

Seat No.	
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P.G. Entrance Examination, May - 2023**M.Sc. BOTANY****Sub.Code : 58714**

Day and Date : Tuesday : 09-05-2023

Total Marks : 100

Time : 03.30 p.m. to 05.00 p.m.

- 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.

- 1) The Latin term "Viron" means _____.
 A) Antidote B) Poison
 C) Hormone D) Chemical

- 2) The rod-or cylindrical shaped bacteria are called _____.
 A) Bacilli B) Cocci
 C) Vibrio D) Pleomorphic

- 3) *Canada balsam* is obtained from _____.
 A) Rose B) Cycas
 C) Gnetum D) Abies

- 4) The function of Nostoc heterocyst is _____.
 A) N₂ fixation B) Sulphur fixation
 C) Lipid fixation D) Phosphorous fixation

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- 5) The process of soil formation from parent rock is called as _____.
A) Decomposition B) Accumulation
C) Hardening D) Weathering
- 6) Community ecology is study of _____.
A) Individual B) Organism
C) Population D) Only Plant
- 7) Selaginella produces _____ types of spores.
A) Two B) Three
C) Four D) Five
- 8) In Bryophytes _____ is a male reproductive organ.
A) Anther B) Antheridium
C) Archegonium D) Carpel
- 9) *Gloriosa superba* is belongs to the family _____.
A) Caesalpiniaceae B) Solanaceae
C) Nyctanginaceae D) Liliaceae
- 10) The Indian Botanical Garden was established by _____.
A) J.D. Hooker B) Robert Kyd
C) Robert Wallich D) J. Biswas
- 11) In plants gametophytic plant body is always _____.
A) Haploid B) Diploid
C) Polyploid D) Tetraploid

- 12) The stalk of ovule attached to the placenta is called _____.
- A) Helium
 - B) Raphe
 - C) Nucellus
 - D) Funicle
- 13) The process of formation of seeds without fertilization in flowering plants is known as _____.
- A) Budding
 - B) Apomixis
 - C) Sporulation
 - D) Somatic hybridization
- 14) During day time starch is converted in to glucose phosphate by enzyme _____.
- A) Phosphatase
 - B) Carboxylase
 - C) Phosphorylase
 - D) Catalase
- 15) Which type of meristem is responsible for primary growth?
- A) Apical meristem
 - B) Lateral meristem
 - C) Vascular meristem
 - D) Cambium meristem
- 16) Casparian is the characteristics of _____.
- A) Cortex
 - B) Endodermis
 - C) Pericycle
 - D) Pith
- 17) Glycolysis takes place in _____
- A) Cytoplasm
 - B) Chloroplast
 - C) Ribosome
 - D) Mitochondria

- 18) _____ is an example of aerobic bacteria.
- A) *Azotobacter* B) Yeast
C) *Riccia* D) *Penicillium*
- 19) In seeds food material is stored in _____.
- A) Embryo B) Seed coat
C) Cotyledons D) Epithelial layer
- 20) The endosperms is rich in proteins and is called as _____.
- A) Aleurone B) Lipids
C) Carbohydrates D) Sugar
- 21) What causes male sterility in plants?
- A) Genetic factors B) Environmental factors
C) Nutritional deficiencies D) All of the above
- 22) What is the primary goal of plant breeding?
- A) To reduce genetic diversity
B) To increase genetic diversity
C) To improve the quality of the crop
D) To prevent the development of new crop varieties
- 23) The point mutation involves _____.
- A) Deletion B) Insertion
C) Change in single base pair D) Duplication

- 24) What is the purpose of selecting parent plants in plant breeding?
- A) To increase genetic variation
 - B) To decrease genetic variation
 - C) To improve the quality of the offspring
 - D) To reduce the number of offspring
- 25) *Raphanobrassica* is example of _____.
- A) Autopolyploidy
 - B) Haploidy
 - C) Allopolyploidy
 - D) Diploidy
- 26) When two or more genes interact to control a single trait, it is called _____.
- A) Epistasis
 - B) Pleiotropy
 - C) Co-dominance
 - D) Incomplete dominance
- 27) The size, shape and morphology of chromosomes of an organism constitute _____.
- A) Phenotype
 - B) Genotype
 - C) Karyotype
 - D) All the above
- 28) The interchange of parts between non-homologous chromosomes is called _____.
- A) Duplication
 - B) Translocation
 - C) Inversion
 - D) Deletion

- 29) _____ is an example of a physical mutagenic agent.
 A) Formaldehyde B) Diphenyl amine
 C) UV radiation D) Alcohol
- 30) Extra nuclear inheritance commonly occur in _____.
 A) Nucleus B) Nucleolus
 C) Cell membrane D) Plastids
- 31) Capsid of viral genome is made up of _____.
 A) Lipid coat B) Carbohydrate coat
 C) Protein coat D) Starch coat
- 32) The process which allows growing the microorganisms in laboratory is called _____.
 A) Incubation B) Inoculation
 C) Isolation D) Fixation
- 33) The transfer of genes from one cell to another is called _____.
 A) Transduction B) Conjugation
 C) Transformation D) Transmission
- 34) Molasses is presently used for production of _____.
 A) Alcohol B) Antibiotic
 C) Lactic acid D) Citric acid
- 35) A biocontrol agent used against plant diseases is _____.
 A) Trichoderma B) *Bacillus thuringiensis*
 C) *Glomus* D) Bucleovirus

- 36) Plant diseases caused by living organisms are called as _____.
A) Biotic diseases B) A biotic diseases
C) Non-infectious diseases D) Infectious diseases
- 37) Bacterial disease was first reported by _____.
A) Carl Lewis B) Sir Edwin John Butler
C) Heinrich Anton de Bary D) Thomas J. Burrill
- 38) *Cuscuta reflexa* is _____.
A) Partial stem parasite B) Total stem parasite
C) Partial root parasites D) Total root parasite
- 39) Mushroom produces _____.
A) Ascospores B) Conidiospores
C) Basidiospores D) Teleutospores
- 40) _____ is poisonous mushroom can cause death.
A) *Pleurotus sajor caju* B) *Amanita muscaria*
C) *Agaricus bisporus* D) *Morchella spp.*
- 41) Mushroom cultivation technology is developed at _____ New Delhi.
A) IARI B) UGC
C) MOEF D) DST
- 42) Extra chromosomal DNA in bacteria is called _____.
A) Nucleoid B) Chromosome
C) Plasmid D) Telomere

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- 43) Electron microscope was first developed by _____.
A) Dong
B) E. Ruska & M. Knoll
C) Russel
D) Mayer
- 44) Colorimeter operates in _____ light.
A) Infrared
B) Visible
C) Invisible
D) Blue and red
- 45) Endoplasmic reticulum is absent in _____ only.
A) Prokaryotes
B) Eukaryotes
C) Plant cell
D) Animal cell
- 46) Polymorphism is characteristic feature of _____.
A) Chloroplast
B) Lysosomes
C) Ribosomes
D) Mitochondria
- 47) Fluid-mosaic model of cell membrane was described by _____.
A) Robertson
B) Danielli-Davson
C) Singer-Nicholson
D) Robertson-Davson
- 48) Light microscope is also known as _____.
A) Electron microscope
B) Optical microscope
C) Fluorescence microscope
D) Scanning microscope
- 49) The replication of nuclear DNA occurs in _____.
A) G₁-phase
B) G₂-phase
C) M-phase
D) S-phase

- 56) Jasmine is an example of _____.
- A) Loose flowers B) Cut flowers
C) Cut greens D) Dried flowers
- 57) Mughal garden is situated at_____.
- A) Mysore B) Delhi
C) Kolkatta D) Lucknow
- 58) Necrosis in Rose is due to _____ deficiency.
- A) Iron B) Boron
C) Sodium D) Pottasium
- 59) Designing of outdoor and public spaces is called _____.
- A) Landscaping B) Indoor gardening
C) Floriculture D) Hedges
- 60) Marigold is native of _____.
- A) China B) U.S.A.
C) South Africa D) Australia
- 61) _____soil is most suitable for nursery.
- A) Loamy and sandy B) Black cotton
C) Regur D) Rocky
- 62) Amylose and amylopectin are the two components of _____.
- A) Cellulose B) Glycogen
C) Inulin D) Starch

- 95) Perfume is obtained from _____.
- A) *Acacia concinna* B) *Lawsonia inermis*
C) *Santalum album* D) *Jasminum sambac*
- 96) Vitamin C, also known as _____.
- A) Ascorbic acid B) Butanol
C) Gibberellic acid D) Fumaric acid
- 97) Incorporation of impurities in genuine or standard drug is known as _____.
- A) Adulteration B) Filtration
C) Sterilization D) Pharmacognosy
- 98) The symbiotic relationship between fungi and roots of higher plant is called _____.
- A) Parasitism B) Mycorrhiza
C) Helotism D) Etiology
- 99) In VAM fungi bladders like structures are called as _____.
- A) Vesicles B) Arbuscules
C) Conodiophores D) Chlamidospores
- 100) *Crotolaria juncea L.* is commonly used as _____.
- A) Green manure B) Compost
C) Vermicompost D) All of the above



Rough Work