Subject Code : 602 Section Code : -Select- Difficulty: 1

Subject Code	Q Id	Questions	Answer Key
602	901	Who developed the aeroponic method of cultivation of plants? (A) Antonie van Leeuwenhoek (B) Murashige and Skoog (C) Davis et al (D) Zobel et al	(D)
602	902	Which one of the following has the haustoria? (A) Mango (B) Orchid (C) Cuscuta (D) Cashew nut	(C)
602	903	Green Fluorescent Protein (GFP) was isolated from (A) *C. elegans* (B) *Drosophila melanogaster* (C) *Aequoria victoria* (D) *Zea mays*	(C)
602	904	Viticulture is the branch of study of crop plants pertaining to (A) Betel vines (B) Grapes (C) Oranges (D) Pine apples	(B)
602	905	The most abundant sugar in honey is (A) Fucose (B) Amylose (C) Rhamnose (D) Fructose	(D)
602	906	Which of the following is a viral disease of potato? (A) Early blight of potato (B) Late blight of potato (C) Leaf role of potato (D) None of the above	(B)
602	907	Which of the following is a capsid? (A) Protein part of the virus (B) Nucleic acid part of the virus (C) Both (A) and (B)	(A)

		(D) None of the above	
602	908	The germination of pine seed is (A) Hypogeal (B) Epigeal (C) Vivipary (D) Ovipary	(B)
602	909	Green fodder stored under anaerobic condition is known as (A) hay (B) straw (C) silage (D) roughage	(C)
602	910	The plant with the smallest genome is (A) *Oryza sativa* (B) *Vigna mungo* (C) *Arabidopsis thaliana* (D) *Nicotiana tabacum*	(C)
602	911	The chemical molecule that signals the symbiosis is (A) Curcumin (B) Flavonoid (C) Cytochrome C (D) Glycogen	(B)
602	912	DNA synthesis occurs during (A) Anaphase (B) G1 phase (C) G2 phase (D) S phase	(D)
602	913	Regulated processes leading to cell death via a series of well-defined morphological changes is termed as (A) Anabolism (B) Apomixis (C) Apoptosis (D) Synopsis	(C)
602	914	Out of 900 reported species of living gymnosperms, conifers are represented by about 500 species. About 2,50,000 species of angiosperms are also reported in the world. The vast and dominant woodlands in Europe, Asia, North America and mountains such as Himalayas are wooded with (A) All gymnosperms except conifers (B) Only conifers (C) Only angiosperms (D) Angiosperms and all gymnosperms except conifers	(B)

602	915	Transduction was discovered by (A) Safferman and Moris (B) Louis Pasteur (C) Smithy and Knight (D) Lederberg and Zinder	(D)
602	916	Which one of the following form the trunk of banana? (A) Inflorescence (B) Pseudo stem (C) Rhizome (D) Young leaf	(B)
602	917	Law of segregation is also called as (A) Law of purity (B) Law of impurity (C) Law of mutation (D) Principle of segregation	(A)
602	918	Plants that grow on sand are termed as (A) Chasmophytes (B) Oxylophytes (C) Xanthophytes (D) Psammophytes	(D)
602	919	The method of reproduction in pteriodophytes is through (A) Seeds (B) Spores (C) Fruitlet (D) Buds	(B)
602	920	Development of fruit without fertilization is called as (A) Apocarpy (B) Polycorpy (C) Parthenocarpy (D) Syncarpy	(C)
602	921	A plant that helps cure jaundice is (A) *Lactra saliva* (B) *Helianthus annus* (C) *Phyllanthus niruri* (D) *Withania somifera*	(C)
602	922	Monocot root differs from that of dicot in having (A) Open vascular bundles (B) Scattered vascular bundles	(C)

		(C) Well-developed pith (D) Radial arrangement of vascular bundles	
602	923	Dahlia mosaic virus contains (A) RNA (B) DNA (C) Both DNA and RNA (D) None of the above	(B)
602	924	An example of transposons is (A) An-Ab complex (B) Ac-Ds elements (C) FMN/FAD (D) NAD/NAD	(B)
602	925	Which organelle has only single membrane? (A) Nucleolus (B) Mitochondrion (C) Peroxisome (D) Golgi body	(C)
602	926	Cyrbrids are hybrids having (A) Nucleus from one parent and cytoplasm from both parents (B) Nucleus from both parents and cytoplasm from only one parent (C) Both (A) and (B) (D) Nuclei from both parents and cytoplasm from one parent	(A)
602	927	Agroinfection is a process of (A) Infection of crop plants with fungus (B) Infection of agricultural plants with virus (C) *A. tumifaciens* infects legume plants (D) *A. tumifaciens* transfers a piece of DNA to host genome	(D)
602	928	The term ‘embryo rescue’ is used for (A) Embryo culture (B) Ovary culture (C) Ovule culture (D) All of the above	(D)
602	929	The true statement about ‘green house effect’ is that it is (A) caused by combination of many gases (B) caused by CO_2 (C) caused only by CO_2, CFC, CH_4 and NO_2 gases (D) None of the above	(B)

602	930	The molecule(s) formed during cyclic-photophosphorylation include (A) ADP (B) $NADPH_2$ (C) ATP (D) ATP + $NADPH_2$	(D)
602	931	The process of photorespiration in plants leads to (A) release of enhanced levels of CO_2 (B) removal of waste metabolites (C) lowering of the efficiency of photosynthetic carbon fixation (D) enhanced plant biomass	(C)
602	932	Biodiversity (A) decreases towards the equator (B) increases towards the equator (C) remains unaltered throughout the planet (D) None of the above	(B)
602	933	Fluorescein diacetate is used to test the pollen viability based on the activity of which one of the following enzymes? (A) Amylase (B) Esterase (C) Catalase (D) Decarboxylase	(B)
602	934	A red-fruited tomato plant was crossed with yellow colored fruit one, produced 173 offspring 84 of which were yellow and 89 red. Determine the genotype of parents. (A) 1 : 1 (B) 1 : 3 (C) 1 : 3 : 3: 1 (D) None of the above	(A)
602	935	In cereals, *Puccinia graminis* causes (A) Blight (B) Gall (C) Rust (D) Wilt	(C)
602	936	Ribose has 5 carbon atoms of which 3 are *asymmetric*. What is the maximum number of stereoisomers that may exist for ribose in Pentose Phosphate Pathway? (A) 2 (B) 6 (C) 8 (D) 10	(C)

602	937	Hardness of water is mainly due to the presence of (A) Na^+ (B) Ca and Mg ions (C) $H_2 SO_4$ (D) Cl and SO_4^- ions	(B)
602	938	Edible part of banana fruit is (A) Epicarp (B) Epicarp and mesocarp (C) Mesocarp and less developed endocarp (D) Endocarp and less developed mesocarp	(D)
602	939	Choose the volume (ml) of 5M Sulphuric acid required to prepare 1 litre 0.002M solution (A) 4.0 (B) 40.0 (C) 0.4 (D) 400.0	(C)
602	940	Indefinite stamens are characteristic of family (A) Labiatae (B) Gramineae (C) Malvaceae (D) Cruciferae	(C)
602	941	Inversion is a (A) somatic mutation (B) genetic mutation (C) chromosomal mutation (D) point mutation	(C)
602	942	Community ecology is called as (A) Autecology (B) Caste (C) Synecology (D) Both (A) and	(C)
602	943	Phosphoric acid is tribasic with pKa's of 2 14, 6.86 and 12.4. The ionic form that predominates at pH 3.2 is (A) H_3PO_4 (B) H_2PO_4 - (C) HPO_4 -- (D) PO_4 ---	(B)
602	944	A nucleoside is composed of (A) Nitrogenous base	(C)

		(B) Nitrogenous base + Phosphate (C) Nitrogenous base + Sugar (D) Nitrogenous base + Sugar + Phosphate	
602	945	Polyethylene glycol is a (A) mutagen (B) fusogen (C) immunogen (D) carcinogen	(B)
602	946	Period of dry weather longer than normal is called as (A) flood (B) famine (C) disaster (D) drought	(D)
602	947	Which of the following absent, according to Oparin, on the primitive surface of Earth? (A) CH_4 (B) O_2 (C) H_2 (D) H_2O	(B)
602	948	The technique used to produce a large number of plantlets by tissue culture is (A) Plantlet culture (B) Organ culture (C) Micropropagation (D) Macropropagation	(C)
602	949	Biogas is a mixture of (A) 40% CH_2 and 60% CO_2 (B) 40% CH_4 and 60% C_2H_2 (C) 40% CO_2 and 60% C_2H_2 (D) 60% CH_4 and 40% CO_2	(D)
602	950	Totipotency means (A) flowering in culture medium (B) development of fruit from flower in culture (C) development of plant from a cell in a culture medium (D) All of the above	(C)
602	951	The simplest plant genome greatly understood is that of (A) *Oryza sativa* (B) *Arabidopsis thaliana*	(B)

		(C) *Pisum sativum* (D) *Triticum aestivum*	
602	952	In Cycas the endosperm is (A) Haploid (B) Diploid (C) Triploid (D) Tetraploid	(A)
602	953	Pollination by wind is called as (A) Anemophily (B) Hydrophily (C) Entomorphily (D) Zoophily	(A)
602	954	*Puccinia graminis* causes (A) Wilt (B) Rust (C) Stunted growth (D) Leaf curl disease	(B)
602	955	Disaccharide molecules that contain *b 1 -4* glycosidic linkage include (A) Sucrose and Maltose (B) Sucrose and Isomaltose (C) Maltose and Isomaltose (D) Lactose and Celloboise	(D)
602	956	Clove, a commonly used spice is obtained from (A) Leaf (B) Flower bud (C) Root (D) Fruit	(B)
602	957	Which family of viruses belongs to single-strand DNA? (A) Herpesviridae (B) Poxviridae (C) Retroviridae (D) Geminiviridae	(D)
602	958	Crossing of F1 heterozygous with homozygous recessive parent is known as (A) Poly crosses (B) Test cross (C) Reciprocal crosses (D) Top cross	(B)

602	959	Chlorosis in plants occurs due to (A) high intensity of sunlight (B) low intensity of sunlight (C) deficiency of Mg and Fe in the soil (D) absence of yellow pigment in the soil	(C)
602	960	Gasohol is a blend of (A) 20% ethanol + 70% petrol + 10% kerosene (B) 10% ethanol + 80% petrol + 10% kerosene (C) 20% ethanol + 80% petrol (D) 10% ethanol + 90% petrol	(C)
602	961	In N-linked glycosylation, the oligosaccharide chain is attached to protein by (A) Asn (B) Arg (C) Ser (D) Thr	(A)
602	962	During lactic acid fermentation, net yield of ATP and NADH per glucose is (A) 2 ATP and 2 NADH (B) 2 ATP and 0 NADH (C) 4 ATP AND 2 NADH (D) 4 ATP AND 0 NADH	(A)
602	963	Diisopropyl fluorophosphates (DIPFP) inhibits serine proteases by (A) competitively (B) non-competitively (C) irreversibly (D) feed-back mode	(C)
602	964	Enzymes with the same recognition sequence are known as (A) Isobars (B) Isozymes (C) Enantiomers (D) Isoschizomers	(D)
602	965	Colchicine is a mitosis inhibitor because it (A) prevents microtubule polymerization (B) affects spindle formation (C) clogs the cells (D) dissolves nucleus	(A)
602	966	Cybrids are (A) nuclear hybrids (B) derived from cross pollination	(D)

		(C) cytological hybrids (D) cytoplasmic hybrids	
602	967	Caterpillar that affects coconut is (A) Calcandra oryza (B) Prodenia litura (C) Nephantis seranopa (D) Pectinophora gossypiella	(C)
602	968	In blue-green alga, photosynthesis takes place in (A) Chloroplasts (B) Lamellae (C) Heterocysts (D) Carotene	(B)
602	969	The phylogenetic system of classification was proposed by (A) Bentham and Hooker (B) Adolf Engler and Karl Prantl (C) Darwin and Malthus (D) Carl Linnaeus	(B)
602	970	Angiosperms are (A) open seeded plants (B) closed seeded plants (C) seedless plants (D) aquatic plants	(B)
602	971	When the calyx and corolla are combined, it is called (A) Epicalyx (B) Leaf sheath (C) Bracteole (D) Perianth	(D)
602	972	*Solanum tuberosum* is (A) Tomato (B) Potato (C) Banana (D) Mango	(B)
602	973	The collection of dried plant specimens is called (A) Vivarium (B) Aquarium (C) Terrarium (D) Herbarium	(D)

602	974	What is the byproduct of bacterial photosynthesis? (A) Oxygen (B) Hydrous oxide (C) Sulphur (D) Hydrogen sulphide	(C)
602	975	In which phase of mitosis in plant cells does the nucleolus in the nucleus seem to reappear? (A) Telophase (B) Prophase (C) Metaphase (D) Anaphase	(A)
602	976	Which of the following is a primary or transitional meristem? (A) Root hair (B) Ground meristem (C) Collenchyma (D) Vascular cambium	(B)
602	977	Pine and fir are abundant in (A) tropical forests (B) coniferous forests (C) temperate forests (D) polar forests	(B)
602	978	*Eugenia caryophyllus* is the botanical name of (A) Clove (B) Eucalyptus (C) Coriander (D) Cardamom	(A)
602	979	Air pollution affects plants mostly on (A) leaves (B) flowers (C) stems (D) roots	(A)
602	980	The seed germination in *Xanthium* is inhibited by (A) Allelopathy (B) Hard seed coat (C) Dormant embryo (D) Reduced embryo	(B)
602	981	Companion cells have not been observed in the following angiosperm/s (A) *Austrobaileya* (B) *Sarcandra and Gentum*	(A)

		(C) *Austrobaileya and Sarcandra* (D) All of the above	
602	982	The modified stem present in *Dioscorea* is (A) Rhizome (B) Corm (C) Tuber (D) Sobole	(B)
602	983	The anthers in Cruciferae are (A) dithecous, extrorse (B) dithecous introrse (C) monothecous, extrorse (D) monothecous, introrse	(B)
602	984	The lightest wood in the plant kingdom comes from (A) *Aeschynomene indica* (B) *Ougenia dalbergioides* (C) *Ochroma lagopus* (D) *Erythrina suberosa*	(C)
602	985	*Spirogyra* reproduces asexually by forming (A) Akinete (B) Zoospores (C) Hypnospores (D) Aplanosphore	(D)
602	986	Which of the following plants is generally described as living fossil? (A) *Cycas* (B) *Cupressus* (C) *Taxus* (D) *Ephedra*	(A)
602	987	The transition zone between two different communities is called as (A) Ecad (B) Ecotype (C) Ecotone (D) None of the above	(C)
602	988	'Whip tail' in cauliflower is caused due to the deficiency of (A) Boron (B) Molydenum (C) Copper (D) Zinc	(B)

602	989	The phenomenon of ‘red snow’ is due to the alga (A) *Chlamydomonas nivalis* (B) *Nostoc commune* (C) *Voucheria hamata* (D) *Oscillatoria terebriformis*	(A)
602	990	As water pollution increases in a stream, the values of BOD and COD change in the following manner (A) BOD decreases and COD increases (B) BOD increases and COD decreases (C) Both decrease (D) Both increase	(D)
602	991	Viticulture is the branch of study of crop plants pertaining to (A) ABA (B) Inhibitor *b* (C) Ethylene (D) Cyanide	(B)
602	992	The cork cambium in roots arises from the cells of (A) primary phloem (B) inner cortex (C) outer cortex (D) pericycle	(D)
602	993	The edible portion in mulberry comprises of (A) Pericarp (B) Meso and endocarp (C) Endocarp only (D) Perianth	(D)
602	994	The ‘black tongue’ disease is caused by the yeast (A) *Nematospora sp.* (B) *Oospora sp.* (C) *Monosporella sp.* (D) *Schizosaccharomyces sp.*	(B)
602	995	In pteridium, the sorus is (A) superficial and discontinuous (B) superficial and continuous (C) marginal and discontinuous (D) marginal and continuous	(D)
602	996	Genetically engineered bacteria are used in the commercial production of (A) thyroxine (B) testosterone	(C)

		(C) human insulin (D) melatonin	
602	997	Kreb's cycle operates in (A) cytoplasm (B) ribosomes (C) mitochondria (D) chloroplasts	(C)
602	998	Niche of a species in an ecosystem refers to its (A) place of its occurrence (B) competitive ability (C) centre of origin (D) function at its place of occurrence	(D)
602	999	The most effective wavelength of visible light in photosynthesis in the region of which of the following: (A) Green (B) Yellow (C) Red (D) Violet	(C)
602	1000	Which part of the coconut produces coir? (A) Seed coat (B) Pericarp (C) Mesocarp (D) Epicarp	(C)
602	1001	Which one of the following is known as 'blue mould'? (A) *Penicillium* (B) *Erisiphe* (C) *Aspergillum* (D) *Peziza*	(A)
602	1002	Agar-agar is extracted from (A) Blue-green algae (B) Brown algae (C) Green algae (D) Red algae	(D)
602	1003	Petioles are modified into tendrils in (A) *Passiflora* (B) *Gloriosa* (C) *Clematis* (D) *Antigonon*	(C)

602	1004	*Datura* belongs to the family (A) Compositae (B) Cruciferae (C) Liliaceae (D) Solanaceae	(D)
602	1005	The cell organelle associated with photorespiration is (A) glyoxysome (B) lysosome (C) mesosome (D) ribosome	(A)
602	1006	*Hevea brasilensis* is a source of (A) rubber (B) spice (C) beverage (D) dye	(A)
602	1007	The botanical name of jute is (A) *Linus usitatissimum* (B) *Corchorus capsularis* (C) *Hibiscus sabdariffa* (D) *Crotalaria juncea*	(B)
602	1008	Where is the Sugarcane Breeding Institute located? (A) Lucknow (B) Mysore (C) Coimbatore (D) Ludhiana	(C)
602	1009	*Cicer arietinum* is known as (A) black gram (B) green gram (C) Bengal gram (D) dew gram	(C)
602	1010	In plant cells, the number of Golgi bodies increases during (A) cell division (B) food synthesis (C) translocation (D) respiration	(A)
602	1011	*Cinchona* plant is also known as (A) Prickly bark (B) Turmeric bark	(C)

		(C) Peruvian bark (D) Devil's dung bark	
602	1012	Which one of the following is not a pteridophyte? (A) *Ginkgo* (B) *Selaginella* (C) *Polypodium* (D) *Azolla*	(A)
602	1013	*Mimosa pudica* bears (A) monocarpellary gynoecium (B) simple leaves (C) trimerous flower (D) closed vascular bundles	(A)
602	1014	Monadelphous condition describes (A) aestivation of floral leaves (B) cohesion of stamens (C) placentation in ovary (D) adhesion of stamens	(B)
602	1015	A bicollateral vascular bundle means (A) xylum and phloem arranged alternately (B) xylum surrounded by phloem (C) phloem surrounded by xylum (D) phloem situated both on outer and inner face of xylum	(D)
602	1016	Agrostology is related with the study of (A) Agricultural growth (B) Epiphytes (C) Grasses (D) Nematode diseases	(C)
602	1017	A dihybrid ratio is (A) 1 : 1 : 1 : 1 (B) 3 : 1 (C) 9 : 3 : 3 : 1 (D) 9 : 5 : 1 : 1	(C)
602	1018	Zygotic meiosis takes place in (A) *Selaginella* (B) *Spirogyra* (C) *Pinus* (D) *Brassica*	(B)

602	1019	The drug 'Belladonna' is obtained from (A) *Atropa* (B) *Ravoulfa* (C) *Solanum* (D) *Capsicum*	(A)
602	1020	Cristae help in (A) respiration (B) transpiration (C) photosynthesis (D) photo-oxidation	(A)
602	1021	In xerophytic plants, leaves are arranged into spines in structures called (A) Phyllode (B) Phylloclade (C) Cladode (D) Stipule	(B)
602	1022	Which type of fruit is found in sunflower? (A) Siliqua (B) Silicula (C) Capsule (D) Cypsella	(D)
602	1023	Root cap is formed by (A) Calyptra (B) Root nodules (C) Calyptrogen (D) Algae	(C)
602	1024	Still root is present in (A) Banyan (B) Rice (C) Sugarcane (D) Mango	(C)
602	1025	Which green-house gas, other than methane, is being produced from the agricultural fields? (A) Arsine (B) Sulphur dioxide (C) Ammonia (D) Nitrous oxide	(D)
602	1026	Genes that are involved in switching on or off the transcription of a set of structural genes are called (A) Polymorphic genes (B) Operator genes	(B)

		(C) Redundant genes (D) Regulatory genes	
602	1027	Which one of the following is used for the production of citric acid in industries? (A) *Lactocacillus bulgaris* (B) *Penicillium citrinium* (C) *Aspergillus niger* (D) *Rhizopus nigricans*	(C)
602	1028	When a plant of F-1 generation is crossed with homozygous dominant plants, it is known as (A) Simple cross (B) Test cross (C) Backcross (D) Special cross	(C)
602	1029	Which one of the following is not involved in the fertilization of ferns? (A) Flagellated spores (B) Archegonia (C) Water (D) Pollen tube	(D)
602	1030	In soil, water available for plants, as (A) Capillary water (B) Hygroscopic water (C) Gravitational water (D) Chemically-bound water	(A)
602	1031	Casparian stripes are found in (A) Periderm (B) Endodermis (C) Epidermis (D) Hypodermis	(B)
602	1032	L-shaped chromosomes are called (A) Sex-chromosomes (B) Acrocentric (C) Telocentric (D) Sub-metacentric	(D)
602	1033	In which of the following multiciliated antherozoids are present? (A) *Riccia and Funaria* (B) *Pteris and Cycas* (C) *Riccia and Pteris* (D) *Marchantia and Riccia*	(B)

602	1034	Red rust of tea is caused by (A) *Cephaleuros* (B) *Synchytrium* (C) *Mucor* (D) *Fusarium*	(A)
602	1035	In peritrichous bacteria, hairs are (A) present at one end (B) present at both ends (C) absent (D) present all over the body	(D)
602	1036	The pyramid of biomass in a parasitic ecosystem is (A) upright (B) inverted (C) rhomboidal (D) linear	(A)
602	1037	Finger millet is (A) *Sataria italic* (B) *Echinocloa colonum* (C) *Panicum miliare* (D) *Eleucine coracana*	(D)
602	1038	Gum is secreted by one of the following (A) *Zanthaoxylum* (B) *Glycomis* (C) *Aegle* (D) *Cusparia*	(C)
602	1039	The placentation in Rutaceae is (A) axile or parietal (B) parietal or free-central (C) axile or free-central (D) parietal or basal	(A)
602	1040	Runners are found in (A) *Spiraea* (B) *Rosa* (C) *Poterium* (D) *Fragaria*	(D)
602	1041	The dye comes from which part of *Toddalia asiatica* (A) Root bark (B) Heartwood	(A)

		(C) Leaves (D) Flowers	
602	1042	For chlorophyll formation in plants, the following elements are needed (A) sodium and copper (B) calcium and potassium (C) iron and magnesium (D) iron and calcium	(C)
602	1043	The common transport form of sugar in plants is (A) glucose (B) fructose (C) sucrose (D) galactose	(C)
602	1044	The kind of stomata generally found in the members of Solanaceae and Cruciferae are (A) Anomocytic (B) Anisocytic (C) Paracytic (D) Actinocytic	(B)
602	1045	The leaves of Allium are (A) Isobilateral (B) Bifacial (C) Cylindrical (D) Equifacial	(C)
602	1046	The site of meiotic division in higher plants is (A) vegetative buds (B) root tip cells (C) stomatal cells (D) spore mother cells	(D)
602	1047	Which is the largest bud eaten? (A) Celery (B) Cauliflower (C) Cabbage (D) Cassava	(C)
602	1048	Euglena is classified under one of the following kingdoms (A) Animal (B) Plant (C) Protista (D) Both plant and animal	(C)

602	1049	The character that appears in F_1 is called (A) Recessive (B) Incomplete dominance (C) Dominant (D) None of the above	(C)
602	1050	HCN is released after bruises from (A) apple (B) banana (C) custard (D) tapioca	(D)