

Grade	Subject Name	Question ID	Key	Cognitive Level	SLO #	SLO Text
XI-2022	Biology	1	D	U	3.3.1	compare lock and key model and induced fit model of enzyme action
XI-2022	Biology	2	C	U	3.4.1	verify the effect of different factors, i.e. pH and temperature on the rate of enzyme action using graph;
XI-2022	Biology	3	A	U	3.5.3	explain feedback inhibition;
XI-2022	Biology	4	A	U	3.6.1	classify enzymes on the basis of reactions they catalyse and nature of substrate.
XI-2022	Biology	5	B	U	10.2.1	differentiate among various phyla of kingdom animalia on the basis of their body plan, i.e. a.type of symmetry (radial and bilateral symmetry) b.tissue organisation (diploblastic and triploblastic) c.body cavities (acoelomates, pseudocoelomates and coelomates) d.pattern of development (protostomes and deuterostomes);
XI-2022	Biology	6	D	U	10.3.1; 10.4.1	explain coelenterates with reference to their a.general characteristics b.origin of diploblastic organisation c.radial symmetry d.polymorphism and alternation of generation e.formation of coral reef 10.3.1 explain general characteristics of poriferans;
XI-2022	Biology	7	D	U	10.5.1	explain general characteristics of platyhelminthes;
XI-2022	Biology	8	B	U	10.2.1;10.9.2	differentiate among various phyla of kingdom animalia on the basis of their body plan, i.e. a. type of symmetry (radial and bilateral symmetry); describe characteristics of classes of molluscs, i.e. a. gastropoda b. bivalvia
XI-2022	Biology	9	C	U	10.8.2	describe the major classes of arthropodes, i.e. a.arachnida b.crustaceae c.insecta d.myriapoda;
XI-2022	Biology	10	B	U	10.9.2	describe characteristics of classes of molluscs, i.e. a.gastropoda b.bivalvia c.cephalopoda;
XI-2022	Biology	11	A	U	10.13.8	discuss reptiles as successful land vertebrates;

XI-2022	Biology	12	B	U	10.13.10	explain the adaptations of birds for aerial mode of life (flight adaptations);
XI-2022	Biology	13	A	U	6.2.5	relate the function of each component of bacterial cell with its structure, i.e. a.cell wall b.cell membrane c.cytoplasm d.mesosomes e.chromatin f.endospore g.plasmid h.ribosomes i.flagella j.capsule;
XI-2022	Biology	14	A	K	6.4.1	describe obligatory aerobes, micro-aerobes, facultative and obligatory anaerobes;
XI-2022	Biology	15	B	K	7.3.3	list the pathogenic protozoan and diseases caused by them;
XI-2022	Biology	16	A	K	7.4.1	describe salient features of plant-like protists;
XI-2022	Biology	17	A	U	8.2.1	differentiate among main groups of fungi based on their reproductive structures and methods of reproduction;
XI-2022	Biology	18	C	U	8.2.1	differentiate among main groups of fungi based on their reproductive structures and methods of reproduction;
XI-2022	Biology	19	A	U	8.2.1	differentiate among main groups of fungi based on their reproductive structures and methods of reproduction;
XI-2022	Biology	20	B	U	8.4.1	discuss ecological and commercial importance of fungi;
XI-2022	Biology	21	C	U	9.2.5	discuss the adaptive characteristics of bryophytes in the land habitat;
XI-2022	Biology	22	A	U	9.3.1	compare major groups of tracheophyta, i.e. a.psilopsida b.lycopsida c.sphenopsida d.pteropsida;
XI-2022	Biology	23	C	U	9.3.1	compare major groups of tracheophyta, i.e. a.psilopsida b.lycopsida c.sphenopsida d.pteropsida;
XI-2022	Biology	24	B	U	9.4.3	explain life cycle of an angiosperm with diagram;
XI-2022	Biology	25	C	K	9.5.1	differentiate among vegetative characteristics, floral characteristics and economic importance of angiospermic families, i.e. a.Rosaceae b.Solanaceae c.Fabaceae d.Caesalpinaceae e.Mimosaceae f.Poaceae.
XI-2022	Biology	26	A	U	9.4.2	explain life cycle of pinus (gymnosperm) with diagram;

XI-2022	Biology	27	C	U	11.2.6	describe main events of light dependent reactions (energy conversion, formation of ATP and NADPH);
XI-2022	Biology	28	B	U	11.2.8	describe three phases of light independent (dark) reactions;
XI-2022	Biology	29	C	U	11.2.9	compare C3, C4 and CAM plants;
XI-2022	Biology	30	C	K	11.3.4	explain the steps involved in the mechanism of cellular respiration, i.e. a.glycolysis b.pyruvic acid oxidation (formation of acetyl CoA) c.Krebs cycle (citric acid cycle) d.respiratory chain.
XI-2022	Biology	31	A	U	11.3.4	explain the steps involved in the mechanism of cellular respiration, i.e. a.glycolysis b.pyruvic acid oxidation (formation of acetyl CoA) c.Krebs cycle (citric acid cycle) d.respiratory chain.
XI-2022	Biology	32	A	U	12.1.4	differentiate among various modes of heterotrophic nutrition in plants, i.e. a.saprophytic nutrition b.parasitic nutrition c.symbiotic nutrition d.insectivorous nutrition;
XI-2022	Biology	33	B	U	12.4.1	relate the function of each organ of digestive system of the human with its structure: a.gastrointestinal tract (GIT) i.oral cavity ii.pharynx iii.oesophagus iv.stomach v.small intestine vi.large intestine vii.rectum and anus b.accessory digestive organs i.dentition ii.tongue iii.salivary glands (composition of saliva) iv.liver (gall bladder and composition of bile) v.pancreas (composition of pancreatic juice);
XI-2022	Biology	34	D	U	12.4.1	relate the function of each organ of digestive system of the human with its structure: a.gastrointestinal tract (GIT) i.oral cavity ii.pharynx iii.oesophagus iv.stomach v.small intestine vi.large intestine vii.rectum and anus b.accessory digestive organs i.dentition ii.tongue iii.salivary glands (composition of saliva) iv.liver (gall bladder and composition of bile) v.pancreas (composition of pancreatic juice);

XI-2022	Biology	35	B	U	12.4.2	discuss the process of digestion of carbohydrates, proteins and lipids in human being;
XI-2022	Biology	36	C	K	12.4.5	describe disorders of GIT, i.e. diarrhoea, dysentery, constipation, piles, dyspepsia, peptic ulcer, food poisoning, anorexia and bulimia nervosa;
XI-2022	Biology	37	C	K	13.1.3	differentiate between gaseous exchange in plants through stomata and lenticels;
XI-2022	Biology	38	C	U	13.1.4	describe process and importance of photorespiration;
XI-2022	Biology	39	B	U	13.2.3	explain the mechanism of gaseous exchange in fish, frogs and birds;
XI-2022	Biology	40	D	K	13.2.2	describe process of gaseous exchange in hydra, earthworm and cockroach;
XI-2022	Biology	41	A	U	13.3.4	explain transportation of carbon dioxide and oxygen by the blood;
XI-2022	Biology	42	D	U	13.4.1	discuss causes, symptoms and preventive measures of: a.upper respiratory tract infections i.sinusitis ii.otitis media b.lower respiratory tract infections i.pneumonia ii.tuberculosis iii.emphysema iv.lung cancer;
XI-2022	Biology	43	C	K	14.2.3	calculate water potential of living cells;
XI-2022	Biology	44	B	U	14.2.1	explain uptake of water and minerals by roots and pathways (apoplast, symplast and vacuolar) involved in it;
XI-2022	Biology	45	B	U	14.4.3	explain mechanisms involved in opening and closing of stomata, i.e. a.starch sugar hypothesis b.influx of potassium ions;
XI-2022	Biology	46	B	K	14.4.4	analyse the effect of various factors affecting the rate of transpiration, i.e. a.light b.wind c.humidity d.temperature e.availability of soil water f.carbon dioxide concentration;
XI-2022	Biology	47	D	U	14.7.8	differentiate among artery, vein and capillary on the basis of their structure
XI-2022	Biology	48	C	U	14.7.2	describe disorders of blood, i.e. a.leukaemia b.thalassemia c.oedema;
XI-2022	Biology	49	A	U	14.7.5	explain cardiac cycle (sequence of events and mechanism of heart excitation and contraction);

XI-2022	Biology	50	B	U	14.7.5	explain cardiac cycle (sequence of events and mechanism of heart excitation and contraction);
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