D 144456 (Pages : 16) Name.....

Reg. No.....

CALICUT UNIVERSITY COMMON ENTRANCE TEST (CU-CET), APRIL 2026

BOTANY

Time : Two Hours Maximum : 400 Marks

Each question carries 4 marks.

One mark will be deducted for each wrong answer.

I. The primary cell wall is mainly composed of :

(A) Lignin.

(B) Cellulose, hemicellulose, and pectin.

(C) Cutin.

(D) Suberin.

2. Heartwood is :

(A) Outer wood. (B) Living wood.

(C) Dead inner wood. (D) Conducting wood.

3. Which enzyme joins DNA fragments ?

(A) Restriction enzyme. (B) DNA ligase.

(C) Polymerase. (D) Helicase.

4. Carnoy's fluid is used for :

(A) Staining. (B) Fixation.

(C) Mounting. (D) Dehydration.

5. SEM provides :

(A) Internal structure. (B) Surface details.

(C) Color image. (D) Chemical analysis.

6. Resolving power refers to the ability to :

(A) Magnify objects.

(B) Distinguish two close points.

(C) Reflect light.

(D) Focus image.

7. Centrifugation separates particles based on :

(A) Color.

(B) Density.

(C) Shape.

(D) Temperature.

8. Fixation is done to :

(A) Destroy tissue.

(B) Preserve tissue structure.

(C) Stain tissue.

(D) Dehydrate tissue.

9. Agar is used as :

(A) Nutrient.

(B) Solidifying agent.

(C) Stain.

(D) Fixative.

10. Single cell protein refers to :

(A) Plant protein.

(B) Animal protein.

(C) Microbial protein.

(D) Synthetic protein.

11. HIV is a :

(A) DNA virus.

(B) Retrovirus.

(C) Bacteriophage.

(D) Viroid.

12. TMV affects :

(A) Humans.

(B) Animals.

(C) Tobacco plants.

(D) Bacteria.

13. Albugo is commonly known as :

(A) Black rust. (B) White rust.

(C) Red rust. (D) Leaf spot.

14. The cell wall of fungi is mainly composed of :

(A) Cellulose. (B) Chitin.

(C) Peptidoglycan. (D) Lipid.

15. Lichens are good indicators of :

(A) Soil fertility. (B) Air pollution.

(C) Water level. (D) Temperature.

16. Sudden drying and death of plant tissues is known as:

(A) Wilt. (B) Blight.

(C) Rust. (D) Smut.

17. A colonial green algae is :

(A) Spirogyra. (B) Volvox

(C) Chara. (D) Oedogonium.

18. The cell wall of diatoms is made of :

(A) Cellulose. (B) Silica.

(C) Chitin. (D) Lignin.

19. Brown color of Phaeophyceae is due to :

(A) Chlorophyll. (B) Fucoxanthin.

(C) Carotene. (D) Phycobilin.

20. Alginates are obtained from :

(A) Green algae. (B) Brown algae.

(C) Red algae. (D) Diatoms.

21. Which Algae is used as food :

(A) Chlorella. (B) Volvox.

(C) Sargassum. (D) Pinnularia.

22. Bryophytes are commonly known as :

(A) Vascular plants.

(B) Amphibians of plant kingdom.

(C) Desert plants.

(D) Marine plants.

23. Peat moss is obtained from :

(A) Riccia. (B) Anthoceros.

(C) Sphagnum. (D) Funaria.

24. Marsilea is known as :

(A) Water fern. (B) Club moss.

(C) Whisk fern. (D) Horsetail.

25. A well-known Indian pteridologist is :

(A) Birbal Sahni. (B) M. O. P. Iyengar.

(C) E. K. Janaki Ammal. (D) R. S. Rao.

26. Gnetum shows similarities with :

(A) Bryophytes. (B) Pteridophytes.

(C) Angiosperms. (D) Algae.

27. Which of the following is a type of fossil ?

(A) Impression. (B) Compression.

(C) Petrifaction. (D) All of these.

28. Williamsonia belongs to :

(A) Angiosperms. (B) Gymnosperms.

(C) Bryophytes. (D) Algae.

29. A famous institute for palaeobotany in India is :

(A) ISRO. (B) Birbal Sahni Institute.

(C) DRDO. (D) ICAR.

30. The largest phytogeographical kingdom is :

(A) Paleotropical. (B) Holarctic.

(C) Neotropical. (D) Australia.

31. Age and Area hypothesis was proposed by :

(A) J. C. Willis. (B) Darwin.

(C) Humboldt. (D) Wallace.

32. Glaciation mainly occurs due to :

(A) High temperature. (B) Low temperature.

(C) Rainfall. (D) Wind.

33. Pangaea refers to :

(A) Ocean. (B) Supercontinent.

(C) Mountain. (D) Desert.

34. Vicarism refers to :

(A) Extinction of species.

(B) Replacement of species by related species.

(C) Migration.

(D) Mutation.

35. Lichens are good indicators of :

(A) Soil fertility. (B) Air pollution.

(C) Water level. (D) Temperature.

36. Powdery reproductive structures in lichens are called :

(A) Cephala. (B) Soridia.

(C) Isogametes. (D) Rhizoids.

37. The age of Earth is approximately :

(A) 2.5 billion years. (B) 3.5 billion years.

(C) 4.5 billion years. (D) 5.5 billion years.

38. Genetic drift is :

(A) Directed evolution.

(B) Random change in gene frequency.

(C) Mutation.

(D) Selection.

39. Pneumatophores are found in :

(A) Desert plants. (B) Aquatic plants.

(C) Mangroves. (D) Epiphytes.

40. Fibrous root system is found in :

(A) Mangifera indica. (B) Triticum aestivum.

(C) Pisum sativum. (D) Hibiscus rosa-sinensis.

41. Acaulescent plants are those :

(A) Without roots.

(B) Without visible stem.

(C) With underground stem.

(D) With woody stem.

42. A glabrous leaf surface is :

(A) Hairy. (B) Rough.

(C) Smooth. (D) Spiny.

43. Actinomorphic flowers are :

(A) Bilaterally symmetrical. (B) Radially symmetrical.

(C) Asymmetrical. (D) Irregular.

44. Parthenocarpic fruits are :

(A) Seedless. (B) With seeds.

(C) Dry fruits. (D) Aggregate fruits.

45. Anomalous secondary growth is seen in :

(A) Mango. (B) Neem.

(C) Boerhaavia. (D) Rice.

46. Stomata in dicots are generally :

(A) Dumbbell shaped. (B) Kidney shaped.

(C) Rectangular. (D) Oval.

47. Hemophilia is :

(A) Autosomal trait. (B) X-linked trait.

(C) Y-linked trait. (D) Polygenic trait.

48. Red drop effect is related to :

(A) Respiration.
(B) Photosynthesis efficiency.
(C) Nitrogen fixation.
(D) Transpiration.

49. Match the following :

(A) Centromere.
(B) Telomere.
(C) Chromatin.
(D) Karyotype.

Answers :

1 Chromosome end.

2 Spindle attachment.

3 DNA + protein complex

4 Chromosome arrangement.

(A)	(B)	(C)	(D)
A-2	A-1	A-4	A-3
B-1	B-2	B-1	B-4
C-3	C-3	C-2	C-1
D-4	D-4	D-3	C-2

50. Plant quarantine ensures :

(A) Fast growth.
(B) Prevention of pest/disease entry.
(C) High yield.
(D) Hybrid vigor.

51. JNTBGRI is located in :

(A) Tamil Nadu.
(B) Kerala.
(C) Karnataka.
(D) Goa.

52. Isotype is :

(A) Different specimen.
(B) Duplicate of holotype.
(C) New species.
(D) Hybrid.

53. ICBN stands for :

(A) International Code of Botanical Nomenclature.
(B) Indian Code of Botanical Names.
(C) International Classification Board.
(D) None.

54. Chemotaxonomy is based on :

(A) DNA.
(B) Chemical constituents.
(C) Morphology.
(D) Habitat.

55. Poaceae is important for :

(A) Timber.
(B) Cereals.
(C) Medicinal plants.
(D) Fibres.

56. APG system is based on :

(A) Morphology.
(B) Molecular data.
(C) Anatomy.
(D) Ecology.

57. Phylogenetic system reflects :

(A) Artificial grouping.
(B) Evolutionary relationships.
(C) Economic uses.
(D) Habitat.

58. "Species Plantarum" was written by :

(A) Andrea Caesalpino.
(B) Gaspard Bauhin.
(C) Carl Linnaeus.
(D) Bentham.

59. Krebs cycle occurs in :

(A) Cytoplasm.
(B) Mitochondrial matrix.
(C) Ribosome.
(D) Chloroplast.

60. The innermost layer of anther wall is :

(A) Epidermis.
(B) Endothecium.
(C) Middle layer.
(D) Tapetum.

61. The term "Palynology" was coined by :

(A) Robert Hooke.
(B) Hyde and Williams.
(C) Charles Darwin.
(D) Gregor Mendel.

62. The outer wall of pollen grain is :

(A) Intine.
(B) Exine.
(C) Tapetum.
(D) Nucellus.

63. Wind pollination is called :

(A) Entomophily.
(B) Hydrophily.
(C) Anemophily.
(D) Zoophily.

64. Study of pollen in honey is :

(A) Aeropalynology.
(B) Melitopalynology.
(C) Palynotaxonomy.
(D) Embryology.

65. The binomial name of rice is :

(A) Triticum aestivum.
(B) Oryza sativa.
(C) Zea mays.
(D) Eleusine coracana.

66. The edible part of apple (*Malus domestica*) is :

(A) Ovary.
(B) Thalamus.
(C) Seed.
(D) Root.

67. Papaya belongs to :

(A) Caricaceae.
(B) Rutaceae.
(C) Solanaceae.
(D) Fabaceae.

68. Potato (*Solanum tuberosum*) is a :

(A) Root tuber.
(B) Stem tuber.
(C) Leaf.
(D) Fruit.

69. Ethylene is responsible for :

(A) Growth.
(B) Fruit ripening.
(C) Photosynthesis.
(D) Root growth.

70. Clove is obtained from :

(A) Root.
(B) Leaf.
(C) Flower bud.
(D) Fruit,.

71. *Rauvolfia serpentina* is used to treat :

(A) Hypertension.
(B) Diabetes.
(C) Asthma.
(D) Cancer.

72. *Phyllanthus* is commonly used for :

(A) Liver disorders.
(B) Bone fractures.
(C) Eye diseases.
(D) Skin allergy.

73. Kadar tribe is found in :

(A) Kerala. (B) Rajasthan.

(C) Punjab. (D) Bihar.

74. *Trichopus zeylanicus* is known as :

(A) Energy plant. (B) Timber plant.

(C) Fiber plant. (D) Spice plant.

75. In grafting, the upper part of the plant is called :

(A) Stock. (B) Scion.

(C) Root. (D) Node.

76. Bonsai is :

(A) Large tree. (B) Miniature tree.

(C) Aquatic plant. (D) Weed.

77. Bio pesticides are :

(A) Chemical pesticides. (B) Natural pest control agents.

(C) Fertilizers. (D) Herbicides.

78. Oyster mushroom belongs to :

(A) Algae. (B) Fungi.

(C) Bacteria. (D) Bryophytes.

79. Which method ensures true-to-type plants ?

(A) Seed propagation. (B) Vegetative propagation.

(C) Hybridization. (D) Mutation.

80. Open access publishing means :

(A) Paid journals only.
(B) Free access to research.
(C) Restricted access.
(D) Offline access.

81. Sanger method is used for :

(A) Protein synthesis.
(B) DNA sequencing.
(C) Cell division.
(D) Photosynthesis.

82. Adventive embryony arises from :

(A) Zygote.
(B) Nucellus.
(C) Endosperm.
(D) Pollen grain.

83. The backbone of DNA consists of :

(A) Proteins.
(B) Sugar and phosphate.
(C) Lipids.
(D) Amino acids.

84. Z-DNA is :

(A) Right-handed helix.
(B) Left-handed helix.
(C) Linear.
(D) Circular.,

85. Operon concept was proposed by :

(A) Jacob and Monod.
(B) Watson and Crick.
(C) Mendel.
(D) Darwin.

86. Write the example of Mutagen :

(A) Radiation.
(B) Chemicals.
(C) UV rays.
(D) All of the above.

D 123842 (Pages : 15) Name.....

Reg. No.....

CALICUT UNIVERSITY CENTRALIZED ENTRANCE TEST (CU-CET)
APRIL 2025

M.Sc. BOTANY

Time : Two Hours Maximum : 400 Marks

Each question carries 4 *marks.*

1 *mark will be deducted for each wrong answer.*

1. Which of the following is a fossil pteridophyte ?

   (a) Lepidodendron. (b) Pteris.

   (c) Isoetes. (d) Lycopodium.

2. The end region of a chromosome is called :

   (a) Centromere. (b) Telomere.

   (c) Nucleotide. (d) None of the above.

3. The final electron acceptor in respiration is :

   (a) Hydrogen. (b) Dehydrogenase.

   (c) Cytochrome. (d) Oxygen.

4. The current Epoch of the geological time scale is :

   (a) Paleocene. (b) Eocene.

   (c) Holocene. (d) Miocene.

5. Who is the pioneer of paleo-botanical research in India ?

   (a) Birbal Sahni. (b) S. K. Jain.

   (c) V. Kurien. (d) None of the above.

6. Induction of flowering in plants by exposure to low temperature is called :

(a) Cryopreservation. (b) Vernalization.

(c) Photoperiodism. (d) Phototaxis.

7. The process by which plants utilize light energy to produce their food is called :

(a) Photosynthesis. (b) Respiration.

(c) Evaporation. (d) Transpiration.

8. The plants capable of releasing oxygen during the night are :

(a) Amaranth and Beans. (b) Cabbage and Carrot.

(c) Tulsi and Neem. (d) Rose and Lilly.

9. Water available to roots of plants in the soil is called :

(a) Capillary water. (b) Hygroscopic water.

(c) Gravitational water. (d) Soil water.

10. The process by which an enzyme makes DNA from RNA template :

(a) Reverse transcription. (b) Translation.

(c) Amplification. (d) None of the above.

11. The lysosomes digest the external particles that enter the cell by :

(a) Meiosis. (b) Mitosis.

(c) Endocytosis. (d) Osmosis.

12. The process by which multiple copies of a sequence of DNA are produced :

(a) Hybridization. (b) Amplification.

(c) Cleavage. (d) Splicing.

13. An important initial step in the research work design is :

(a) Data collection. (b) Sampling.

(c) Hypothesis formulation. (d) None of the above.

14. First stable product during the dark reaction of Kreb's cycle in C3 plants :

(a) PGA. (b) Pyruvic acid.

(c) RuBP. (d) Oxaloacetic acid.

15. The measure of central tendency which is not affected by extreme values :

(a) Mode. (b) Mean.

(c) Median. (d) Standard deviation.

16. Hormone which causes early ripening of fruits :

(a) Auxin. (b) IAA.

(c) ABA. (d) Ethylene.

17. The cell wall of diatom is made of :

(a) Chitin. (b) Cellulose.

(c) Silica. (d) Lipid.

18. The father of Indian ethnobotany is :

(a) S. K. Jain. (b) M. S. Swaminathan.

(c) J. C. Bose. (d) Birbal Sahni.

19. In a survey the required information is collected from:

(a) Enumerator. (b) Supervisor.

(c) Respondent. (d) None of the above.

20. Lichen that grows tightly on surfaces like rocks :

(a) Fruticose. (b) Foliose.

(c) Crustose. (d) None of the above.

21. The conversion of a pond to a climax forest community is called :

(a) Hydrarch succession. (b) Xerarch succession.

(c) Mesarch succession. (d) None of the above.

22. *Rauwolfia serpentina* is a medicinal plant used to treat which of the following diseases ?

(a) Cancer. (b) Hypertension.

(c) Fever. (d) Arthritis.

23. According to Henry's law the solubility of a gas in a liquid is :

(a) Inversely proportional to the pressure of the gas over the liquids.

(b) Unrelated to the pressure of the gas over the liquid.

(c) Proportional to the square root of the pressure of the gas over the liquid.

(d) Directly proportional to the pressure of the gas over the liquid.

24. Which of the following is neutral pH ?

(a) 1. (b) 10.

(c) 7. (d) 14.

25. The use of another person's work as our own without acknowledgement is called :

(a) Citation. (b) Plagiarism.

(c) Reference. (d) Transcription.

26. What is RPM in centrifugation ?

(a) Revolutions per minute. (b) Rotations per minute.

(c) Both (A) and (B). (d) None of the above.

27. The mobile phase in chromatography is :

(a) Solid or liquid. (b) Liquid or gas.

(c) Liquid only. (d) Gas only.

28. Match the following :

1. Chloroplast	A. Powerhouse of the cell.
2. Mitochondria	B. Plastid.
3. Chlorophyll	C. Tonoplast.
4. Vacuole	D. Photosynthetic pigment.

(a) 1-A 2-B 3-C 4-D. (b) 1-B 2-C 3-A 4-D.

(c) 1-B 2-A 3-D 4-C. (d) 1-D 2-C 3-B 4-A.

29. The probability of Type II error is :

(a) $1 - \alpha$. (b) $1 - \beta$.

(c) β. (d) α.

30. Which of the following elements is most abundant in living organisms ?

(a) Carbon. (b) Hydrogen.

(c) Nitrogen. (d) Oxygen.

31. Female sex organ of Rhodophyccae :

(a) Oogonium. (b) Carpagonium.

(c) Sporogonium. (d) None of the above.

32. Match the following :

i. Quillwort	A. *Ophioglossum*.
ii. Adder's tongue	B. *Equisetum*.
iii. Horse tail	C. *Lycopodium*.
iv. Club moss	D. *Isoetes*.

(a) i-A ii-B iii-C iv-D. (b) i-D ii-C iii-B iv-A.

(c) i-D ii-A iii-B iv-C. (d) i-A ii-D iii-C iv-B.

33. Penicillin was first discovered by :

(a) Alexander Fleming. (b) Frederick Banting.

(c) Charles Darwin. (d) John Macleod.

(a) 1-A 2-B 3-C 4-D. (b) 1-B 2-C 3-A 4-D.

(c) 1-B 2-A 3-D 4-C. (d) 1-D 2-C 3-B 4-A.

29. The probability of Type II error is :

(a) $1 - \alpha$. (b) $1 - \beta$.

(c) β. (d) α.

30. Which of the following elements is most abundant in living organisms ?

(a) Carbon. (b) Hydrogen.

(c) Nitrogen. (d) Oxygen.

31. Female sex organ of Rhodophyccae :

(a) Oogonium. (b) Carpagonium.

(c) Sporogonium. (d) None of the above.

32. Match the following :

i. Quillwort	A. *Ophioglossum*.
ii. Adder's tongue	B. *Equisetum*.
iii. Horse tail	C. *Lycopodium*.
iv. Club moss	D. *Isoetes*.

(a) i-A ii-B iii-C iv-D. (b) i-D ii-C iii-B iv-A.

(c) i-D ii-A iii-B iv-C. (d) i-A ii-D iii-C iv-B.

33. Penicillin was first discovered by :

(a) Alexander Fleming. (b) Frederick Banting.

(c) Charles Darwin. (d) John Macleod.

42. Which year has been declared as the International Year of Millets by United Nations ?

(a) 2021. (b) 2020.

(c) 2023. (d) 2024.

43. Which of the following is not a stop codon ?

(a) UAA. (b) AUG.

(c) UGA. (d) UAG.

44. The Chi-square test is used to :

(a) Compare the Means of two groups.

(b) Examine the association between two categorical variables.

(c) Test only related variables.

(d) None of the above

45. Match the following :

i. Carrot	A *Brassica oleracea.*
ii. Potato	B *Beta vulgaris.*
iii. Beet root	C *Daucus carota.*
iv. Cabbage	D *Solanum tuberosum.*

(a) i-A ii-B iii-C iv-D (b) i-D ii-B iii-A iv-C

(c) i-C ii-D iii-B iv-A (d) i-A ii-C iii-D iv-B

46. Edible mushroom :

(a) *Aspergillus.* (b) *Saccharomyces.*

(c) *Phytophthora.* (d) *Agaricus.*

47. White dammar is obtained from which of the following plant?

(a) *Valeria indica.* (b) *Canarium strictum.*

(c) *Acacia Senegal.* (d) *Acacia seyal.*

48. Which of the following is not a reason for soil erosion ?

(a) Deforestation. (b) Grazing.

(c) Rainfall. (d) Weathering.

49. Software programme used to view web pages is :

(a) Hyperlink. (b) Browser.

(c) Address bar. (d) Site.

50. Which of the following is not a vegetative propagation technique :

(a) Layering. (b) Seedling.

(c) Budding. (d) Grafting.

51. DNA is a polymer of :

(a) Nucleotides. (b) Lipids.

(c) Nucleosides. (d) Polysaccharides.

52. A dry dehiscent fruit developed from one carpel and at maturity splits along both the dorsal and ventral sutures is :

(a) Pome. (b) Berry.

(c) Legume. (d) Pepo.

53. Which of the following plants contain pollinium ?

(a) *Ixora coccinea*. (b) *Calotropis gigantea*.

(c) *Solanum nigrum*. (d) *Syzygiumcumini*.

54. Which of the following is a natural husk fibre with commercial value ?

(a) Cotton. (b) Sisal.

(c) Flax. (d) Coir.

55. Which of the following is not a protein sequence database ?

(a) DDBJ.
(b) UniProt.
(c) RCSB PDB.
(d) None of these.

56. DNA sequences that move from one location on the genome to another :

(a) Muton.
(b) Transposon.
(c) Recon.
(d) Cistron.

57. Normal pH of human blood is :

(a) 3.25 – 5.65.
(b) 9.25 – 9.86.
(c) 7.35 – 7.45.
(d) 6.35 – 6.55.

58. The G1 S G2 phases of cell cycle happens during :

(a) Prophase.
(b) Metaphase.
(c) Anaphase.
(d) Interphase.

59. Plant tissue culture media are generally sterilized using :

(a) Autoclave.
(b) Laminar air flow.
(c) Filter sterilization.
(d) None of these.

60. Resin duct of conifers is example of :

(a) Contractile vacuole.
(b) Schizogenous cavity.
(c) Sap vacuole.
(d) Lysigenous cavity.

61. The chemical fertilizer urea provides which element to the plants ?

(a) Potassium.
(b) Phosphorus.
(c) Nitrogen.
(d) Magnesium.

62. Law of limiting factors was proposed by :

(a) Blackman. (b) Justus von Liebig.

(c) Stephen Hales. (d) None of these.

63. ICAR Sugarcane Breeding Institute is situated at :

(a) Chennai. (b) Coimbatore.

(c) Bengaluru. (d) Hyderabad.

64. Which sampling method is used for the study of biodiversity to obtain quantitative information ?

(a) Convenience sampling. (b) Systematic sampling.

(c) Quadrat sampling. (d) Cluster sampling.

65. Which among the following countries is the highest emitter of greenhouse gases ?

(a) India. (b) USA.

(c) Russia. (d) European Union.

66. The transfer of DNA fragments from an electrophoresis gel to a membrane is :

(a) Southern blotting. (b) Western blotting.

(c) Northern blotting. (d) None of these.

67. Which of the following can induce genetic transformation in both *Escherichia coli* and *Saccharomyces cerevisiae* :

(a) Sodium dodecyl sulphate.

(b) Ethylene diamine tetraacetic acid.

(c) Polyethylene Glycol.

(d) None of these.

68. Which of the following is commonly called the 'nettle family' ?

(a) Meliaceae. (b) Urticaceae.

(c) Nymphaeaceae. (d) Verbenaceae.

69. In light microscopy what controls and adjusts the intensity of light that passes into the specimen :

(a) Diaphragm. (b) Coarse adjustment screw.

(c) Condenser lens. (d) Fine adjustment screw.

70. Which of the following is the most widely used vital stain ?

(a) Safranin. (b) Giemsa.

(c) Tetrazolium chloride. (d) Toluidine blue.

71. The protein coat covering the nucleic acid core of bacteriophage is :

(a) Capsule. (b) Capsid.

(c) Envelope. (d) None of these.

72. The condition in which chromosome number of an individual does not occur in multiples of haploid set :

(a) Diploidy. (b) Aneuploidy.

(c) Polyploidy. (d) Tetraploidy.

73. Collenchyma differs from parenchyma in :

(a) Possessing thick cell wall. (b) Being meristematic.

(c) Containing chloroplast. (d) All of the above.

74. In unilocular ovary with single ovule, the placentation is :

(a) Marginal. (b) Axile.

(c) Basal. (d) Free central.

75. Peroxisomes in photosynthetic plant tissue are the sites of :

(a) Photorespiration. (b) Protein degradation.

(c) Fat synthesis. (d) None of the above.

76. Who is called the Father of Indian Bryology ?

(a) S.C. Srivastava. (b) S. R. Kashyap.

(c) D. D. Pant. (d) P. Maheshwari.

77. Which of the following gymnosperm is considered as living fossil ?

(a) *Ginkgo biloba*. (b) *Pinus wallichiana*.

(c) *Gnetumgnemon*. (d) *Cedrus deodara*.

78. Which one of the following is a continental glacier ?

(a) Gorner glacier. (b) Furtwangler glacier.

(c) Greenland ice sheet. (d) Aletsch glacier.

79. Which of the following is a hypanthodium inflorescence ?

(a) *Ricinus commuis*. (b) *Ficus religiosa*.

(c) *Centella asiatica*. (d) *Solanum nigrum*.

80. The youngest layer of secondary xylem lies :

(a) Just inside the vascular cambium.

(b) Between pith and primary xylem.

(c) Just inside the cork cambium.

(d) Just outside the vascular cambium.

81. In plant cells which organelle is involved in cell wall synthesis ?

(a) Mitochondria. (b) Endoplasmic reticulum.

(c) Peroxisome. (d) Golgi apparatus.

82. Water pores present at the leaf margin of plants which help in guttation are :

(a) Hydathodes. (b) Lenticels.

(c) Stomata. (d) Nectarthodes.

83. Anomalous secondary growth of stem is seen in :

(a) *Dalbergia sp.*
(b) *Ficus sp.*
(c) *Bigonia sp.*
(d) *None of these.*

84. Which type of microscopeis used for observing specimen that have not been stained and are in natural state ?

(a) Light microscope.
(b) Phase contrast microscope.
(c) Electron microscope.
(d) Stereomicroscope.

85. Gram staining is used to test which organism at the site of infection ?

(a) Virus.
(b) Fungi.
(c) Nematodes.
(d) Bacteria.

86. Which of the following mushrooms contain psychoactive alkaloids ?

(a) *Amanita muscaria.*
(b) *Pleurotus ostreatus.*
(c) *Agaricus bisporus.*
(d) *Ganoderma lucidum.*

87. Specialized regions in the lichen thallus that are capable of nitrogen fixation is called :

(a) Isidia.
(b) Cephalodia.
(c) Soridia.
(d) None of these.

88. Citrus canker is caused by :

(a) Phytophthora.
(b) Aspergillus.
(c) Xanthomonas.
(d) Mycoplasma.

89. The anticancer drug paclitaxel is extracted from which gymnosperm ?

(a) *Ginkgo biloba.*
(b) *Pinus roxburghii.*
(c) *Gnetum ula.*
(d) *Taxus brevifolia.*

90. INFLIBNET centre is located at which state of India :

(a) Gujarat. (b) Maharashtra.

(c) West Bengal. (d) Goa.

91. Which of the following is the characteristic of genetic code ?

(a) Universal. (b) Unambiguous.

(c) Degenerate. (d) All of the above.

92. Which of the following is the most common form of DNA that has right-handed helix.

(a) A-Form. (b) Z-form.

(c) B-form. (d) C-form.

93. The variation seen in plants that have been produced by plant tissue culture :

(a) Phenotypic variation. (b) Somaclonal variation.

(c) Genotypic variation. (d) Somatic variation.

94. Genetic disorder caused by an extra full or partial copy of chromosome 21 :

(a) Down syndrome. (b) Cystic fibrosis.

(c) Albinism. (d) Sickle cell anaemia.

95. Photosystem II is present in :

(a) Outer chloroplast membrane. (b) Stroma.

(c) Grana. (d) None of these.

96. Which of the following is an aquatic fern ?

(a) *Pteris*. (b) *Drynaria*.

(c) *Adiantum*. (d) *Azolla*.

97. The edible part of jackfruit is :

(a) Thalamus.

(b) Perianth.

(c) Peduncle.

(d) Mesocarp.

98. Nyctinastic movement is commonly observed in which of the following plants :

(a) Legumes.

(b) Jasmines.

(c) Mirabilis.

(d) Water lilies.

99. Which of the following parts will get fossilized easily?

(a) Skin.

(b) Muscles.

(c) Bones.

(d) Fibrous tissue.

100. Cyclic photophosphorylation results in the synthesis of :

(a) ATP and NADPH.

(b) NADP only.

(c) ATP NADPH and O_2.

(d) ATP only.