

**U.G./P.G. ENTRANCE EXAMINATION, APRIL 2021**  
**APPLIED PLANT SCIENCE/GENERAL BIOTECHNOLOGY**

Time : Three Hours

Maximum : 400 Marks

*Instructions :*

1. Attempt *all* questions in parts relevant to the discipline you have applied.
2. All questions carry 4 marks each.
3. For each wrong answer 1 mark will be deducted.
4. Part A is common for both M.Sc. Applied Plant Science and General Biotechnology.
5. Part B for M.Sc. Applied Plant Science candidates only.
6. Part C for M.Sc. General Biotechnology only.
7. Those who are writing both M.Sc. Applied Plant Science and General Biotechnology will be given additional 1 hour to write Part C and for them Part C has to be attempted in a separate answer sheet and the answering should start from "51".
8. Those who are writing M.Sc. Applied Plant Science should write "M.Sc. Applied Plant Science" at the top of the answer sheet.
9. Those who are writing M.Sc. General Biotechnology should write "M.Sc. General Biotechnology" at the top of the answer sheet.

**Part A**

1. Coronavirus genome is :
  - (A) Single stranded DNA.
  - (B) Single stranded RNA.
  - (C) Double stranded DNA.
  - (D) Double stranded RNA.
2. Identify the pair that contain DNA :
  - (A) Nucleus, ribosomes.
  - (B) Chloroplast, mitochondrion.
  - (C) Peroxisome, Chloroplast.
  - (D) Ribosome, chloroplast.

**Turn over**

3. Quinine is obtained from :
- (A) Cinchona officinalis. (B) Rauwolfia serpentina.  
(C) Atropa belladonna. (D) Colchicum autumnale.
4. Bacterial cell wall composed of:
- (A) N-acetyl glucosamine. (B) N-acetyl muramic acid.  
(C) Both (A) and (B). (D) None of these.
5. Small infectious agents that contains naked RNA are :
- (A) Viruses. (B) Viroids  
(C) Prions. (D) Interferons.
6. Example for Single Cell Protein (SCP) :
- (A) Chlorella. (B) Spirulina.  
(C) Yeasts. (D) All of these.
7. Citrus canker caused by :
- (A) Bacteria. (B) Virus.  
(C) Fungi. (D) Mycoplasma.
8. Aflatoxin is produced by :
- (A) Penicillium notatum. (B) Rhizopus nigricans.  
(C) Agaricus. (D) Aspergillus flavus.
9. Symbiotic association between algae and fungi is called :
- (A) Mycorrhiza. (B) Lichen.  
(C) Commensalism. (D) Mutualism.
10. Theory of natural Selection was proposed by Charles Darwin and :
- (A) Lamarck. (B) Weismann.  
(C) Hugo de Vries. (D) Alfred Russel Wallace.
11. Which of the following is not a measure of central tendency ?
- (A) Arithmetic Mean. (B) Median.  
(C) Mode. (D) Range.

12. Scientific temper involves :
- (A) Freedom from prejudice or bias. (B) Objectivity.  
(C) Application of logic. (D) All of the above.
13. Working principle of colorimeter is :
- (A) Beer-Lambert's law. (B) Poisson's law.  
(C) Arrhenius law. (D) None of the above.
14. Ability to distinguish two closely packed objects under a microscope is :
- (A) Resolving power. (B) Magnifying power.  
(C) Distinguishing power. (D) Partition power.
15. Source of illumination in electron microscope is :
- (A) Day light. (B) Infrared rays.  
(C) Ultraviolet rays. (D) Beam of Electrons.
16. In gram staining, gram's iodine is used as a :
- (A) Stain. (B) Mordant.  
(C) Fixative. (D) Counter stain.
17. One micrometer is equal to :
- (A)  $10^{-6}$  m. (B)  $10^{-9}$  m.  
(C)  $10^{-12}$  m. (D)  $10^{-3}$  m.
18. Genome of a virus contain 20 % G, 20 % C, 35 % A and 25 % U. The genome is a :
- (A) dsDNA. (B) ssDNA.  
(C) dsRNA. (D) ssRNA.
19. Name the enzyme that link okazaki fragments during DNA replication.
- (A) DNA polymerase. (B) DNA ligase.  
(C) DNA gyrase. (D) Topoisomerase.

Turn over

20. In a study animal cell is labelled with radioactive amino acids. Which of the following molecules will show radioactivity ?
- (1) Protein. (2) Ribosome.  
(3) Enzymes. (4) Glycolipids.
- (A) Only 1. (B) 1 and 2.  
(C) 1, 2 and 3. (D) All of the above.
21. The phase which is common to aerobic and anaerobic respiration is :
- (A) Glycolysis. (B) Kreb's cycle.  
(C) Photophosphorylation. (D) Photorespiration.
22. Which is the correct order of action of enzymes during DNA replication ?
- (A) Helicase, polymerase, primase.  
(B) Helicase, primase, polymerase.  
(C) Primase, helicase, polymerase.  
(D) Primase, polymerase, helicase.
23. DNA level mutation changed the sequence TTC → ATC. This type of mutation is called :
- (A) Silent mutation. (B) Missense mutation.  
(C) Nonsense mutation. (D) Neutral mutation.
24. Which of the following does not contribute to protein diversity ?
- (A) RNA editing.  
(B) Exon shuffling.  
(C) Alternative initiation of translation.  
(D) RNA interference.
25. RNA polymerase I involved in the synthesis of :
- (A) mRNA. (B) tRNA.  
(C) rRNA. (D) snRNA.
26. When a purine is replaced by a pyrimidine in DNA, the mutation is called ?
- (A) Transition mutation. (B) Inversion.  
(C) Translocation. (D) Transversion mutation.

27. DNA methylation is associated with :
- (A) TATA box. (B) CAT box.  
(C) CpG island. (D) Pribnowbox.
28. Enzyme act by :
- (A) Lowering activation energy.  
(B) Increasing activation energy.  
(C) Increasing pH.  
(D) Changing reaction equilibrium.
29. Glyoxylate cycle is completed in :
- (A) Chloroplast, mitochondrion, peroxisome.  
(B) Chloroplast, glyoxysome, mitochondrion.  
(C) Mitochondrion, cytoplasm, chloroplast.  
(D) Mitochondrion, chloroplast, oleosome.
30. Which of among the following is not a reducing sugar :
- (A) Glucose. (B) Fructose.  
(C) Sucrose. (D) Galactose.
31. In eukaryotes enzyme Succinate dehydrogenase is located on :
- (A) Inner mitochondrial membrane.  
(B) Mitochondrial matrix.  
(C) Cytoplasm.  
(D) Plasma membrane.
32. Biosynthesis of amino acid takes place through :
- (A) Reductive amination.  
(B) Transamination.  
(C) GS/GOGAT pathway.  
(D) All of the above.
33. Oxygen scavenger in biological nitrogen fixation is :
- (A) Myoglobin. (B) Nitrogenase.  
(C) Mo-Fe protein. (D) Leghaemoglobin.

Turn over

34. Vincristine and Vinblastine obtained from :
- (A) Rauwolfia. (B) Adhatoda.  
(C) Catharanthus. (D) Phyllanthus.
35. Which of the following is not a condition of Hardy-Weinberg equilibrium ?
- (A) Panmictic population. (B) No natural selection.  
(C) Large population. (D) Migration of individuals.
36. A haemophilic man marries a woman heterozygous for that trait. What is the chance of their first child becoming haemophilic ?
- (A) 100 % (B) 75 %.  
(C) 50 %. (D) 25 %.
37. ABO Blood group is an example of :
- (A) Co-dominance. (B) Multiple allelism.  
(C) Incomplete dominance. (D) Both (A) and (B).
38. Which of the following is not an example for polygenic inheritance ?
- (A) Skin colour in human.  
(B) Seed shape in garden pea plant.  
(C) Kernel Colour in Wheat.  
(D) Eye colour in human.
39. Complementary genes modify the dihybrid  $F_2$  phenotypic ratio into :
- (A) 9 : 3 : 3 : 1. (B) 9 : 6 : 1.  
(C) 9 : 3 : 4. (D) 9 : 7.
40. Independent assortment of characters occur during :
- (A) Anaphase of mitosis. (B) Anaphase of meiosis I.  
(C) Anaphase of meiosis II. (D) Prophase of meiosis I.
41. DNA replication takes place during :
- (A) G1 phase. (B) G2 phase.  
(C) S phase. (D) G0 phase.

42. Nucleolar organiser is the site of :
- (A) mRNA synthesis. (B) rRNA synthesis.  
(C) tRNA synthesis. (D) Both (B) and (C).
43. Transcriptionally active chromatin :
- (A) Euchromatin. (B) Heterochromatin.  
(C) Facultative heterochromatin. (D) Constitutive heterochromatin.
44. Balbiani rings are found in :
- (A) Dipteran polytene chromosome.  
(B) Lampbrush chromosome.  
(C) B-chromosome.  
(D) None of these.
45. Antibiotic resistance gene in pBR 322 :
- (A) Kanamycin.  
(B) Streptomycin.  
(C) Azithromycin.  
(D) Ampicillin and Tetracyclin.
46. Surface sterilization of explants can be done using :
- (A) Distilled water. (B) Flame.  
(C) Sulphuric acid. (D) Mercuric chloride.
47. Golden rice was developed by :
- (A) Ingo Potrykus. (B) Stanley Cohen.  
(C) Herbert Boyer. (D) Kary Mullis.
48. Virus free genotype can be conserved through :
- (A) Shoot tip bank. (B) Seed bank.  
(C) Plant bank. (D) Organ bank.
49. Identify protein database :
- (A) PDB. (B) DDBJ.  
(C) Gen Bank. (D) EMBL.

Turn over

50. Father of Green revolution.

- (A) Norman Ernest Borlaug. (B) Gregor Johann Mendel.  
(C) Luther Burbank. (D) Vavilov.

**Part B**

51. Non-conventional energy source :

- (A) Solar Energy. (B) Wind energy.  
(C) Geothermal energy. (D) All of the above.

52. The exine of pollen grain is made up of :

- (A) Cellulose. (B) Pectin.  
(C) Sporopollenin. (D) Chitin.

53. If megaspore mother cell of an angiosperm has 32 chromosomes, how many chromosomes will be there in aleurone layers ?

- (A) 48. (B) 32.  
(C) 8. (D) 16.

54. Cotyledons seen in monocot seed is called :

- (A) Scutellum. (B) Labellum.  
(C) Phellogen. (D) Aleurone.

55. Histogen theory on apical organisation was given by :

- (A) Schmidt. (B) Schuepp.  
(C) Hanstein. (D) Nageli.

56. Balloon like structures seen in the lumen of xylem vessels.

- (A) Tyloses. (B) Tracheids.  
(C) Trichome. (D) Hydathode.

57. Periderm includes :

- (A) Phellum. (B) Phellogen.  
(C) Phelloderm. (D) All of the above.



58. Centrifugal xylem is a feature of :
- (A) Root. (B) Stem.  
(C) (A) and (B). (D) None of the above.
59. Quiescent centre is present in :
- (A) Root apex. (B) Shoot apex.  
(C) Node. (D) Floral axis.
60. Needle-like crystals of calcium oxalate are called :
- (A) Cystolith. (B) Druses.  
(C) Raphides. (D) All of these.
61. Function of Lenticel is :
- (A) Exchange of gases. (B) Protection.  
(C) Absorption of water. (D) Guttation.
62. Exclusion of plant disease through legislation is known as :
- (A) Plant quarantine. (B) Biological control.  
(C) Biopiracy. (D) Biopatent.
63. Which group of fungi is called *Fungi Imperfecti* ?
- (A) Basidiomycotina. (B) Deuteromycotina.  
(C) Zygomycotina. (D) Ascomycotina.
64. Usnea is an example for :
- (A) Crustose lichen. (B) Foliose lichen.  
(C) Fruticose lichen. (D) Leprose lichen
65. Laminarin and mannitol are reserve food material present in
- (A) Chlorophyceae (B) Xanthophyceae.  
(C) Phaeophyceae. (D) Rhodophyceae.
66. Plaque stage of *Volvox* composed of :
- (A) 8 cells. (B) 32 cells.  
(C) 4 cells. (D) 2 cells.

67. Parasitic algae :
- (A) Cephaleuros. (B) Ulothrix.  
(C) Pinnularia. (D) Vaucheria.
68. Meristematic zone is present in the sporophyte of :
- (A) Riccia. (B) Marchantia.  
(C) Anthoceros. (D) Funaria.
69. Nostoc is present in the gametophytic plant body of :
- (A) Riccia. (B) Anthoceros.  
(C) Funaria. (D) Marchantia.
70. Spores on germination in Funaria give rise to :
- (A) Protonema. (B) Prothallus.  
(C) Sporophyte. (D) Capsule.
71. Trabeculae is seen in stem of :
- (A) Marsilea. (B) Azolla.  
(C) Selaginella. (D) Equisetum.
72. Gametophyte of pteridophytes is called :
- (A) Prothallus. (B) Protonema.  
(C) Gametangium. (D) Gametophore.
73. Spore bearing organs in *Psilotum* are called :
- (A) Sporophyll. (B) Synangia  
(C) Trabeculae. (D) Sporocarp.
74. Chilgoza is obtained from :
- (A) *Cycas revoluta*. (B) *Ginkgo biloba*.  
(C) *Pinus gerardiana*. (D) *Cycas circinalis*.
75. Winged pollen grains are seen in :
- (A) *Cycas*. (B) *Pinus*.  
(C) *Gnetum*. (D) *Marsilea*.

76. Inverted omega shaped arrangement of vascular bundles are found in :
- (A) Cycasrachis. (B) Cycas leaflet.  
(C) Pinus stem. (D) Pinus needle.
77. Fossil gymnosperm :
- (A) Rhynia. (B) Williamsonia.  
(C) Lepidocarpon. (D) Calamites.
78. Shivalik fossil park located in :
- (A) Himachal Pradesh. (B) Madhya Pradesh  
(C) Sikkim. (D) Bihar.
79. Evidences for evolution were quoted by Darwin from
- (A) Galapagos island. (B) Antaretica.  
(C) North America. (D) Brazil.
80. Natural system of classification is proposed by :
- (A) Engler and Prantl.  
(B) Linnaeus.  
(C) Angiosperms Phylogeny Group.  
(D) Bentham and Hooker.
81. Cretaceous period belongs to :
- (A) Mesozoic Era. (B) Paleozoic Era.  
(C) Cenozoic Era. (D) Pre-cambrian.
82. Example for thyrsus inflorescence :
- (A) Jasmine. (B) Ocimum.  
(C) Hamelia. (D) Leucas.
83. Gynobasic style is present in :
- (A) Solanaceae. (B) Lamiaceae.  
(C) Fabaceae. (D) Asclepiadaceae.
84. Rudimentary membranous perianth in Poaceae'
- (A) Lodicule. (B) Lemma.  
(C) Palea. (D) Glume.

Turn over

85. Condition in which anthers are united and filaments remain free :
- (A) Synandrous. (B) Syngenesious.  
(C) Gynandrous. (D) Gynostegium.
86. Sorosis is developed from :
- (A) Hypanthodium inflorescence.  
(B) Catkin inflorescence.  
(C) Verticillaster inflorescence.  
(D) Coenanthium inflorescence.
87. Loss of water in the form of liquid through hydathodes is known as :
- (A) Guttation. (B) Hydration.  
(C) Transpiration. (D) Excretion.
88. Which of the following molecule can be analysed using southern blotting ?
- (A) DNA. (B) RNA.  
(C) Protein. (D) Carbohydrate.
89. The climate pattern that describe periodic warming of the ocean is called :
- (A) La Ni<sup>o</sup>a. (B) El Nino.  
(C) Cloud burst. (D) Anti-El Ni<sup>o</sup>.
90. Eravikulam National Park is located in :
- (A) Kannur District. (B) Idukki District.  
(C) Palakkad District. (D) Alappuzha District.
91. Succession of microorganisms within a microhabitat is called :
- (A) Serule. (B) Niche.  
(C) Primary succession. (D) Secondary succession.
92. Ecosystem operating in running water :
- (A) Lentic ecosystem. (B) Lotic ecosystem.  
(C) Benthic ecosystem. (D) Hydrological ecosystem.

93. Sticky covering found on the surface of pollen grains :
- (A) Intine. (B) Spore  
(C) Pollen kit. (D) Pollinium.
94. Gaseous plant hormone.
- (A) Ethylene. (B) ABA.  
(C) Auxin. (D) Cytokinin.
95. Reaction centre in photosystem I
- (A) P<sub>680</sub>. (B) P<sub>700</sub>.  
(C) P<sub>620</sub>. (D) P<sub>720</sub>.
96. Kranz Anatomy is seen in :
- (A) C<sub>2</sub> plants. (B) C<sub>3</sub> plants.  
(C) C<sub>4</sub> plants. (D) CAM plants.
97. Temporal variation of calvin cycle :
- (A) Photorespiration. (B) C<sub>4</sub> pathway.  
(C) CAM pathway. (D) C<sub>3</sub> cycle.
98. Seed coat fused with fruit wall in :
- (A) Caryopsis. (B) Berry.  
(C) Hesperidium. (D) Pod.
99. Sunken stomata found in :
- (A) Mesophytes. (B) Xerophytes.  
(C) Hydrophytes. (D) All of these.
100. Which is a complex permanent tissue ?
- (A) Sclerenchyma. (B) Xylem.  
(C) Parenchyma. (D) Collenchyma.

**Part C**

51. Example for an aromatic compound ?
- (A) Ethylene. (B) Benzene.  
(C) Glycerol. (D) Urea.

**Turn over**

52. What is molal solution ?
- (A) Solution that contains 1 molecular weight of solute in a kilogram of solvent.
  - (B) Solution that contains 1 molecular weight of solute in a liter of solvent.
  - (C) Solution that contains 1 equivalent weight of solute in a kilogram of solvent.
  - (D) Solution that contains 1 equivalent weight of solute in a liter of solvent.
53. pH of a solution can be calculated by :
- (A)  $-\log [\text{OH}^-]$ .
  - (B)  $-\log [\text{H}^+]$ .
  - (C)  $\log [\text{OH}^-]$ .
  - (D)  $\log [\text{H}^+]$ .
54. For spontaneous biological reaction which of the following is true :
- (A)  $H = -ve$ .
  - (B)  $\Delta S = +ve$
  - (C)  $\Delta G = -ve$ .
  - (D) All the above.
55. Movements exhibited by chemical bonds in response to IR rays :
- (A) Stretching.
  - (B) Bending.
  - (C) Scissoring.
  - (D) All of the above
56. A beta particle is equivalent to :
- (A) An electrons.
  - (B) A Proton.
  - (C) Hydrogen atom.
  - (D) Helium nucleus.
57. If electrical conductivity increases with the increase of temperature of a substance, then it is a :
- (A) Conductor.
  - (B) Semiconductor.
  - (C) Insulator.
  - (D) Carborator.
58. A man weighing 65 kg. jumps from a 100 ft high building with a load of 35 kg. What will be the load experienced by him ?
- (A) 20 kg.
  - (B) 100 kg.
  - (C) 200 kg.
  - (D) Zero.
59. Isotopes of an element contain :
- (A) The same number of protons but different number of neutrons.
  - (B) The same number of neutrons but different number of protons.
  - (C) Equal number of protons and electrons.
  - (D) Equal number of nucleons.

60. All electromagnetic wave is traveling to the east. At one instant at a given point its E vector points straight up. What is the direction of its B vector ?
- (A) North. (B) Down.  
(C) East. (D) South.
61. Lichen is a composite combination of two organisms
- (A) Algae and Fungi. (B) Algae and Bryophyta.  
(C) Fungi and Fern. (D) Fungi and Bryophyta.
62. Which of the following hormone contains Iodine ?
- (A) Insulin. (B) Adrenaline.  
(C) Testosterone. (D) Thyroxine.
63. Find the odd one out :
- (A) Natural Killer cells. (B) Macrophages.  
(C) Antigen presenting cells. (D) T cells.
64. Immunoglobulin that can cross the human placenta :
- (A) IgM. (B) IgA.  
(C) IgG. (D) IgD.
65. Nucleosides are composed of :
- (A) Nitrogen bases, Sugar and Phosphate.  
(B) Nitrogen bases and Sugar.  
(C) Nitrogen bases and Phosphate.  
(D) Sugar and Phosphate.
66. \_\_\_\_\_ is called as Edman reagent ?
- (A) 1-fluoro-2, 4-dinitrobenzene. (B) Phenylisothiocyanate.  
(C) Dansyl Chloride. (D) Diphenylamine.

Turn over

67. Which histone is also called as linker histone ?
- (A) H1. (B) H2A.  
(C) H3. (D) H4.
68. Secondary structure of protein is stabilized by which bond/s
- (A) Peptide bond. (B) Hydrogen bond.  
(C) Disulfide bond. (D) All of the above.
69. Which is a tool used for post transcriptional gene silencing ?
- (A) CRISPR. (B) Zinc Finger nucleases.  
(C) RNA interference. (D) TALEN.
70. Exclusive source of Reverse Transcriptase enzyme :
- (A) Gram negative bacteria. (B) DNA Viruses  
(C) RNA viruses. (D) Fungus.
71. Chaperons are involved in :
- (A) Protein folding. (B) DNA condensation.  
(C) DNA replication. (D) Nutrient transport.
72. Barr bodies are the \_\_\_\_\_
- (A) Inactivated Y chromosome. (B) Inactivated X chromosome.  
(C) Inactivated nucleus. (D) Inactivated nucleolus.
73. Phylogenetic analysis is a technique used to :
- (A) Study the evolutionary relationship between species.  
(B) Determine the genome size of an organism.  
(C) Evaluate the mutations in a genome.  
(D) Solve a crime scene.
74. Example for sulfur containing amino acid :
- (A) Glycine. (B) Cysteine.  
(C) Threonine. (D) Phenylalanine.



75. Corona virus binds with which receptor in human cell :
- (A) ACE2. (B) TMPRSS.  
(C) Spike protein. (D) Nucleoprotein.
76. Media used for animal cell culture :
- (A) Murashige and Skoog.  
(B) White's media.  
(C) Minimum Essential Medium.  
(D) B5 Media
77. Which is an example for DNA sequencing by degradation method ?
- (A) Sanger sequencing. (B) Pyro sequencing.  
(C) Maxam Gilbert sequencing. (D) Nanopore sequencing.
78. Caspases are the enzymes involved in :
- (A) DNA replication. (B) Transcription.  
(C) Translation. (D) Apoptosis.
79. SDS PAGE can be used to detect.
- (A) Approximate molecular weight of nucleic acid.  
(B) Structural conformation of proteins.  
(C) Approximate molecular weight of protein.  
(D) shape of the protein molecule.
80. Role of sparger in bioreactor.
- (A) To introduce the air into the reactor.  
(B) To agitate the media.  
(C) To control the temperature of the reactor.  
(D) To remove the effluent from the reactor.
81. Resting membrane potential is maintained by keeping.
- (A) High Na<sup>+</sup> inside.  
(B) High K<sup>+</sup> inside.  
(C) High Na<sup>+</sup> inside, low K<sup>+</sup> outside.  
(D) High K<sup>+</sup> inside, low Na<sup>+</sup> outside.

Turn over

82. Example for a reporter gene :
- (A) Green Fluorescent Protein gene.
  - (B) Red Fluorescent Protein gene.
  - (C) Luciferase Gene.
  - (D) All of the above.
83. PCR technique was invented by :
- (A) Herbert Boyer.
  - (B) Frederick Sanger.
  - (C) Karry Mullis.
  - (D) James Watson.
84. Light gathering capacity of Microscope is called :
- (A) Numerical aperture.
  - (B) Angular aperture.
  - (C) Both (A) and (B).
  - (D) None of these.
85. In which organ of the human body are the lymphocytes formed ?
- (A) Pancreas.
  - (B) Bone marrow.
  - (C) Liver.
  - (D) Spleen.
86. \_\_\_\_\_ is an acidic dye.
- (A) Nigrosine.
  - (B) Toluidine blue.
  - (C) Methylene blue.
  - (D) Crystal Violet.
87. Vitamin D is also called as :
- (A) Tocopherol.
  - (B) Calciferol.
  - (C) Riboflavin.
  - (D) Retinol.
88.  $\alpha$ -D-Glucose and  $\beta$ -D-glucose are related by :
- (A) Epimers.
  - (B) Anomers.
  - (C) Multirotation.
  - (D) Ketoenol pair.
89. Acid fast staining used to identify which species of bacteria :
- (A) Bacillus.
  - (B) Pseudomonas.
  - (C) Mycobacterium.
  - (D) None of the above.

90. HeLa cells are characterized by :
- (A) Contact Inhibition. (B) Anchorage Independence  
(C) Finite number of divisions. (D) None of the above.
91. Non- protein organic part of the enzyme is called as :
- (A) Co-factor. (B) Co-enzyme.  
(C) Isoenzyme. (D) Proenzyme.
92. The device to measure transpiration in plants is :
- (A) Clinometers. (B) Potometer.  
(C) Crescometer. (D) Hygrometer.
93. Golden rice has the highest quantity of :
- (A) Vitamin A. (B) Vitamin B.  
(C) Vitamin C. (D) Vitamin D.
94. Which Bacteria is called as nature's own genetic engineer ?
- (A) Escherichia coli. (B) Agrobacterium tumefaciens.  
(C) Bacillus cereus. (D) Pseudomonas aeruginosa.
95. His Tagged proteins can be purified by :
- (A) Ion Exchange Chromatography.  
(B) Nickel Affinity Chromatography.  
(C) High Performance Liquid Chromatography.  
(D) Paper Chromatography.
96. Fatty acids can be transported into and out of cell membrane by :
- (A) Active transport. (B) Facilitated transport.  
(C) Diffusion. (D) Osmosis.
97. Competitive inhibitor of an enzyme is :
- (A) Structural analogue of enzyme.  
(B) Functional analogue of enzyme.  
(C) Functional analogue of substrate.  
(D) Structural analogue of substrate.

Turn over

98. Example for nucleotide Data Bank :
- (A) PDB. (B) PubChem.  
(C) DDBJ. (D) All of the above.
99. Pneumatophores are present in :
- (A) Insectivores plants. (B) Hydrophytes plants.  
(C) Epiphytic plants. (D) Mangrove plants.
100. Technique used to detect specific DNA sequence.
- (A) Northern Blotting. (B) Eastern blotting.  
(C) Southern blotting. (D) Western Blotting.

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