Code No. Z-11

ENTRANCE EXAMINATION – 2021

M.Sc. Plant Biology & Biotechnology

Time: 2 hours | Maximum Marks: 100

HALL TICKET NO.

INSTRUCTIONS

Please read carefully before answering the questions:

1. Enter your Hall Ticket number both on the top of this page and on the OMR answer sheet.
2. Answers are to be marked only on the **OMR answer sheet** following the instructions provided there upon.
3. Hand over the OMR answer sheet to the Invigilator before leaving the examination hall.
4. The question paper contains **100** questions (**Part-A**: Question Nos. **1-25** and **Part-B**: Questions Nos. **26-100**) of multiple-choice printed in **20** pages, including this page. One OMR answer sheet is provided separately. **Please check.**
5. The marks obtained in **Part-A** will be used for resolving the tie cases.
6. Each question carries one mark.
7. There is **Negative marking** for wrong answers, in **Parts A and B.** For each wrong answer, 0.33 mark will be deducted.
8. No additional sheets will be provided. Rough work can be done in the question paper itself/space provided at the end of the booklet.
9. Calculators and mobile phones are NOT allowed.

PART-A

1. An instrument used to measure the amount of water vapor in air, in soil, or in confined spaces is called as

   A) Hydrometer
   B) Hygrometer
   C) Vapourmeter
   D) Rain gauge

2. One of the research scholars has isolated a novel protein from a medicinal plant which enhances the immunity in humans. After isolation, he purified the protein by a protein purification method in which he used Sephadex G-100. Which technique he has used for the purification of novel protein?

   A) Sodium Dodecyl Sulphate-Polyacrylamide Gel Electrophoresis
   B) Pulse Field Gel Electrophoresis
   C) Counter Immuno Electrophoresis
   D) Gel Filtration Chromatography

3. Three polypeptides (A, B and C) whose masses are 55, 50, and 75 kDa with pI of 6.5, 7.0 and 8.0 respectively, were subjected to standard reducing SDS-PAGE. The order of their separation from top to bottom would be

   A) A, B and C
   B) B, A and C
   C) A, C and B
   D) C, A and B

4. The scientists Buchner, Mayerhof, Parnas and Embden have made significant contributions in the field of

   A) respiration in plants
   B) plant pathogen interactions
   C) reproduction in plants
   D) plant taxonomy

5. Which one of the following microscopes would you use to localize a protein fused to green fluorescent protein (GFP) reporter in a cell?

   A) Dissecting microscope
   B) Scanning electron microscope
   C) Confocal microscope
   D) Phase contrast microscope

6. A seed biologist tested a seed population for germination. In this tested population, he got 68% germination and out of 32% ungerminated seeds, 25% seeds were found viable. What type analysis he might have performed?

   A) Tetrazolium test
   B) Iodine test
   C) Carbohydrate test
   D) Protein test

7. In higher plants, tunica-corpus theory is applicable to

   A) root apex
   B) shoot apex
   C) leaf tip
   D) flower development

8. From a protein mixture, same molecular weight proteins can be separated by using

   A) SDS-PAGE
   B) 2D-PAGE
   C) Agarose gel electrophoresis
   D) Capillary electrophoresis

9. The degree or intensity with which a particular genotype is expressed in an individual is called as

   A) Penetrance
   B) Expressivity
   C) Phenocopy
   D) Ecotype

10. $C_{55}H_{72}O_5N_4Mg$ is the chemical formula of

    A) Chlorophyll a
    B) Phytochrome
    C) Xanthophyll
    D) Anthocyanin

11. Viviparous nature of seed germination occurs in

    A) Mango
    B) Rhizophora
    C) Banana
    D) Rhizoctonia

12. Bioreactors are useful in

A) Separation and purification of a product
B) Processing of large volumes of culture
C) Cloning of genetic material
D) Raising of transgenic plants

13. Auxanometer is used for measuring for

A) Respiration
B) Plant movement
C) Plant growth
D) Transpiration

14. Cultivated bananas are sterile because

A) male flower-bearing plants are very rare
B) they lack natural pollinators
C) they are triploid and therefore seeds are not set
D) they are a cross of two unrelated plant species

15. Which of the following is ***incorrect*** for H^+-ATPase?

A) It uses energy of hydrolysis of ATP.
B) It is also responsible for the maintenance of cytosolic pH in the range of 7.3 – 7.5.
C) It results in the generation of proton motive force (pmf).
D) It maintains a high H^+ concentration inside the cell.

16. During ABA-mediated stomatal closure, membrane depolarization is caused by net influx of which of the following ions?

A) Chloride
B) Potassium
C) Hydrogen
D) Calcium

17. How many numbers of chiral atoms are present in Glucose and Fructose?

A) 5 in glucose and 4 in fructose
B) 4 in glucose and 3 in fructose
C) 4 in each
D) 3 in each

18. Mutations that involve the change of a single nucleotide and that code for different amino acid are

    A) Missense mutation
    B) Nonsense mutation
    C) Transversions
    D) Frameshift mutation

19. Which of the following nutrient is required for N_2 fixation in higher plants?

    A) B
    B) Si
    C) Co
    D) P

20. During sexual reproduction in barley, how many total meiotic divisions will be required for forming 100 zygotes/100 grains?

    A) 25
    B) 75
    C) 125
    D) 200

21. The '*Flavr Savr*' tomato was the first genetically engineered crop product commercialized for human consumption. This transgenic tomato is known for ____.

    A) increased bioactive compounds
    B) fortified Fe and Zn contents
    C) enhanced shelf-life
    D) bigger and pulpier fruits

22. Calculate the enthalpy change for the following reaction and choose the ***correct*** answer

    $CH_4(g) + 2O_2(g) \longrightarrow CO_2(g) + 2H_2O(l)$ using the formula $\Delta G^\circ = \Delta G^\circ_{f(products)} - \Delta G^\circ_{f(reactants)}$

    Given, enthalpies of formation of O_2, CH_4, CO_2 and H_2O are 0, 74.8 $kJmol^{-1}$, -393.5 $kJmol^{-1}$, -286 $kJmol^{-1}$, respectively.

    A) -890.7 kJ
    B) +880 kJ
    C) -640 kJ
    D) +640 kJ

23. Cysts are commonly seen in

A) *Agrobacterium*
B) *Gluconobacter*
C) *Rhodobacter*
D) *Azotobacter*

24. Identify the ***correct*** sequence of events that lead to the development of female gametophyte in angiosperms

A) Gametes – PCD - Functional megaspore – Meiosis – gametogenesis – MMC
B) MMC – Meiosis – PCD – Functional megaspore – gametogenesis – gametes
C) Functional megaspore – PCD – MMC – gametogenesis - Meiosis – gametes
D) Functional megaspore – Meiosis – PCD – gametogenesis – MMC – gametes

25. The CO_2 compensation point for C_3 plants is greater than C_4 plants because in C_3 plants ____.

A) photorespiration is present
B) photorespiration is absent
C) dark respiration is higher
D) dark respiration is lower

PART-B

26. Which of the following events takes place in metaphase I of meiosis?

A) Crossing over
B) Contraction of chromosomes
C) Homologous pairs of chromosomes line up on the metaphase plate
D) Individual chromosomes line up on the metaphase plate

27. The phytochemical ouabain is a potential inhibitor of ____.

A) Na^+ ion channel
B) H^+ pump
C) Na^+ / K^+ pump
D) Na^+ / Ca_2^+ antiporter

28. The first alkaloid to be isolated and characterized from plants is ____.

A) Caffeine
B) Morphine
C) Quinine
D) Cocaine

29. Kinase reactions involve the

A) addition or removal of a ketone group
B) addition or removal of a phosphate group
C) addition or removal of an amino acid to a polypeptide chain
D) involve the transfer of hydrogen atoms

30. Restriction endonuclease *NotI* recognizes 8-nt sequence (5'-GCGGCCGC-3') in a genome. What is the probability of presence of *NotI* recognition sequence in the genome?

A) It should cut once every 1,024bp in the genome
B) It should cut once every 4,096bp in the genome
C) It should cut once every 16,384bp in the genome
D) It should cut once every 65,536bp in the genome

31. Which of the following statement(s) is ***incorrect*** in angiosperms?

A) They have a dominant gametophyte generation
B) Double fertilization occurs
C) Presence of lignified vascular system
D) Independent sporophyte and gametophyte stages

32. ____protects the mRNA from degradation

A) Golgi bodies
B) Ribosomes
C) Series of adenine bases
D) Mitochondria

33. The lateral roots generally originate from

A) Cork cambium
B) Pericycle cells lying against protoxylem
C) Cortex
D) Endodermal cells lying against protoxylem

34. Entry of enveloped viruses into its host cells is mediated by:

A) only endocytosis
B) both endocytosis and phagocytosis
C) both endocytosis and membrane fusion
D) only pinocytosis

35. Which of the following viruses is ***not*** reported to spread by fruit bats?

A) SARS
B) HIV
C) Nipah
D) Ebola

36. On sequence analysis of a double standard DNA, the result showed the content of guanine, G was 30%, what is the amount of A and T put together.

A) 40%
B) 20%
C) 50%
D) 30%

37. Identify the ***correct*** statement regarding red green color blindness which is caused by the presence of an X-linked recessive allele.

A) Two colour-blind parents can give birth to a normal son
B) Two colour-blind parents can give birth to a normal daughter
C) Two normal parents can produce a colour-blind daughter
D) Two normal parents can produce a colour-blind son

38. Match the common names of spices listed in Column A with their scientific names and the plant parts (commonly used in food preparations) given in Column B and Column C, respectively and choose the ***correct*** answer

Column A	Column B	Column C
Common Name	**Scientific Name**	**Plant part used**
I. Cloves	a. *Piper nigrum*	i. Seeds
II. Blackpepper	b. *Curcumo longa*	ii. Roots
III. Cardamom	c. *Syzygium aromaticum*	iii. Flower buds
IV. Turmeric	d. *Elettaria cardomomum*	iv. Fruits

A) I-c, iii; II-a, iv; III-d, i; IV-b, ii
B) 1-c. iv, II-a, i; III-d, iii; IV-b, ii
C) I-d, iii; II-a, iv; III-c, ii; IV-b, i
D) I-d, iv; II-a, i; III-c, iii; IV-b, ii

39. If seeds become dormant when present on mother plant itself, such type of dormancy is known as

A) Induced dormancy
B) Innate dormancy
C) Enforced dormancy
D) Mechanical dormancy

40. The process of copying RNA into DNA is called ___

A) transcription
B) reverse transcription
C) translation
D) recombination

41. Goethe's foliar theory, Haughn and Somerville's ABC models relate to the study of

A) Leaf development
B) Shoot development
C) Root development
D) Flower development

42. Which plant is the source for the natural alternative to hydroxychloroquine (anti-malarial drug)?

A) Artemisia leaf
B) Podophyllum root
C) Cinchona bark
D) Aconitum seeds

43. Seed germination is completed when the

A) embryo sporophyte absorbs water
B) embryo sporophyte resumes growth
C) primary root comes out of the seed
D) cotyledons grow

44. Double fertilization occurs in

A) Algae
B) Pteridophytes
C) Angiosperms
D) Gymnosperms

45. Name the product(s) of β-oxidation of fatty acids

A) Glycerol
B) Pyruvate only
C) Acetyl CoA
D) $FADH_2$ and $NADPH_2$

46. According to second law of thermodynamics, spontaneous reaction will occur

A) When fewer complex molecules are converted to more complex ones.
B) When there is absorption of energy from the surroundings.
C) Molecules having higher entropy are converted to molecules having lesser entropy.
D) Molecules having lesser entropy are converted to molecules having high entropy.

47. Excited state of chlorophyll molecule responsible for the photochemical reaction of photosynthesis is:

A) First singlet state
B) Second singlet state
C) Triplet state
D) Quadruplet state

48. Stomatal closure is induced by

A) Abscisic acid
B) Gibberellic acid
C) Auxin
D) Ethylene

49. Which of the following is ***not*** an auxin transport inhibitor?

A) TIBA
B) NAA
C) NPA
D) Morphactin

50. Which of the following is a natural growth inhibitor which has physiological properties similar to ABA?

A) Xanthoxin
B) Violaxanthin
C) Phaseic acid
D) Isopentenyl diphosphate

51. Any partial unfolding of the protein destabilizes the protein structure, in such circumstances which form of the secondary structure components can be seen?

A) Turns and α-Helix
B) β-sheets
C) Supercoil
D) Random coils

52. The output of glycolysis if one glucose molecule metabolizes

A) 2 Pyruvate, 2 ATP & 2 NADH
B) 4 Pyruvate, 2 ATP & 2 NADH
C) 4 Pyruvate, 4 ATP & 2 NADH
D) 2 Pyruvate, 4 ATP & 4 NADH

53. Proteins having KDEL (Lys-Asp-Glu-Leu) signal sequence are _____.

A) ER lumen retaining proteins
B) secretory proteins
C) lysosomal proteins
D) mitochondrial inner membrane proteins

54. The three types of C4 plants differ from each other on the basis of:

A) Chemical nature of C4 compound transported out of mesophyll cells
B) Decarboxylation reaction of C4 compound in bundle sheath cells
C) Chemical nature of C3 compound which is returned to mesophyll cells
D) The enzyme which is responsible for initial carboxylation of CO_2 acceptor

55. Which of the following species produces non-endospermous seeds?

A) *Triticum aestivum*
B) *Ricinus communis*
C) *Phaseolus vulgaris*
D) *Zea mays*

56. Read the following statements regarding chelating agent and identify the *correct* statement

A) These are the inorganic compounds which are having the ability to form stable water-soluble complexes with organic compounds and helps in the stability of the inorganic compounds.
B) These are the organic compounds which are used to stabilize the media compounds while autoclaving.
C) These are the organic compounds which prevent from binding with metallic cation in the form ligands.
D) These are the organic compounds which are having the ability to form stable water-soluble complexes with heavy metal and prevent or reverse the binding of metallic cation to ligands, improving the metal's general stability and likelihood to bond with other substances.

57. Termites represent _____ biological system.

A) monopartite
B) bipartite
C) tripartite
D) polypartite

58. Phycoerythrin and phycocyanin are the pigments commonly present among the members of the phylum Cyanobacteria. Chemically these are

A) cyclic tetrapyrroles coupled to proteins
B) open-chain tetrapyrroles coupled to proteins
C) lipo-glycosides
D) acyl unbranched lipids coupled to carotenoids

59. Clostridia which obtain energy by fermenting amino acids in which one amino acid acts as electron donor and is oxidized, whereas the other acts as the electron acceptor and is reduced. This type of coupled decomposition is known as

A) Reimer-Tiemann reaction
B) Stephens reaction
C) Stickland reaction
D) Michael reaction

60. A geneticist interested in immune function induces random mutations in a number of specific genes in mice and then determines which of the resulting mutant mice have impaired immune function. This approach is an example of ___.

A) Forward genetics
B) Reverse genetics
C) Both forward and reverse genetics
D) Neither forward nor reverse genetics

61. These are multicellular green algae characterised by flattened growth form composed of thin-walled cells. These are thought to be sister group to Charales plus land plants. These are

A) Coleochaetales
B) Coelacanths
C) Copepods
D) Crenarchaeotes

62. Position of centromeres can be determined by using ____banding technique

A) G - banding
B) N - banding
C) C - banding
D) R - banding

63. The anticodon of $tRNA^{fMet}$ is ____.

A) 3'-CAU-5'
B) 3'-CAG-5'
C) 3'-UAC-5'
D) 3'-UAG-5'

64. Which of the following is/are ***true*** about isoenzymes?

(i) They have several identical subunits
(ii) They react with the same substrate, but form different products
(iii) They are obtained from the same gene by different posttranslational modifications
(iv) They are proteins with a different primary structure that perform the same reaction on the same substrate

A) (i) and (ii)
B) (ii) alone
C) (iii) and (iv)
D) (iv) alone

65. Trehalose is a disaccharide formed by ____.

A) two alpha glucose units
B) glucose and fructose
C) two alpha fructose units
D) glucose and galactose

66. Circadian rhythm is a biological rhythm with a cycle of ____ hours.

A) 12
B) 24
C) 36
D) 48

67. Which one of the following organic acids is present in rancid butter?

A) Acetic acid
B) Formic acid
C) Lactic acid
D) Butyric acid

68. The positive (+) charge in NAD+ is found in which part of the molecule?

A) Nicotinamide
B) Adenine
C) Both adenine and nicotinamide
D) Ribose

69. In a Michaelis-Menton plot enzyme activity (reaction rate *vs.* substrate concentration), the reaction rate reaches a plateau, and does not increase any further upon adding more substrate is that

A) all substrate has been converted to product
B) the active site is saturated with substrate
C) the substrate is inducing inhibition on the enzyme
D) there is a competitive inhibitor present

70. Match the antibiotics in Group I with the targets in Group II and choose the ***right*** answer.

Group I	**Group II**
1. Sulfonamide	i. Peptidoglycan synthesis
2. Quinolones	ii. Peptide chain elongation
3. Erythromycin	iii. Folic acid biosynthesis
4. Cephalosporin	iv. Topoisomerase

A) 1-iii, 2-iv, 3-i, 4-ii
B) 1-ii, 2-iv, 3-iii, 4-i
C) 1-iv, 2-i, 3-ii, 4-iii
D) 1-iii, 2-iv, 3-ii, 4-i

71. The diploid chromosome number (2n) of *Datura stramonium*, the jimson weed is 24. How many different types of trisomics can be obtained in this species?

A) 12
B) 13
C) 24
D) 25

72. Mature male gametophyte in plants is ___.

A) pollen grains
B) endosperm
C) seed
D) anthers

73. Match the following and choose the ***correct*** option.

1. Requirement of light for germination	(i). Nyctinasty
2. Folding of leaves at night	(ii). Photonasty
3. Opening of leaves at dawn	(iii). Phototropism
4. Directional bending of shoots to light	(iv). Photoblasty

A) 1, (iv); 2, (iii); 3, (ii); 4, (i)
B) 1, (i); 2, (iv); 3, (iii); 4, (ii)
C) 1, (iv); 2, (i); 3, (ii); 4, (iii)
D) 1, (ii); 2, (iii); 3, (ii); 4, (iv)

74. Quantasomes are found in

A) thylakoid membrane of chloroplasts
B) cristae of mitochondria
C) nucleus membrane
D) plasma membrane

75. What is the value of ΔG, when a reaction is in equilibrium?

A) $\Delta G = 0$
B) $\Delta G = -1$
C) $\Delta G = 1$
D) $\Delta G = \Delta G^{\circ}$

76. Lineweaver-Burk plot is also known as_____

A) Hanes-Woolf plot
B) Double reciprocal plot
C) Eadie-Hofstee plot
D) Steady-state equation

77. Which of the following is ***not*** a diazotroph?

A) *Rhizobium leguminosarum*
B) *Anabaena nostoc*
C) *Klebsiella pneumonia*
D) *Clostridium botulinum*

78. In cereals, the cells of the outermost layer of the endosperm becomes morphologically and physiologically specialized to form a layer is called

A) Aleurone
B) Tapetum
C) Perisperm
D) Pericarp

79. Virtually all bacteria have cell walls containing peptidoglycan. Which among the following is an ***exception***?

A) *Bacillus*
B) *Pseudomonas*
C) *Helicobacter*
D) *Chlamydia*

80. Which among the following organisms is recognized as the causative for the seventh pandemic during the early 1960's?

A) Classic strain of *Vibrio cholerae*
B) E1 Tor biotype of *Vibrio cholerae*
C) E5 Zor biotype of *Vibrio cholerae*
D) M1 Cla biotype of *Vibrio cholerae*

81. In negative regulation of a gene expression, the presence of a particular regulatory factor reduces gene expression and its absence results in increased gene expression; the factor is a

A) Activator
B) Repressor
C) Operator
D) Inhibitor

82. Which enzyme is involved in epigenetic inheritance?

A) MAPK
B) Acetyl CoA carboxylase
C) Telomerase
D) Histone methyl transferase

83. Which of the following pairs is inter-converted in the process of mutarotation?

A) α-D-glucose and β-D-glucose
B) D-glucose and L-glucose
C) D-glucose and D-fructose
D) α-D-glucopyranose and β-D-glucofuranose

84. Which element plays an important role in pollen germination?

A) Potassium
B) Magnesium
C) Zinc
D) Boron

85. Usually in photosynthesis the resonance energy plays a major role. Therefore, what is resonance energy transfer?

A) The transfer of electrons between the molecules
B) The transfer of energy but not the electrons
C) The transfer of electrons but not the energy
D) The transfer of energy as well as electrons

86. In general, the melting point of fatty acids depends upon chain length and _____

A) the position of the double bond
B) the shape of the fatty acids
C) charge on the carbon
D) degree of unsaturation

87. Compounds derived from burnt plant material, responsible for stimulating seed germination in plants are:

A) Strigolactones
B) Polyamines
C) Jasmonic acid
D) Karrikins

88. Which precursor is involved in biosynthesis of folate pathway?

A) Serine
B) Shikimate
C) Tyrosine
D) Glycine

89. A reciprocal cross was made between two types of the evening primrose, *Oenothera hookeri* and *O. muricata*, known to have the same chromosome constitution. When the seed parent was *O. hookeri*, the plastids of the progeny were yellow; but when the seed parent was *O. muricata*, the plastids of the progeny were green. Which of the following statements is the ***correct*** explanation of the differences in results obtained from the reciprocal crosses?

A) Nuclear inheritance; *Oenothera hookeri* and *Oenothera muricata* are heterozygous for the loci controlling the color of the plastids
B) Nuclear inheritance: *Oenothera hookeri* contains green plastids and *O. muricata* contains yellow plastids
C) Maternal inheritance: *Oenothera hookeri* contains yellow plastids and *O. muricata* contains green plastids
D) Maternal effect: *Oenothera hookeri* contains green plastids and *O. muricata* contains yellow plastids

90. Porins are

A) Proteins present in the outer membrane of gram-negative bacteria and function as channels for the entrance and exit of hydrophilic low-molecular weight substances.
B) Complex lipids present in the outer membrane of gram-negative bacteria and function as channels for the entrance and exit of hydrophilic low-molecular weight substances.
C) Proteins present in the inner membrane of gram-positive bacteria and function as channels for the entrance and exit of hydrophobic low-molecular weight substances.
D) Complex lipo-glucosides present in the outer membrane of gram-negative bacteria and function as channels for the entrance and exit of hydrophilic low-molecular weight substances.

91. The molecular markers and their classification are given below.

(1) SSR and RFLP - Codominant
(2) ISSR and RAPD - Codominant
(3) AFLP and RAPD - Codominant
(4) AFLP and ISSR - Dominant

Which of the above combinations are ***correct***?

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

92. Which of the following is an anaplerotic reaction?

A) Conversion of pyruvate to acetyl CoA
B) Conversion of pyruvate to lactic acid
C) Conversion of pyruvate to acetaldehyde
D) Conversion of pyruvate to oxaloacetate

93. A type of facultative apomixis in which the male gamete does not fuse with the female nucleus following entry into the embryo sac, leading to production of paternal and maternal haploids is

A) semigamy
B) syngamy
C) parthenogenesis
D) apogamy

94. The Prophase 1 of first meiotic division is characterized by critical events as reflected by the appearance of chromosomes at each substage. The stage of Prophase 1 during which synaptonemal complex dissolves and the pairs of homologous chromosomes remain held together at intervals by cross-connections resulting from crossing over is

A) Leptotene
B) Zygotene
C) Pachytene
D) Diplotene

95. Which of the following statements is ***incorrect*** about somatic embryogenesis *in vitro*?

A) Somatic embryos are bipolar structures having both shoot and root meristems
B) Somatic embryos are induced either directly from the cells of the explants or indirectly from the callus produced from the explants
C) Somatic embryos have vascular connections with the original tissue
D) Somatic embryos generally lack a suspensor and even if present is not functional

96. The antibiotic Fusidic acid inhibits the elongation steps of protein synthesis. Which other antibiotics have same mode of action?

A) Rifamycin, Neomycin
B) Neomycin, Puromycin
C) Virginiamycin, Pulvomycin
D) Anisomycin, Narciclasine

97. If a series of three alleles is known to exist in a given diploid (2n) species, how many different combinations might be expected to occur in the diploid individuals of the entire population.

A) 5
B) 6
C) 7
D) 8

98. Citral is used extensively in the perfume and flavour industry to stimulate lemon-like odour. Upon oxidation it gives rise to

A) Methylheptenone
B) Geranic acid
C) Geraniol
D) Limonene

99. In *Zea mays*, the diploid chromosome number 2n=20. The chromosome number and ploidy of matured endosperm cells is:

A) 10 (n)
B) 20 (2n)
C) 30 (3n)
D) 40 (4n)

100. Which of the following is ***not*** an allopolyploid?

A) *Raphano brassica*
B) *Triticum aestivum*
C) *Gossypium hirsutum*
D) *Solanum tuberosum*

University of Hyderabad
Entrance Examinations - 2021

School/Department/Centre : Department of Plant Sciences, School of Life Sciences
Course/Subject : M.Sc. Plant Biology & Biotechnology – 2021 (Code No. Z-11)

Q.No.	Answer	Q.No.	Answer	Q.No.	Answer	Q.No.	Answer
1	B	26	C	51	D	76	B
2	D	27	C	52	A	77	D
3	D	28	B	53	A	78	A
4	A	29	B	54	B	79	D
5	C	30	D	55	C	80	B
6	A	31	A & D	56	D	81	B
7	B	32	C	57	C	82	D
8	B	33	B	58	B	83	A
9	B	34	C	59	C	84	D
10	A	35	B	60	B	85	B
11	B	36	A	61	A	86	D
12	B	37	D	62	C	87	D
13	C	38	A	63	C	88	B
14	C	39	B	64	D	89	C
15	D	40	B	65	A	90	A
16	C	41	D	66	B	91	D
17	B	42	C	67	D	92	D
18	A	43	C	68	A	93	A
19	C	44	C	69	B	94	D
20	C	45	C & D	70	D	95	C
21	C	46	D	71	A	96	C
22	A	47	A	72	A	97	B
23	D	48	A	73	C	98	B
24	B	49	B	74	A	99	C
25	A	50	A	75	A	100	D

Note/Remarks: 1. Question No. 31: Both A and D are correct answers. Hence, students who have marked either A or D will get one mark.
2. Question No. 45: Both C and D are correct answers. Hence, students who have marked either C or D will get one mark.

Signature of the Head
Department of Plant Sciences