d) Gastrin
- (137) Which of the hormone suppresses ovulation. (RWP 2021)
 (a) Testosterone (b) Oestrogen
 (c) Gastrin (d) Progesterone

ENTRY TEST BASED MCQs

- (138) Hormone produced by placenta is: (UHS 2022)
 (a) Follicle stimulating hormone (FSH) (b) Luteinizing hormone
 (c) Progesterone (d) Testosterone

BEHAVIOUR

KIPS MCQs

- (139) The instincts are:
 (a) Based on learning (b) Based on experiences
 (c) Genetically inherited (d) Based on I.Q
- (140) Which type of behavior depends on the selection operating the history of species?
 (a) Imprinting (b) Instinctive behavior
 (c) Habituation (d) Insight learning
- (141) Which type of innate behavior is a directed movement toward or away from stimulus?
 (a) Imprinting (b) Kinesis
 (c) Taxes (d) Classic conditioning

- (142) The behaviour which evolves slowly in species is:
 (a) Learning behaviour (b) Instinctive behaviour
 (c) Habituation (d) Insight learning
- (143) The behaviour which evolves slowly in species is:
 (a) Learning behaviour (b) Instinctive behaviour
 (c) Habituation (d) Insight learning

LEARNING BEHAVIOUR

KIPS MCQS:

- (144) Latent learning was first studied by:
 (a) B.F Skinner (b) Ervin Bunning
 (c) Thorpe (d) Pavlov
- (145) The simplest form of learning is:
 (a) Imprinting (b) Insight learning
 (c) Habituation (d) Innate behavior
- (146) A mouse learn the pathway of maize without any patent reward, this type of learning is:
 (a) Imprinting (b) Latent learning
 (c) Habituation (d) Insight learning
- (147) Which is correct for learning behavior?
 (a) Product of natural selection
 (b) Related to history of species
 (c) Depend upon environmental influences
 (d) Advantageous for animals with no parental care
- (148) The most advance form of learning is:
 (a) Imprinting (b) Insight learning
 (c) Latent learning (d) Habituation
- (149) Imprinting is:
 (a) Decline in response
 (b) Association of indifferent stimuli
 (c) Manipulation of mental concepts
 (d) Association with another object/ stimulus

PAST PAPERS MCQs

- (150) The simplest form of learning behaviour is: (MTN, SWL 2017)
 (a) Imprinting (b) Insight learning
 (c) Habituation (d) Latent learning
- (151) Higher form of learning is the: (DGK 2018)
 (a) Conditioned reflex type-I (b) Imprinting
 (c) Insight learning (d) Latent learning
- (152) The simplest form of learning is: (LHR 2019)
 (a) Habituation (b) imprinting
 (c) Insight learning (d) Latent
- (153) Pavlov performed experiments on do go to prove: (MTN 2019)
 (a) Conditional reflex I (b) Habituation
 (c) Conditional reflex II (d) Imprinting
- (154) The simplest form of learning behavior is: (MTN 2019)
 (a) Imprinting (b) Habituation
 (c) Insight learning (d) Latent learning

ANSWER KEY

(Topic Wise Multiple Choice Questions)

1	d	26	b	51	a	76	c	101	d	126	a	151	c
2	a	27	c	52	a	77	a	102	c	127	c	152	0
3	c	28	b	53	c	78	c	103	0	128	b	153	0
4	d	29	d	54	c	79	c	104	0	129	d	154	0
5	c	30	d	55	c	80	a	105	a	130	b		
6	b	31	e	56	c	81	c	106	d	131	d		
7	c	32	a	57	a	82	c	107	a	132	c		
8	b	33	b	58	b	83	d	108	c	133	d		
9	c	34	a	59	d	84	b	109	b	134	a		
10	c	35	a	60	c	85	a	110	b	135	b		
11	c	36	0	61	a	86	d	111	c	136	0		
12	b	37	c	62	c	87	0	112	b	137	0		
13	b	38	b	63	a	88	0	113	b	138	c		
14	d	39	c	64	a	89	0	114	d	139	c		
15	a	40	a	65	c	90	a	115	d	140	b		
16	b	41	d	66	a	91	b	116	b	141	c		
17	a	42	d	67	d	92	c	117	c	142	b		
18	a	43	a	68	c	93	a	118	d	143	b		
19	c	44	b	69	c	94	a	119	d	144	c		
20	c	45	d	70	b	95	a	120	c	145	c		
21	a	46	d	71	a	96	b	121	0	146	b		
22	a	47	a	72	b	97	b	122	a	147	c		
23	d	48	a	73	d	98	b	123	c	148	b		
24	d	49	d	74	c	99	b	124	d	149	d		
25	d	50	d	75	d	100	c	125	b	150	c		

KIPS SHORT QUESTIONS COORDINATION IN PLANTS

KIPS QUESTIONS

Q:1 Why the coordination in plant is not much developed as in animals?

Ans: **Coordination in Plants:**

Plants are passive and non-motile so they do not need to respond quickly. Their behaviour is fundamentally different from animals. But still plants respond and behave. Coordination in plants takes place only by means of hormones.

Q:2 Differentiate between callus and gall.

Ans:

Callus	Gall
These are the masses of amorphous material with poor differentiation.	These are abnormal growth on plant induced by pathogens.
They are localized.	They are spreading in nature.
Caused by cut or wound	Caused by pathogen, Bacteria

Q:3 Define coordination. How do plants respond to the stimuli?

Ans. **Coordination:**

Working together of different body parts and systems to perform an activity with timing and perfection is called coordination.

Plant Response:

Plants respond to stimuli by;

- (i) Regulating their growth and development in appropriate ways.
- (ii) Controlling their body functions through plant hormones or growth hormones.

Q:4 Define chlorosis and etiolation.

Ans. **Chlorosis:**

Development of yellowish hue in plants when they fail to form sufficient chlorophyll is called chlorosis.

Etiolation:

If plants are grown without light, they become extremely long and fail to form chlorophyll. This is called etiolation.

Q:5 Define biorhythms. Give example.

Ans. In living things, the behavioural activities occur at regular intervals, which are called biorhythms or biological rhythms.

Example:

seed formation, flowering, germination of seed, sleep movements etc.

PAST PAPERS QUESTIONS

- Q:6** How plants respond to various stimuli? (LHR 2017)
- Q:7** Differentiate between etiolation and chlorosis. (LHR 2017)
- Q:8** Define biorhythms and give their types. (GKW 2017)
- Q:9** Differentiate between stimulus and response. (SGD 2017)
- Q:10** What is etiolation in plants? (SWL 2017)
- Q:11** What are biological clocks? Define its types (SWL 2017)
- Q:12** Differentiate between calluses and galls. (DGK 2017)
- Q:13** Differentiate between diurnal rhythms and circannual rhythms. (SWL 2018)
- Q:14** What is chlorosis? How it is caused (LHR 2018)
- Q:15** How do plants respond to environmental stresses? (LHR 2019)
- Q:16** Define the term Biological rhythms. (RWP 2017)
- Q:17** Define Chlorosis. Give its cause. (DGK 2019)
- Q:18** What is diurnal rhythms and circannual rhythms? (DGK 2019, GRW 2021)
- Q:19** What are biological rhythms? (RWP 2021)
- Q:20** How coordination in plants is different from animals? (MTN 2022)
- Q:21** How plants respond to stimuli? (LHR 2022)

PLANT HORMONES**KIPS QUESTIONS**

Q:22 Why synthetic Auxins are more effective than Natural Auxins.

Ans: Synthetic Auxins:

Synthetic Auxins are more effective because plants generally do not have necessary enzymes to break them down. More over the synthetic auxins are more economical than IAA to produce.

Q:23 ABA is growth inhibitor, in what respect is it beneficial for plants?

Ans:

- Under water stress, it prevents excessive water loss by closing stomata.
- It may be used to promote flowering in short day plants.
- It is sprayed on trees to regulate fruit drop. This removes the need for picking over a large time span.

Q:24 What is the effect of Auxins on root growth?

Ans. In root, promote growth at very low concentration. Inhibit growth at higher concentration e.g. geotropism. Promote growth of roots from cuttings and calluses.

Q:25 What are commercial applications of 2,4 Dichlorophenoxy acetic acid?

Ans.

- It is selective weed killer. It kills broad leaves species.
- It inhibits sprouting of potatoes.
- It prevents premature fruit drop.

Q:26 What are the effects of gibberellins and ABA to promote flowering?

Ans. Gibberellins promote flowering in long day plants and inhibit in short day plants while ABA promotes flowering in short day plants and inhibits in long day plants.

Q:27 Give commercial applications of Gibberellins.

Ans.

- They are used to promote fruit setting.
- They are used in brewing industry to stimulate alpha amylase production and promote malting.
- These are used to delay ripening and improve storage life of bananas and grape fruits.

Q:28 What are the commercial applications of Ethene?

Ans:

- Ethene induces flowering in pineapple.
- It stimulates ripening of tomatoes and citrus fruit.
- The commercial compound ethephon breaks down and releases ethene in plants. It is applied on rubber plant. It stimulates the flow of latex in rubber plant.

PAST PAPERS QUESTIONS

Q:29 Give commercial applications of auxins. (LHR 2017)

Q:30 Describe the functions of "abscisic acid" growth hormone in plants. (GRW 2017)

Q:31 What is the role of Cytokinins? (MTN 2017)

Q:32 Give two commercial applications of 2,4 d. (SGD 2017)

Q:33 Write down any four functions of Auxins. (DGK 2017)

Q:34 Write two commercial applications of Gibberellins. (DGK 2017, LHR 2018, MTN 2019)

Q:35 Write down two commercial applications of Gibberellins. (MTN 2019)

Q:36 Write down two uses of auxins. (LHR 2019)

Q:37 What is commercial importance of ethene? (FSD 2017, MTN 2017, SWL 2019, GRW 2019)

Q:38 Write commercial application of cytokinins. (LHR 2016, MTN 2016, RWP 2019, SGD 2021)

Q:39 Write down any two function of ethane. (GRW 2021)

Q:40 Define Gibberellins. Give their two commercial applications. (MTN 2021)

- Q:41 Write any four functions of Cytokinin. (FSD 2021)
 Q:42 How gibberellins are commercially produced? Write their commercial applications. (MTN 2021)
 Q:43 How does 2, 4 d affects dicots? (LGK 2022)

NERVOUS COORDINATION

KIPS QUESTIONS

Q:44 How different nerve fibers transmit different modalities of sensation? (differentiation of stimulus)

Ans: Differentiation of stimulus

- Each nerve tract terminates at a **specific points in the CNS**, so the type of sensation is determined by the point in the nervous system to which the fibers lead.
- Each **receptor organ is specialized** to receive only a particular type of stimulus.

Q:45 How intensity of stimulus interpreted in CNS?

Ans: Intensity of stimulus received would be interpreted by two ways

- It is transmitted in the form of **repeated impulses**.
- **More fibers** carrying the impulse of same stimulus to CNS.

Q.2 Name the structural components of neuron.

Ans.

- The cell body or soma which is the main nutritional part of neuron.
- Cytoplasmic processes or fibers which carry impulse towards (dendrites) or away (axons) from the cell body.

Q:46 What are neuroglia?

Ans. Neuroglia make up as much as half of the nervous system. They play a vital role in the nutrition of neurons and their protection by myelin sheath.

Q:47 What are axons and dendrites?

Ans: Axon:

The process conducting the impulse away from the cell body is called axon. These may be meter long in some neurons.

Dendrites:

The process which carry impulse towards the cell body is called dendron. The dendrons with single smaller fiber are called dendrites.

PAST PAPERS QUESTIONS

- Q:48 What are Effectors?
 Q:49 Differentiate between Chemoreceptors and Mechanoreceptors. (SWL 2016, MTN 2018)
 Q:50 What are effectors? (MTN 2015, DGK 2018)
 Q:51 Differentiate between mechanoreceptors and thermoreceptors. (FSD 2018)
 Q:52 What are chemoreceptors? (SGD 2018)
 Q:53 Differentiate between thermoreceptors and nociceptors. (RWP 2018)
 Q:54 Define the term effectors. Write down names of two important effectors of humans. (GRW 2019)
 Q:55 What are effectors? Give examples. (FSD 2018, DGK 2019)
 Q:56 What are effectors? Give their types. (GRW 2021)
 Q:57 Write the functions of photoreceptors and chemoreceptors. (MTN 2021)
 Q:58 Differentiate between mechanoreceptors and thermoreceptors. (FSD 2019)
 Q:59 Differentiate between Photoreceptors and Thermoreceptors. (FSD 2021)
 Q:60 Why Pacinian corpuscles are able to detect deep pressure stimulus? (DGK 2022)
 Q:61 Differentiate between chemoreceptors and thermoreceptor. (SWL 2022)
 Q:62 Which receptors respond to the mechanical conditions of the internal organs? Give examples. (SWL 2022)
 Q:63 How different modalities of sensation work? (LHR 2022)

NEURONS AND REFLEX ARC**KIPS QUESTIONS****Q:64 Define reflex arc.****Ans.** Reflex arc is the pathway of passage of impulse during a reflex action.**PAST PAPERS QUESTIONS****Q:65** Define Reflex action and Reflex arc. (MTN 2017)**Q:66** What do you know about Nissl's granules? (RWP 2017)**Q:67** Differentiate between reflex action and reflex arc. (LHR 2018)**Q:68** What is neuroglia? Give its role. (GRW 2018)**Q:69** What are neurons? Give examples. (SWL 2018)**Q:70** Differentiate between axon and dendrite. (DGK 2018)**Q:71** Define reflex arc. (DGK 2018)**Q:72** Define Nissl's granules. (SWL 2015, MTN 2018)**Q:73** What is reflex action? (RWP 2018)**Q:74** What are effectors? Give examples. (FSD 2019)**Q:75** Define Reflex Action and Reflex Arc. (SGD 2019, SWL 2021)**Q:76** Draw labelled sketch of motor neuron. (SWL 2021)**Q:77** What are neuroglia? (MTN 2021)**Q:78** Which fundamental parts of human are involved in reflex arc? (MTN 2022)**NERVE IMPULSE****KIPS QUESTIONS:****Q:79 How active membrane potential is developed from RMP?****Ans: Active membrane potential:**

When a threshold stimulus is received, Na^+ gates open to cause rapid influx of Na^+ ions from outside. This results in the decrease in negativity at the inner side of membrane. Gradually the inner environment become positive shifting the membrane potential from RMP to a new value called Active membrane potential i.e. $+50\text{mV}$. At that point Na^+ gates become closed.

Q:80 What is nerve impulse?**Ans.** Nerve impulse is a wave of electrochemical changes, which travel along the length of neuron involving chemical reactions and movement of ions across the cell membrane.**Q:81 Define Resting Membrane Potential (RMP).****Ans.** Net difference in charge between the inner and the outer surface of a non-conducting neuron is called resting membrane potential.**Q:82 What is saltatory impulse?****Ans.** In myelinated neurons, the impulse jumps from node to node (nodes of Ranvier). This is called saltatory impulse.**PAST PAPERS QUESTIONS****Q:83** Differentiate between resting membrane potential and active membrane potential. (FSD 2017)**Q:84** Differentiate active membrane potential from resting membrane potential. (DGK 2017)**Q:85** Differentiate between active and resting membrane potential. (LHR 2018)**Q:86** Differentiate between action membrane potential and resting membrane potential. (RWP 2018)**Q:87** Define nerve impulse. (MTN 2021)**Q:88** What are sodium and potassium pumps? (MTN 2021)**Q:89** Compare nerve impulse with saltatory impulse. (FSD 2021)**Q:90** What structures show response to an impulse? Give examples. (BWP 2022)**Q:91** In what way nerve impulse triggers the action potential? (LHR 2022)

SYNAPSE**KIPS QUESTIONS****Q:92** Define synapse.**Ans.** Microscopic gaps between two consecutive neurons are called synapse.**Q:93** Name various types of neurotransmitters. Also give their occurrence.**Ans.** Common transmitters are acetylcholine, adrenaline, nor-epinephrine, serotonin and dopamine. Acetylcholine is the main transmitter for synapses that lie outside the CNS. Others are mostly involved within the CNS.**PAST PAPERS QUESTIONS****Q:94** What are neurotransmitters? Write down the names of any two. (DGK 2017)**Q:95** What are neurotransmitters? Quote an example. (FSD 2018, SGD 2018)**Q:96** What is synapse? (SWL 2019)**Q:97** Define the term synapse. (SGD 2019)**Q:98** Name any four neurotransmitters, associated with co-ordination. (MTN 2021)**Q:99** What are Neurotransmitters? Give their examples. (MTN 2021)**Q:100** What is acetylcholine? Give its role. (FSD 2021)**Q:101** What are Neurotransmitters? Give examples. (SWL 2017, MTN 2017-18, FSD 2019, GRW 2021)**Q:102** Define neurotransmitters and give examples (RWP 2021)**Q:103** What happens when an impulse reaches a synaptic knob? (LHR 2022)**Q:104** What will happen if the receptor sites on postsynaptic membrane are blocked? (MTN 2022)**Q:105** What happens when impulse reaches a synaptic knob? (SWL 2022)**CENTRAL NERVOUS SYSTEM
(BRAIN AND SPINAL COR (d))****KIPS QUESTIONS:****Q:106** What is the role of Amygdala and Hypothalamus?**Ans. Amygdala:** Its neurons produce sensation of pleasure, punishment or sexual arousal when stimulated. It is also involved in the feeling of fear and rage.**Hypothalamus:** The hypothalamus through its hormone production and neural connections acts as a major coordinating centre controlling body temperature, hunger, the menstrual cycle, water balance, the sleep-wake cycle etc.**Q:107** Differentiate between CNS and PNS.**Ans.**

CNS	PNS
It provides central control of all the activities of body.	It connects peripheral parts of the body with CNS.
It contains brain and spinal cord.	It contains nerves and ganglia.

PAST PAPERS QUESTIONS**Q:108** What is cerebrospinal fluid? Write its function. (FSD 2017)**Q:109** What is the role of Hind-brain? (MTN 2017)**Q:110** Differentiate between Corpus Callosum and Cerebral Cortex. (SGD 2017)**Q:111** Differentiate between CNS and PNS. (LHR 2019)**Q:112** Write down two major functions of mid brain. (MTN 2019)**Q:113** What is reticular formation? (RWP 2017)**Q:114** What is difference between somatic nervous system and autonomic nervous system? (DGK 2017)**Q:115** What is cerebrospinal fluid? Give its function. (FSD 2021)**Q:116** What is midbrain's reticular formation? (RWP 2021)**Q:117** Describe the neural pathways involved in regulation of reflexes. (GRW 2022)

PERIPHERAL NERVOUS SYSTEM**KIPS QUESTIONS**

Q:118 Differentiate between sympathetic and parasympathetic Nervous system.

Ans:

Sympathetic system	Parasympathetic system
The fibers arise from the middle portion of the spinal cord and terminate in ganglia that lie near the cord.	A few cranial nerves including the vagus nerve and the fibers from the bottom of spinal cord form this system.
Emergency / Fight or flight response, accelerates heart beat, dilates pupil, inhibits digestion.	Controls functions during relaxed state, contraction of pupil, promotes digestion, retards heartbeat.

Q:119 Define Nerve and Ganglia.

Ans. Nerve:

The nerves are the bundles of axons or dendrites, bounded by connective tissue.

Ganglia: Ganglia are the concentrations of cell bodies or neurons.

Q:120 What are cranial nerves?

Ans: The nerves which originate from the brain are known as cranial nerves.

12 – pairs of cranial nerves are present in Human beings.

PAST PAPERS QUESTIONS

Q:121 Compare sympathetic with parasympathetic nervous system.

(GRW 2017)

Q:122 What are parasympathetic nervous system?

(SGD 2018)

Q:123 Write down the functions of sympathetic nervous system.

(DGK 2019)

Q:124 Define Parasympathetic Nervous System.

(BWP 2022)

Q:125 Justify that sympathetic system is associated with fight or flight.

(SGD 2022)

NERVOUS DISORDERS**KIPS QUESTIONS**

Q:126 How Parkinson's disease can be treated?

Ans. Effective drugs are available such as L-dopa. A naturally occurring protein called GDNF has been shown to boost uptake of dopamine.

Q:127 Discuss the effect of Nicotine on Nervous system.

Ans. Nicotine affects post-synaptic membranes in CNS and PNS. It mimics the action of acetylcholine on nicotine receptors, so it is stimulant of nerve impulse. It increases the heart beat rate, blood pressure and digestive tract mobility. Nicotine may induce vomiting and diarrhea and even may cause water retention.

Q:128 What is epilepsy?

Ans: It is a convulsive disorder of nerves.

Symptoms:

- It is characterized by abrupt transient symptoms of motor sensory psychic or autonomic nature.
- It causes frequent consciousness.
- The above changes are secondary changes. These changes are caused due to sudden transient alterations in brain function. These alterations cause excessive rapid electric discharges in the gray matter.

PAST PAPERS QUESTIONS

Q:129 Elaborate action of nicotine on humans.

(RWP 2017)

Q:130 Write the actions of nicotine on nervous and circulatory system.

(LHR 2021)

Q:131 What is Parkinson's disease?

(LHR 2018, GRW 2021)

Q:132 Describe action of Nicotine on coordination in animals.

(MTN 2019)

Q:133 What is Epilepsy? Name the test for proper diagnosis.

(MTN 2018, SWL 2021)

Q:134 Define Epilapsy. Give its treatment.

(MTN 2021)

- Q:135 Write a note on Parkinson's disease. (FSD 2021)
 Q:136 Give negative effects of nicotine. (LHR 2022)
 Q:137 How epilepsy is characterized and diagnosed? (GRV 2022)

CHEMICAL COORDINATION & PITUITARY GLAND

KIPS QUESTIONS

Q:138 Differentiate between cretinism and dwarfism.

Ans:

Cretinism	Dwarfism
It is due to congenital deficiency of thyroid hormone.	It is due to under secretion of STH.
Mental retardation	Mental faculties usually remain normal.

PAST PAPERS QUESTIONS

- Q:139 Enlist the hormones secreted by posterior lobe of pituitary gland. (GRW 2017)
 Q:140 Which hormones are secreted by posterior lobe of pituitary gland? (BWP 2017)
 Q:141 Define Hormones. Enlist their chemical composition. (BWP 2018)
 Q:142 What are the functions of Follicle Stimulating Hormones? (BWP 2018)
 Q:143 What are the functions of oxytocin hormones? (RWP 2019)
 Q:144 List the four types of hormones with examples. (LHR 2019)
 Q:145 Enlist hormones secreted by posterior lobe of pituitary gland. (MTN 2021)
 Q:146 What are the functions of oxytocin hormones? (SGD 2021)
 Q:147 Give any two types of hormones with example on the basis of compassion. (GRW 2022)

THYROID GLAND AND PARATHYROID GLAND

KIPS QUESTIONS

Q:148 What is Grave's disease?

Ans. Excess thyroxine produces a condition called Grave's disease with exophthalmic goiter and increase in the basal metabolic rate. This can lead to cardiac failure of prolonged.

Q:149 What is myxoedema?

Ans. Deficiency of thyroxin in later life may lead to laying down of excess fats and weight is increased. This condition is known as myxoedema and is characterized by puffiness of hands and skin.

Q:150 What are the effects of low and high concentration of parathormone?

Ans:

- Under – activity or under secretion of parathormone causes a drop in blood Ca^{+} ions which may cause muscular tetany.
- Over – activity or over secretion leads to a progressive demineralization of the bones similar to rickets. It may cause the formation of massive kidney stones. Both conditions may be fatal.

PAST PAPERS QUESTIONS

- Q:151 Write two functions of Parathyroid gland. (MTN 2018)
 Q:152 What is the main function of parathyroid gland? (GRW 2019)
 Q:153 Write a note on Parathyroid Glands. (BWP 2021)
 Q:154 Justify that calcitonin is antagonistic to parathormone. (GRW 2022)

ISLETS OF LANGHERNS AND ADRENAL GLAND

KIPS QUESTIONS

Q:155 What will happen to rat if its adrenal medulla is removed surgically?

Ans: The function of Adrenal medulla is to prepare the body for stress condition as they release glucose from liver glycogen and reinforce the effects of the sympathetic system, so the ability to withstand any stress situation would be markedly diminished in that rat.

Q:156 What are androgens?

Ans: Androgens are produced by adrenal cortex of adrenal gland. Androgens cause development of the secondary male characteristics. Very small amounts of androgens are secreted in both male and female by adrenal glands. Sometimes, a tumor is developed on inner part of the adrenal cortex in females. It results in production of androgens in excess amount. Thus certain male characteristics are developed in such females. Such cases are very rare.

PAST PAPERS QUESTIONS:

Q:157 Give the functions of androgens. (BWP 2017)

Q:158 What are the abnormalities caused by the destruction of the adrenal cortex? (MTN 2019)

Q:159 How Pancreas acts as both Exocrine and Endocrine Gland? (BWP 2019)

Q:160 What is Addison's disease? (LHR 2021)

Q:161 What condition results due to hypo and hyper function of cortical hormones? (LHR 2021)

Q:162 Give the role of insulin and glucagon. (RWP 2019, SGD 2021)

GUT, GONADS AND FEEDBACK MECHANISM**KIPS QUESTIONS****Q:163 What is role of LH in males and females?**

Ans. In Female:

LH works with FSH to stimulate estrogen secretion and rupture mature follicles to release egg or ovum. It also causes the luteinization.

In Male:

LH/ICSH in the male stimulates the interstitial cells of the testis to secrete testosterone.

Q:164 What is the role of testosterone during development and at puberty?

Ans.

- In the foetus, it initiates the development of the sex organs.
- At puberty, it brings about development of the male secondary characteristics and promotes the sex drive.

Q:165 Name the two hormones of gut.

Ans:

- Gastrin
- Secretin

PASTPAPERS QUESTIONS

Q:166 Explain feed-back mechanism. Give an example. (LHR 2017)

Q:167 Define feedback mechanism. (LHR 2018)

Q:168 What do you know about Gastrin? (DGK 2018)

Q:169 Differentiate between gastrin and secretin. (SWL 2018)

Q:170 Discuss the role of progesterone in reproductive cycle of human females. (MTN 2019)

Q:171 Differentiate between gastrin and secretin hormone. (DGK 2019)

Q:172 Write the role of progesterone. (LHR 2021)

Q:173 Describe feedback mechanism with an example. (BWP 2019, 2021)

Q:174 Why is feedback mechanism so important in maintaining homeostasis? (DGK 2022)

Q:175 Write functions of gastrin. From where it is secreted? (SGD 2022)

COMPARISON OF NERVOUS COORDINATION AND CHEMICAL COORDINATION**KIPS QUESTIONS****Q:176 What are the similarities between nervous and chemical coordination?**

Ans.

- Both synthesize chemical messengers.
- Both release chemical messengers in extracellular space of body.
- Both help in coordination.
- Both respond to specific stimuli.
- Both are homeostatic in function.

PAST PAPERS QUESTIONS

Q:177 What are two similarities of nervous coordination and chemical coordination? **(DJK 2019)**

BEHAVIOUR

KIPS QUESTIONS

Q:178 What is sign stimulus?

Ans. A sign stimulus is a part of stimulus configuration and may be relatively a simple part that elicits a specific behavioral response.

Q:179 Differentiate instinctive behaviour from learning behaviour.

Ans:

Instinctive Behaviour	Learning behavior
This is the type of behaviour that depends on the hereditary material which the animal inherits. The animal may be born with the right responses built in the nervous system as part of its inherited structure.	This type of behaviour also depends on the environmental influence, but the ability to modify its behaviour depends on the hereditary material
Experience has no obvious influence on this type of behavior	Experience has an obvious influence on this type of behaviour.

PAST PAPERS QUESTIONS

Q:180 Differentiate between kinesis and taxis. **(GRW 2016, 2018, 2019, LHR 2021)**

LEARNING BEHAVIOUR

KIPS QUESTIONS

Q:181 Define imprinting and Habituation.

Ans. Imprinting:

It is a form of learning in which shape or form of objects can be 'imprinted'.

Habituation:

Habituation is the simplest form of learning and involves modification of behaviour through a diminution of response to repeated stimuli.

PAST PAPERS QUESTIONS

Q:182 What is Imprinting? **(MTN 2017)**

Q:183 Name the four types of learning behaviour. **(GRW 2018)**

Q:184 Define latent learning. Explain with example. **(DGK 2018)**

Q:185 Define habituation. Give one example. **(DGK 2018, LHR 2019)**

Q:186 What is conditioning in learning behavior? **(SWL2019)**

Q:187 What do you know about Latent learning? **(SGD 2019)**

Q:188 Define imprinting with the example of precocial birds **(LHR 2021)**

Q:189 Elaborate habituation as simplest form of learning **(LHR 2022)**

Q:190 Irrelevant stimulus can be paired with natural stimulus in a type of learning. Comment on it. **(BWP 2022)**

Q:191 Interpret habituation with the help of an example. **(SGD 2022)**