

Seat No.

Total No. of Pages : 19

RE-Entrance Examination 2026**Department of Botany****M.Sc. Botany****Subject Code : 58714**

Day and Date : Wednesday, 24-06-2026**Total Marks : 100****Time : 10.30 AM TO 12.00 PM**

Instructions:

- 1) All questions are compulsory.
 - 2) Each question carries 1 mark.
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
 - 4) Follow the instructions given on OMR sheet.
 - 5) Rough work shall be done on the sheet provided at the end of question paper.
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1. Which algae is used as a biofertilizer?

a) Spirogyra

b) Nostoc

c) Ulothrix

d) Chara

2. TMV is an example of

a) RNA virus

b) DNA virus

c) Bacteria

d) Fungus

3. Bacteria reproduce mainly by

a) Budding

b) Binary fission

c) Meiosis

d) Fragmentation

4. Glyoxysomes are involved in
- a) Photosynthesis
 - b) Fat metabolism
 - c) Respiration
 - d) Protein synthesis
5. Which organelle contains chlorophyll?
- a) Mitochondria
 - b) Golgi body
 - c) Nucleus
 - d) Chloroplast
6. Peroxisomes help in
- a) DNA synthesis
 - b) Detoxification
 - c) Protein synthesis
 - d) Cell division
7. Virus lacks
- a) Protein
 - b) Nucleic acid
 - c) Cellular organization
 - d) Capsid
8. Reproduction in Spirogyra is mainly by
- a) Binary fission
 - b) Conjugation
 - c) Budding
 - d) Sporulation
9. The body of algae is called
- a) Root
 - b) Stem
 - c) Thallus
 - d) Leaf

10. Penicillium reproduces by
- a) Zoospores
 - b) Conidia
 - c) Budding
 - d) Fragmentation
11. Cycas belongs to
- a) Angiosperms
 - b) Gymnosperms
 - c) Bryophytes
 - d) Algae
12. The scientific naming of plants is called
- a) Taxonomy
 - b) Nomenclature
 - c) Classification
 - d) Identification
13. Rhizome is a modification of
- a) Stem
 - b) Root
 - c) Leaf
 - d) Flower
14. Phyllotaxy refers to
- a) Root arrangement
 - b) Leaf arrangement
 - c) Stem growth
 - d) Flower type

15. Mendel's law of segregation is also called as.....
- a) Law of dominance
 - b) Law of linkage
 - c) Law of purity of gametes
 - d) Law of variation
16. Centromere position defines
- a) DNA structure
 - b) Chromosome type
 - c) Gene function
 - d) Mutation
17. mRNA carries
- a) Amino acids
 - b) Enzymes
 - c) Energy
 - d) Genetic message
18. Food chain represents in ecosystem.
- a) Energy flow
 - b) Water cycle
 - c) Nitrogen cycle
 - d) Respiration
19. Vavilov is associated with of cultivated plants
- a) Photosynthesis
 - b) Centres of origin
 - c) Respiration
 - d) Mutation

37. Water absorption occurs mainly in
- a) Root hairs
 - b) Stem
 - c) Leaves
 - d) Flowers
38. Cohesion theory explains
- a) Photosynthesis
 - b) Transpiration
 - c) Respiration
 - d) Water transport
39. Transpiration pull is process
- a) Active process
 - b) Passive process
 - c) Enzymatic
 - d) Chemical
40. Diffusion is process
- a) Active
 - b) Passive
 - c) Energy requiring
 - d) Enzymatic
41. Carrier concept explains
- a) Diffusion
 - b) Active transport
 - c) Osmosis
 - d) Transpiration
42. Calcium deficiency causes
- a) Leaf fall
 - b) Necrosis
 - c) Chlorosis
 - d) Poor root growth

43. Magnesium is a part of
- a) DNA
 - b) Chlorophyll
 - c) Protein
 - d) Lipid
44. Biotic stress is caused due to
- a) Drought
 - b) Pathogens
 - c) Salinity
 - d) Heat
45. Abiotic stress is caused due to
- a) Fungi
 - b) Bacteria
 - c) Drought
 - d) Virus
46. Adaptation means
- a) Sudden change
 - b) Long-term adjustment
 - c) Short-term response
 - d) Damage
47. Tissue culture requires
- a) Sterile conditions
 - b) Soil
 - c) Sunlight
 - d) Air
48. Auxins promote in plants
- a) Root formation
 - b) Leaf fall
 - c) Dormancy
 - d) Senescence

49. Cytokinins promote in plants
- a) Aging
 - b) Cell division
 - c) Death
 - d) Dormancy
50. Somatic embryos arise from
- a) Seeds
 - b) Somatic cells.
 - c) Gametes
 - d) Roots
51. Protoplast fusion produces
- a) Clones
 - b) Seeds
 - c) Hybrids
 - d) Roots
52. GMO stands for
- a) General Modified Organism
 - b) Gradually modified organism
 - c) Genetic Model Organism
 - d) Genetically Modified Organism
53. Agrobacterium transfers
- a) Protein
 - b) DNA
 - c) Lipid
 - d) Sugar
54. GUS is a
- a) Marker gene
 - b) Hormone
 - c) Protein
 - d) Enzyme

55. Golden rice is rich in
- a) Protein
 - b) Vitamin A
 - c) Iron
 - d) Calcium
56. Microprojectile method uses
- a) Electricity
 - b) Virus
 - c) Injection
 - d) Gene gun
57. Floriculture deals with cultivation
- a) Fruit
 - b) Flower
 - c) Vegetable
 - d) Seed
58. Landscape gardening is of gardens
- a) Indoor plantation
 - b) Outdoor design
 - c) Farming
 - d) Cultivation
59. Drip irrigation uses more efficiently
- a) Water
 - b) Soil
 - c) Fertilizer
 - d) Light
60. Rose is propagated by
- a) Seed
 - b) Spore
 - c) Cutting
 - d) Roots

61. Freezing is
- a) Chemical preservation
 - b) Physical preservation
 - c) Biological
 - d) Enzymatic
62. Lactose is a
- a) Monosaccharide
 - b) Disaccharide
 - c) Polysaccharide
 - d) Protein
63. Cellulose is carbohydrate
- a) Storage
 - b) Structural
 - c) Lipid
 - d) Protein
64. Proteins are made up of
- a) Sugars
 - b) Lipids
 - c) Amino acids
 - d) Nucleotides
65. Fatty acids are synthesized in
- a) Cytoplasm
 - b) Nucleus
 - c) Mitochondria
 - d) Golgi bodies
66. Library research involves
- a) Lab
 - b) Books
 - c) Field
 - d) Survey

67. Camera Lucida is used for
- a) Photography
 - b) Heating
 - c) Measuring
 - d) Drawing specimens
68. Sustainable use means
- a) Overuse
 - b) Balanced use
 - c) No use
 - d) Excess use
69. Tinospora is used as plant
- a) Dye
 - b) Medicine
 - c) Fiber
 - d) Food
70. Aloe vera is used in
- a) Textile
 - b) Cosmetics
 - c) Fuel
 - d) Timber
71. Adulteration means
- a) Purity
 - b) Extraction
 - c) Cleaning
 - d) Mixing impurities
72. Sacred groves are
- a) Farms
 - b) Protected forests
 - c) Gardens
 - d) Fields

73. IUCN works for of nature and natural resources
- a) Trade
 - b) Industry
 - c) Conservation
 - d) Mining
74. Ex situ conservation includes
- a) Forest
 - b) Botanical garden
 - c) River
 - d) Desert
75. L'thnobotany deals with studies on
- a) Plants only
 - b) Soil
 - c) Human-plant relation
 - d) Water
76. Rauvolfia serpentina is used for
- a) Dye
 - b) Timber
 - c) Fiber
 - d) Medicine
77. BLAST compares
- a) Plants
 - b) DNA sequences
 - c) Soil
 - d) Water

78. Histogram shows of the data.
- a) Frequency distribution b) Diagram
c) Table d) Chart
79. Mean is nothing but of the data
- a) Average b) Median
c) Mode d) Range
80. Chi-square test is used for
- a) Growth
b) Hypothesis testing
c) Respiration
d) Photosynthesis
81. Mutation breeding improves character.
- a) Yield b) Soil
c) Water d) Light
82. The powerhouse of the cell is
- a) Nucleus b) Ribosome
c) Mitochondria d) Golgi body
83. DNA is located mainly in
- a) Cytoplasm b) Nucleus
c) Vacuole d) Cell wall

84. RNA differs from DNA by having
- a) Deoxyribosc
 - b) Thymine
 - c) Uracil
 - d) Double helix
85. Ribosomes are responsible for
- a) Respiration
 - b) Photosynthesis
 - c) Protein synthesis
 - d) Transport
86. The basic unit of life is
- a) Tissue
 - b) Organ
 - c) Cell
 - d) System
87. Which plant hormone promotes stem elongation?
- a) Auxin
 - b) Gibberellin
 - c) Ethylene
 - d) ABA
88. Ethylene is responsible for
- a) Root growth
 - b) Fruit ripening
 - c) Cell division
 - d) Dormancy
89. Which mineral is essential for protein synthesis in plants?
- a) Nitrogen
 - b) Potassium
 - c) Calcium
 - d) Magnesium

ROUGH WORK