

Rayat Shikshan Sanstha's

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Department of Botany

Question Bank – B. Sc. II

1) What may be defined as occurrence of two or more embryos in one ovule.? a. Polyembryony c. Parthenocarpy d. Embryogenesis b. Nucellus 2) Who noticed polyembryony in orange seeds.? a. Ernst b. Winkler c. Schnarf d. Anton Von Leeuwenhoek 3) The true or false polyembryony is given by? b. Ernst and Schnarf a. Winkler and Schnarf c. Ernst and Winkler d. Leeuwenhoek and Ernst 4) The term apomixis is coined by? a. Schnarf b. Winkler c. Leeuwenhoek d. None 5) Apomixis is of how many main types b. 5 d. 1 a. 4 c. 2 6) In adventive embryony, the embryo develops directly from the? b. Accessory embryo sacs in the ovule a. Zygote c. Antipodals or synergids in an embryo sac d. Integuments or nucleus 7) Polyembryony was first seen in_ c. Citrus fruit a. Tamarind b. Sapota d. Watermelon 8) What is diplospory? a. Embryo develops from megaspore mother cell b. Embryo develops from integuments c. Embryo develops from synergid cells d. Embryo develops from antipodal cells 9) The fusion of 2 haploid gamets during fertilization is referred as a. Syngamy b. Apomixis c. Pollination d. Apospory 10) When embryos are developed from cells of nucellus it is referred as a. Monosporic b. Polyembryony c. Apomictic d. Multiovulate 11) The process of formation of embryo with fertilization is known as a. Polyembryony b. Apomixis c. Amphimixis d. Vivipary 12) In sexual reproduction fertilization and are the crucial stages a. Pollination b. Meiosis c. Mitosis d. Polyembryony 13) The vegetative propagation of the plants is one type of

a. Polyembryony b. Apomixis c. Parthenocarpy d. Sexual Reproduction 14) The product of double fertilization is c. Nucellus d. Synergids a. Endosperm b. Embryo sac 15) The embryo developed from any haploid cell of female gametophyte is referred as..... polyembryony? a. False b. True c. Sporophytic d. Apomictic 16) Indiploid cell is formed from megaspore mother cell a. Monospry b. Vivipary c. Diplospory d. Amphimixis 17) Necrohormone theory was given by? a. Haberlandt b. Schnarf d. Winkler c. Earnst 18) In plants, apomixis pertains to plant development? a. from root cuttings b. from cuttings of stem c. without the gametes having to fuse d. fusion of gametes 19) Processes by which Embryos are formed by eliminating meiosis and syngamy is called? a. Agamospermy b. Polyembryony c. Apospory d. Parthenocarpy 20). It includes vegetative reproduction and agamospermy.? a. Recurrent apomixis b. Non- recurrent apomixis d. None of the above c. Both 21) The primary endosperm nucleus is a. tetraploid b. triploid c. diploid d. haploid 22) The white edible part of maize is a. Pericarp b. seed coat c. endosperm d. seed 23) The polar nuclei and male gamete fuse to form a. secondary nucleus c. triple fusion d. PEN b. zygote 24) The outermost proteinaceous layer of maize endosperm is called a. pericarp b. epidermis c. aleurone d. tunica 25) Glyoxysomes are present in a. root hairs b. palisade cells of leaf c. endosperm of wheat d. endosperm of castor Answers 1) a, 2) d, 3) b, 4) b, 5) c, 6) d, 7) c, 8) a, 9) a, 10) b, 11) c, 12) b, 13) b, 14) a, 15) b, 16) c, 17) a, 18) c, 19) a, 20) a, 21) b, 22) c, 23) d, 24) c, 25) d

1) How many total different micro and macro elements are necessary for the plant growth? a. 15 b. 16 c. 17 d. 20 2) Who proposed the criteria for determining the essentiality of mineral elements for the plants.? a. Arnon and Stout b. Biggs and Robertson c. Hoagland d. Singh 3) ______ is a technique where the plants are grown with their roots suspended in the air.? a. Osmosis b. Aerophytes c. Aerosolization d. Aeroponics 4) ______ is an important mineral nutrient.? b. Nitrogen a. Hydrogen c. Oxygen d. Carbon 5) Active uptake or Carrier concept is given by _____? b. Arnon a. Hoagland c. Stout d. Biggs 6) Uptake of ions through the special protein channel across the cell membrane is called as? a. Simple diffusion b. Special diffusion c. Facilitated diffusion d. Only diffusion 7) Which enzyme is responsible of the ion on inner side of the membrane? a. Isomerase b. Transferase c. Kinase d. Phosphatase 8) Which enzyme is responsible for repeated activation of carrier protein? a. Transferase b. Kinase c. Isomerase d. Phosphatase 9) Which is the second major element required for the plant? b. Phosphorous d. Iron a. Magnesium c. Calcium 10) Which element plays an important role protein synthesis? a. Magnesium b. Iron c. Boron d. Manganese 11) _____ is essential for chlorophyll synthesis? b. Calcium d. Phosphorous a. Chlorine c. Iron 12) Growing of plants without soil is called as _____? a. Aeroponics b. Quartz culture c. Sand culture d. Hydroponics 13) _____ influences the process of flowering in plants. b. Water in the soil a. Photoperiod c. The acidity of the soil d. Amount of green pigment 14) Phytochrome is a photosensitive pigment involved in _____. a. Geotropism b. Phototropism c. Photoperiodism d. Photorespiration 15) In which of the following living species, phytochrome, the blue-green pigment is found? b. Fungi c. Flowering plants d. Vascular cryptograms a. Algae

16) The change over from vegetative to reproductive phase in plants takes place in response to_____.

a. Length of the day b. severity of temperature c. Oxygen content in the air d. mainly the food material available in the soil 17) The reversal of etiolation effected by light is called . b. Richmond Lang effect a. Photomorphogenesis c. Anisotropic wall expansion d. Red-far red light interaction 18) A plant that require not less than 10 hours of light to flower is called _____ a. Day-neutral plant b. Short day plant c. Long day plant d. None of the above 19) Which of the following hormone can replace vernalization? d. Gibberellins a. Auxin b. Ethylene c. Cytokinins 20) When the dark period of short-day plants is interrupted by brief exposure of light, then the plant _____. a. Produces more flowers b. Will not bear any flowers c. Turns into a long day plant d. Produces flowers immediately 21) Which of the following pigment involved in red-far red-light interconversion? a. Cytochrome b. Lycopene c. Phytochrome d. Xanthophyll 22) Cholodny-Went theory is based on_____. a. Phototropism b. Photoperiodism d. Photomorphogenesis c. Photorespiration 23) What is produced as byproduct of photosynthesis? d. Sulphur dioxide b. Nitrogen c. Carbon dioxide a. Oxygen 24) What type of energy can be used by all organisms? b. Chemical energy a. Light energy c. Heat energy d. Water potential 25) Phytochrome is a photosensitive pigment involved in _____ b. Phototropism c. Photoperiodism d. Photorespiration a. Geotropism **Answers:** 1) a, 2) a, 3) d, 4) b, 5) a, 6) c, 7) d, 8) b, 9) b, 10) a, 11) c, 12) d. 13) a,

14) c, 15) c, 16) a, 17) a, 18) c, 19) d, 20) b, 21) c , 22) a, 23) a, 24) b. 25) c