**SET–"X"** (Total No. of printed pages : 21)

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

## UG-EE-June, 2025 (Genetics 4 year)

Sr. No. 10017

**Code A**

Time : 1¼ Hours | Total Questions : 100 | Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Date of Birth : _____

Father's Name : _____ Mother's Name : _____

Date of Examination : _____

(Signature of the candidate) (Signature of the Invigilator)

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3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along-with answer key of all the A,B,C and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case will be considered.
5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers **MUST NOT** be ticked in the Question book-let.
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|---|---|
| 1. | Which of the following structure is absent in bacterial cells?<br>(1) Ribosomes (2) Nucleus<br>(3) Plasma membrane (4) Cell wall |
| 2. | The movement of water across semipermeable membrane is called:<br>(1) Diffusion (2) Osmosis<br>(3) Active Transport (4) Facilitated diffusion |
| 3. | Polymorphism is best exhibited in:<br>(1) Obelia (2) Hydra<br>(3) Physalia (4) Aurelia |
| 4. | Gymnosperms are characterized by:<br>(1) Naked seeds (2) Enclosed seeds<br>(3) Flowers (4) Fruits |
| 5. | Which of the following is a complex permanent tissue?<br>(1) Parenchyma (2) Collenchyma<br>(3) Sclerenchyma (4) Xylem |
| 6. | Following is involuntary muscle found in hollow organs:<br>(1) Skeletal (2) Cardiac<br>(3) Smooth (4) Striated |

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| 7. | Which tissue helps in dispersal of seed?<br>(1) Endosperm (2) Embryo<br>(3) Pericarp (4) Cotyledon |
| 8. | Which structure prevents self-pollination in plants?<br>(1) Ovule (2) Petal<br>(3) Self-incompatibility gene (4) Integument |
| 9. | Which among the following is *true* about cleistogamous flowers?<br>(1) Promote cross-pollination (2) Always open for pollinators<br>(3) Do not require pollinators (4) Do not produce seeds |
| 10. | The acrosome of sperm is derived from:<br>(1) Mitochondria (2) Golgi apparatus<br>(3) Nucleus (4) Lysosome |
| 11. | Menstruation is due to sudden drop of:<br>(1) FSH (2) Estrogen<br>(3) LH (4) Progesterone |
| 12. | Fertilization occurs in which part of the fallopian tube:<br>(1) Infundibulum (2) Ampulla<br>(3) Isthmus (4) Fimbriae |

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| 13. | ART used for male infertility where sperm is directly injected into the ovum:<br>(1) IVF (2) ICSI<br>(3) GIFT (4) ZIFT |
| 14. | Artificial seed production uses:<br>(1) Pollen (2) Somatic embryos<br>(3) Ovules (4) Zygotes |
| 15. | In angiosperms, triple fusion results in:<br>(1) Zygote (2) Ovule<br>(3) Endosperm (4) Embryo sac |
| 16. | Which organism can reproduce through binary fission and also form spores?<br>(1) Paramecium (2) Amoeba<br>(3) Rhizopus (4) Plasmodium |
| 17. | Which of the following is a bacterial STD?<br>(1) AIDS (2) Herpes<br>(3) Gonorrhea (4) Warts |

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| 18. | Apomixis is used in agriculture to :<br>(1) Increase hybrid vigor<br>(2) Increase recombination<br>(3) Avoid fertilization<br>(4) Produce genetically variable seeds |
| 19. | Fragmentation occurs in:<br>(1) Hydra (2) Spirogyra<br>(3) Amoeba (4) Yeast |
| 20. | The function of the synergids in the embryo sac is to :<br>(1) Produce endosperm<br>(2) Help in fertilization by guiding pollen tube<br>(3) Develop into zygote<br>(4) Form antipodals |
| 21. | Which of the following is an outbreeding device?<br>(1) Bisexual flower (2) Self-incompatibility<br>(3) Fertilization (4) Anther dehiscence |
| 22. | Double fertilization is a characteristic feature of :<br>(1) Gymnosperms (2) Bryophytes<br>(3) Angiosperms (4) Algae |

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| 23. | Which of the following disorders is caused by a sex-linked recessive gene?<br>(1) Thalassemia (2) Sickle cell anemia<br>(3) Haemophilia (4) Down's syndrome |
| 24. | In polygenic inheritance, the phenotype is influenced by:<br>(1) A single dominant gene (2) A single recessive gene<br>(3) Multiple genes (4) Environmental factors only |
| 25. | The packaging of DNA into chromosomes involves:<br>(1) Lipids (2) Non histones<br>(3) Histone proteins (4) RNA polymerase |
| 26. | DNA replication is :<br>(1) Conservative (2) Dispersive<br>(3) Semiconservative (4) Degenerative |
| 27. | Which syndrome is caused by the presence of an extra X chromosome in males?<br>(1) Turner's syndrome (2) Klinefelter's syndrome<br>(3) Down's syndrome (4) Edward's syndrome |

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| 28. | The Hardy-Weinberg principle is applicable under:<br>(1) Natural selection<br>(2) Mutation<br>(3) Large population without mutation<br>(4) Gene flow |
| 29. | The Lac Operon is an example of :<br>(1) Gene amplification (2) Gene deletion<br>(3) Gene regulation (4) Gene mutation |
| 30. | Who first performed the experiment demonstrating bacterial transformation?<br>(1) Griffith (2) Hershey<br>(3) Avery (4) Watson |
| 31. | The central dogma of molecular biology is :<br>(1) DNA → RNA → Protein (2) RNA → DNA → Protein<br>(3) Protein → RNA → DNA (4) RNA → Protein → DNA |
| 32. | Evolution through mutation and recombination is explained in:<br>(1) Darwin's theory (2) Modern synthetic theory<br>(3) Lamarkism (4) Catastrophism |

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| 33. | Which of the following is a chromosomal disorder?<br>(1) Haemophilia (2) Thalassemia<br>(3) Colour blindness (4) Turner's syndrome |
| 34. | Which type of evolution is indicated by the presence of similar anatomical features in different species?<br>(1) Divergent evolution (2) Adaptive radiation<br>(3) Convergent evolution (4) Artificial selection |
| 35. | Thalassemia affects:<br>(1) Blood clotting (2) Melanin production<br>(3) Hemoglobin formation (4) Bleeding disorder |
| 36. | Which of the following is a mechanism of evolution?<br>(1) Food chain (2) Reproduction<br>(3) Natural selection (4) Carbon dating |
| 37. | Genetic drift is most likely to occur in:<br>(1) Large populations<br>(2) Populations under selection pressure<br>(3) Small isolated populations<br>(4) Mutated populations only |

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| 38. | Typhoid is transmitted primarily through:<br>(1) Insect bite (2) Contaminated water<br>(3) Sexual contact (4) Air droplets |
| 39. | Ringworm is caused by a :<br>(1) Bacterium (2) Virus<br>(3) Protozoan (4) Fungus |
| 40. | Vaccines development is by stimulating:<br>(1) Toxin production (2) Pathogen growth<br>(3) Immune response (4) Hormone secretion |
| 41. | HIV primarily attacks which type of immune cells:<br>(1) B-Cells (2) Cytotoxic T-cells<br>(3) Helper T-cells (4) Natural killer cells |
| 42. | Adolescence is the period between the ages of :<br>(1) 6–12 years (2) 10–19 years<br>(3) 18–25 years (4) 1–5 years |
| 43. | Long-term alcohol abuse can be detected by dysfunction of :<br>(1) Lungs (2) Liver<br>(3) Pancreas (4) Intestine |

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| 44. | Which of the following is used in single-cell protein production?<br>(1) Saccharomyces cerevisiae (2) Rhizobium<br>(3) Mucor (4) Spirulina |
| 45. | The aim of biofortification is to :<br>(1) Increase food yield (2) Increase taste of food<br>(3) Improve nutrient quality (4) Decrease fertilizers |
| 46. | Apiculture involves the management of :<br>(1) Silkworms (2) Honeybees<br>(3) Fish (4) Poultry |
| 47. | Artificial insemination is commonly used in:<br>(1) Animal tissue culture (2) Animal husbandry<br>(3) Cloning (4) Cross–pollination |
| 48. | Lactobacillus is important in the production of :<br>(1) Dhokla (2) Dosa<br>(3) Yogurt (4) Soft drinks |
| 49. | Methane is produced during sewage treatment by:<br>(1) Methanogens (2) Cyanobacteria<br>(3) Fungus (4) Algae |

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| 50. | Trichoderma species act as:<br>(1) Antibiotic producers (2) Biocontrol agents<br>(3) Fuel producers (4) Vitamin supplement |
| 51. | Which technique is primarily used in recombinant DNA technology?<br>(1) Southern Blotting (2) PCR<br>(3) Gene cloning (4) Northern blotting |
| 52. | Bt toxin gene has been cloned from:<br>(1) Agrobacterium (2) Rhizobium<br>(3) Bacillius thuringiensis (4) Escherichia coli |
| 53. | What is the main purpose of gene therapy?<br>(1) Replace defective genes (2) Clone organisms<br>(3) Cure disease (4) Create Super genes |
| 54. | Golden rice is a genetically modified crop rich in:<br>(1) Iron (2) Vitamin A<br>(3) Vitamin C (4) Calcium |
| 55. | Which of the following organism is used for producing human insulin?<br>(1) Agrobacterium (2) Bacillus<br>(3) E. coli (4) Yeast |

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| 56. | Biosafety protocols aim to :<br>(1) Improve productivity (2) Protect biodiversity<br>(3) Reduce pollution (4) Enhance shelf-life |
| 57. | The term 'biopiracy' refers to :<br>(1) Illegal cloning<br>(2) Patent violation of indigenous knowledge<br>(3) Unsafe vaccines<br>(4) Unauthorized use of antibiotics |
| 58. | In genetic engineering, restriction enzymes are used to :<br>(1) Join DNA (2) Ligate DNA<br>(3) Cut DNA (4) Denature DNA |
| 59. | Bt crops are genetically modified to :<br>(1) Increase nutrient content (2) Resist herbicides<br>(3) Produce insecticidal protein (4) Resist viral infections |
| 60. | A vector must have which one of the following features:<br>(1) Small size & Origin of replication<br>(2) Origin of replication & antibiotic resistance<br>(3) Small size & Antibiotic resistance gene<br>(4) Antibiotic resistance |

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| 61. | The role of Agrobacterium tumefaciens in genetic engineering is :<br>(1) Antibiotic production (2) Inducing tumors<br>(3) Delivering genes (4) Inducing fertilization |
| 62. | What type of vaccine is produced using recombinant DNA technology?<br>(1) Killed pathogen (2) Live-attenuated vaccine<br>(3) Subunit vaccine (4) Toxoid vaccine |
| 63. | The primary goal of the Human Genome Project was to:<br>(1) Create synthetic DNA<br>(2) Identify all genes in human DNA<br>(3) Cure genetic disorders<br>(4) Engineer superhumans |
| 64. | Which method is commonly used to insert foreign DNA into cells?<br>(1) Centrifugation (2) Electroporation<br>(3) Chromatography (4) Spectroscopy |
| 65. | Which is a concern associated with GM crops?<br>(1) Reduced yield (2) Nutrient deficiency<br>(3) Biosafety and ecological impact (4) Short shelf life |

| Question No. | Questions |
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| 66. | Which of the following best defines a *niche* in ecology?<br>(1) Total area occupied by a species<br>(2) Role and position a species has in its environment<br>(3) Number of individuals in a population<br>(4) Type of food consumed by the species |
| 67. | In mutualism,<br>(1) One species benefits, the other harmed<br>(2) Both species are benefitted<br>(3) One species benefits, the other unaffected<br>(4) Both species are neutral |
| 68. | Which of the following is NOT a density-dependent population attribute?<br>(1) Birth & death rate (2) Population density<br>(3) Species distribution (4) Earthquake |
| 69. | The pyramid of biomass in terrestrial ecosystem is :<br>(1) Always inverted (2) Always upright<br>(3) Diamond-shaped (4) Not defined |

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| 70. | Which of the following cycles does *carbon fixation* belong to?<br>(1) Nitrogen cycle (2) Phosphorus cycle<br>(3) Sulphur cycle (4) Carbon cycle |
| 71. | *Primary productivity* refers to :<br>(1) Energy released during respiration<br>(2) Energy available at the top level of pyramid<br>(3) Amount of biomass produced by consumers<br>(4) Rate of biomass production by producers |
| 72. | The term "hotspot" in biodiversity refers to areas that :<br>(1) Are extremely hot<br>(2) Have low biodiversity & more habitant<br>(3) Are rich in endemic species and under threat<br>(4) Have only endangered species |
| 73. | *Red Data Book* is maintained for :<br>(1) Extinct animals (2) Extinct plants<br>(3) Endangered species (4) Living fossils |
| 74. | Which zone has maximum biodiversity?<br>(1) Arctic & Antarctica (2) Desert ecosystems<br>(3) Temperate forests (4) Tropical rainforests |

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| 75. | Which gas is mainly responsible for ozone layer depletion?<br>(1) $CO_2$ (2) $CH_4$<br>(3) CFCs (4) $SO_2$ |
| 76. | An example of *in situ* biodiversity conservation is :<br>(1) Seed bank (2) Botanical garden<br>(3) National Park (4) Zoological park |
| 77. | The main cause of radioactive increase in the environment is :<br>(1) Automobile exhaust (2) Nuclear power plants<br>(3) Ozone depletion (4) Open defecation |
| 78. | Which of the following pollutants is primarily responsible for acid rain?<br>(1) $CO_2$ (2) $SO_2$<br>(3) $O_3$ (4) $CH_4$ |
| 79. | Which of the following is a consequence of deforestation?<br>(1) Increased ozone<br>(2) Enhanced carbon fixation<br>(3) Soil erosion<br>(4) Decrease in greenhouse gases |

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| 80. | Which of the following is an effect of the greenhouse effect?<br>(1) Ozone formation<br>(2) Increase in Earth's average temperature<br>(3) Ozone hole<br>(4) Desertification in polar regions |
| 81. | Which of the following is a property of crystalline solids?<br>(1) Irregular shape (2) Sharp melting point<br>(3) Isotropic nature (4) No definite structure |
| 82. | An example of an amorphous solids is :<br>(1) Quartz (2) Sugar<br>(3) Glass (4) Diamond |
| 83. | Which of the following is not a type of binding force in solids ?<br>(1) Ionic (2) Metallic<br>(3) Hydrogen bonding (4) Gravitational |
| 84. | Which of the following represents a suspension?<br>(1) Blood (2) Muddy water<br>(3) Salt in water (4) Air |

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| 85. | A true solution is :<br>(1) Heterogeneous and transparent<br>(2) Homogeneous and transparent<br>(3) Heterogeneous and opaque<br>(4) Homogeneous and opaque |
| 86. | A characteristics of lyophobic colloids is :<br>(1) High stability (2) Strong affinity to solvent<br>(3) Easily coagulated (4) Self-preparing |
| 87. | Which law states that the mass of substances deposited during electrolysis is proportional to the quantity of electricity passed?<br>(1) Ohm's law (2) Faraday's first law<br>(3) Faraday's second law (4) Avogadro's law |
| 88. | A substance used to destroy or inhibit microbes on living tissues is:<br>(1) Disinfectant (2) Antiseptic<br>(3) Antibiotic (4) Preservative |

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|---|---|
| 89. | Antacids help to relieve:<br>(1) Bacterial infections (2) Allergies<br>(3) Headache (4) Acidity |
| 90. | Which is not an artificial sweetening agent?<br>(1) Sucralose (2) Saccharin<br>(3) Glucose (4) Aspartame |
| 91. | Preservatives in food prevent :<br>(1) Change in flavor (2) Growth of microorganisms<br>(3) Oxidation (4) Emulsification |
| 92. | Which is a commonly used antioxidant in packaged food?<br>(1) BHT (2) Vitamin B complex<br>(3) Sodium chloride (4) Lactic acid |
| 93. | Which is a disinfectant?<br>(1) Silver nitrate<br>(2) Tincture iodine<br>(3) Hydrogen peroxide (strong solution)<br>(4) Zinc |

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| 94. | Which soap molecule part interacts with oil and grease?<br>(1) Hydrophilic head (2) Ionic group<br>(3) Hydrophobic tail (4) Water molecule |
| 95. | Electrolysis involves:<br>(1) Magnetic field<br>(2) Heat conduction<br>(3) Chemical decomposition by electricity<br>(4) Radioactivity |
| 96. | Which of the following is an example of a macromolecular colloid?<br>(1) Milk (2) Rubber<br>(3) Smoke (4) Fog |
| 97. | Which compound can be used as both antiseptic and disinfectant?<br>(1) Hydrogen peroxide (2) Penicillin<br>(3) Sodium benzoate (4) Ampicillin |
| 98. | The basic unit of a crystalline solid is called:<br>(1) Lattice point (2) Unit cell<br>(3) Atom (4) Molecule |

| Question No. | Questions |
|---|---|
| 99. | Which of the following best describes soaps?<br>(1) Acidic salts of long-chain fatty acids<br>(2) Basic salts of fatty acids<br>(3) Neutral esters<br>(4) Acidic & Esters |
| 100. | Macro element essential for plants is :<br>(1) Iron<br>(2) Zinc<br>(3) Calcium<br>(4) Copper |

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| 33. | ART used for male infertility where sperm is directly injected into the ovum:<br>(1) IVF (2) ICSI<br>(3) GIFT (4) ZIFT |
| 34. | Artificial seed production uses:<br>(1) Pollen (2) Somatic embryos<br>(3) Ovules (4) Zygotes |

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| 35. | In angiosperms, triple fusion results in:<br>(1) Zygote (2) Ovule<br>(3) Endosperm (4) Embryo sac |
| 36. | Which organism can reproduce through binary fission and also form spores?<br>(1) Paramecium (2) Amoeba<br>(3) Rhizopus (4) Plasmodium |
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| 38. | Apomixis is used in agriculture to :<br>(1) Increase hybrid vigor<br>(2) Increase recombination<br>(3) Avoid fertilization<br>(4) Produce genetically variable seeds |
| 39. | Fragmentation occurs in:<br>(1) Hydra (2) Spirogyra<br>(3) Amoeba (4) Yeast |

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| 40. | The function of the synergids in the embryo sac is to :<br>(1) Produce endosperm<br>(2) Help in fertilization by guiding pollen tube<br>(3) Develop into zygote<br>(4) Form antipodals |
| 41. | Preservatives in food prevent :<br>(1) Change in flavor (2) Growth of microorganisms<br>(3) Oxidation (4) Emulsification |
| 42. | Which is a commonly used antioxidant in packaged food?<br>(1) BHT (2) Vitamin B complex<br>(3) Sodium chloride (4) Lactic acid |
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| 44. | Which soap molecule part interacts with oil and grease?<br>(1) Hydrophilic head (2) Ionic group<br>(3) Hydrophobic tail (4) Water molecule |
| 45. | Electrolysis involves:<br>(1) Magnetic field<br>(2) Heat conduction<br>(3) Chemical decomposition by electricity<br>(4) Radioactivity |
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| 48. | The basic unit of a crystalline solid is called:<br>(1) Lattice point (2) Unit cell<br>(3) Atom (4) Molecule |

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| 87. | Which syndrome is caused by the presence of an extra X chromosome in males?<br>(1) Turner's syndrome (2) Klinefelter's syndrome<br>(3) Down's syndrome (4) Edward's syndrome |
| 88. | The Hardy-Weinberg principle is applicable under:<br>(1) Natural selection<br>(2) Mutation<br>(3) Large population without mutation<br>(4) Gene flow |
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| 90. | Who first performed the experiment demonstrating bacterial transformation?<br>(1) Griffith<br>(2) Hershey<br>(3) Avery<br>(4) Watson |
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| 92. | The movement of water across semipermeable membrane is called:<br>(1) Diffusion<br>(2) Osmosis<br>(3) Active Transport<br>(4) Facilitated diffusion |
| 93. | Polymorphism is best exhibited in:<br>(1) Obelia<br>(2) Hydra<br>(3) Physalia<br>(4) Aurelia |
| 94. | Gymnosperms are characterized by:<br>(1) Naked seeds<br>(2) Enclosed seeds<br>(3) Flowers<br>(4) Fruits |
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| 96. | Following is involuntary muscle found in hollow organs:<br>(1) Skeletal (2) Cardiac<br>(3) Smooth (4) Striated |
| 97. | Which tissue helps in dispersal of seed?<br>(1) Endosperm (2) Embryo<br>(3) Pericarp (4) Cotyledon |
| 98. | Which structure prevents self-pollination in plants?<br>(1) Ovule (2) Petal<br>(3) Self-incompatibility gene (4) Integument |
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# SET–"X" (Total No. of printed pages : 21)

(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

## UG-EE-June, 2025 (Genetics 4 year)

Code **C**

Sr. No. 10019

Time : 1¼ Hours | Total Questions : 100 | Max. Marks : 100

Roll No. _____ (in figure) _____ (in words)

Name : _____ Date of Birth : _____

Father's Name : _____ Mother's Name : _____

Date of Examination : _____

(Signature of the candidate) (Signature of the Invigilator)

**CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.**

1. **All questions are compulsory.**
2. The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along-with answer key of all the A,B,C and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case will be considered.
5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers **MUST NOT** be ticked in the Question book-let.
6. **There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.**
7. Use only Black or Blue <u>BALL POINT PEN</u> of good quality in the OMR Answer-Sheet.
8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

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| 51. | The central dogma of molecular biology is :<br>(1) DNA → RNA → Protein (2) RNA → DNA → Protein<br>(3) Protein → RNA → DNA (4) RNA → Protein → DNA |
| 52. | Evolution through mutation and recombination is explained in:<br>(1) Darwin's theory (2) Modern synthetic theory<br>(3) Lamarkism (4) Catastrophism |

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| 53. | Which of the following is a chromosomal disorder?<br>(1) Haemophilia (2) Thalassemia<br>(3) Colour blindness (4) Turner's syndrome |
| 54. | Which type of evolution is indicated by the presence of similar anatomical features in different species?<br>(1) Divergent evolution (2) Adaptive radiation<br>(3) Convergent evolution (4) Artificial selection |
| 55. | Thalassemia affects:<br>(1) Blood clotting (2) Melanin production<br>(3) Hemoglobin formation (4) Bleeding disorder |
| 56. | Which of the following is a mechanism of evolution?<br>(1) Food chain (2) Reproduction<br>(3) Natural selection (4) Carbon dating |
| 57. | Genetic drift is most likely to occur in:<br>(1) Large populations<br>(2) Populations under selection pressure<br>(3) Small isolated populations<br>(4) Mutated populations only |

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| 58. | Typhoid is transmitted primarily through:<br>(1) Insect bite (2) Contaminated water<br>(3) Sexual contact (4) Air droplets |
| 59. | Ringworm is caused by a :<br>(1) Bacterium (2) Virus<br>(3) Protozoan (4) Fungus |
| 60. | Vaccines development is by stimulating:<br>(1) Toxin production (2) Pathogen growth<br>(3) Immune response (4) Hormone secretion |
| 61. | *Primary productivity* refers to :<br>(1) Energy released during respiration<br>(2) Energy available at the top level of pyramid<br>(3) Amount of biomass produced by consumers<br>(4) Rate of biomass production by producers |
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| 63. | *Red Data Book* is maintained for :<br>(1) Extinct animals (2) Extinct plants<br>(3) Endangered species (4) Living fossils |
| 64. | Which zone has maximum biodiversity?<br>(1) Arctic & Antarctica (2) Desert ecosystems<br>(3) Temperate forests (4) Tropical rainforests |
| 65. | Which gas is mainly responsible for ozone layer depletion?<br>(1) $CO_2$ (2) $CH_4$<br>(3) CFCs (4) $SO_2$ |
| 66. | An example of *in situ* biodiversity conservation is :<br>(1) Seed bank (2) Botanical garden<br>(3) National Park (4) Zoological park |
| 67. | The main cause of radioactive increase in the environment is :<br>(1) Automobile exhaust (2) Nuclear power plants<br>(3) Ozone depletion (4) Open defecation |

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| 68. | Which of the following pollutants is primarily responsible for acid rain?<br>(1) $CO_2$ (2) $SO_2$<br>(3) $O_3$ (4) $CH_4$ |
| 69. | Which of the following is a consequence of deforestation?<br>(1) Increased ozone<br>(2) Enhanced carbon fixation<br>(3) Soil erosion<br>(4) Decrease in greenhouse gases |
| 70. | Which of the following is an effect of the greenhouse effect?<br>(1) Ozone formation<br>(2) Increase in Earth's average temperature<br>(3) Ozone hole<br>(4) Desertification in polar regions |
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| 82. | Fertilization occurs in which part of the fallopian tube:<br>(1) Infundibulum (2) Ampulla<br>(3) Isthmus (4) Fimbriae |
| 83. | ART used for male infertility where sperm is directly injected into the ovum:<br>(1) IVF (2) ICSI<br>(3) GIFT (4) ZIFT |
| 84. | Artificial seed production uses:<br>(1) Pollen (2) Somatic embryos<br>(3) Ovules (4) Zygotes |
| 85. | In angiosperms, triple fusion results in:<br>(1) Zygote (2) Ovule<br>(3) Endosperm (4) Embryo sac |
| 86. | Which organism can reproduce through binary fission and also form spores?<br>(1) Paramecium (2) Amoeba<br>(3) Rhizopus (4) Plasmodium |

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| 89. | Fragmentation occurs in:<br>(1) Hydra (2) Spirogyra<br>(3) Amoeba (4) Yeast |
| 90. | The function of the synergids in the embryo sac is to :<br>(1) Produce endosperm<br>(2) Help in fertilization by guiding pollen tube<br>(3) Develop into zygote<br>(4) Form antipodals |

| Question No. | Questions |
|---|---|
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| 93. | What is the main purpose of gene therapy?<br>(1) Replace defective genes (2) Clone organisms<br>(3) Cure disease (4) Create Super genes |
| 94. | Golden rice is a genetically modified crop rich in:<br>(1) Iron (2) Vitamin A<br>(3) Vitamin C (4) Calcium |
| 95. | Which of the following organism is used for producing human insulin?<br>(1) Agrobacterium (2) Bacillus<br>(3) E. coli (4) Yeast |
| 96. | Biosafety protocols aim to :<br>(1) Improve productivity (2) Protect biodiversity<br>(3) Reduce pollution (4) Enhance shelf-life |

| Question No. | Questions |
|---|---|
| 97. | The term 'biopiracy' refers to :<br>(1) Illegal cloning<br>(2) Patent violation of indigenous knowledge<br>(3) Unsafe vaccines<br>(4) Unauthorized use of antibiotics |
| 98. | In genetic engineering, restriction enzymes are used to :<br>(1) Join DNA (2) Ligate DNA<br>(3) Cut DNA (4) Denature DNA |
| 99. | Bt crops are genetically modified to :<br>(1) Increase nutrient content (2) Resist herbicides<br>(3) Produce insecticidal protein (4) Resist viral infections |
| 100. | A vector must have which one of the following features:<br>(1) Small size & Origin of replication<br>(2) Origin of replication & antibiotic resistance<br>(3) Small size & Antibiotic resistance gene<br>(4) Antibiotic resistance |

# SET–"X" (Total No. of printed pages : 21)

**(DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)**

## UG-EE-June, 2025 (Genetics 4 year)

Sr. No. 10008

Code **D**

**Time : 1¼ Hours** **Total Questions : 100** **Max. Marks : 100**

Roll No. _____ (in figure)_____ (in words)

Name : _____ Date of Birth ; _____

Father's Name : _____ Mother's Name : _____

Date of Examination : _____

(Signature of the candidate) (Signature of the Invigilator)

**CANDIDATES MUST READ THE FOLLOWING INFORMATION/ INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.**

1. **All questions are compulsory.**
2. The candidates must return the Question book-let as well as OMR answer-sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfair-means / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
4. Question Booklet along-with answer key of all the A,B,C and D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case will be considered.
5. The candidate MUST NOT do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question book-let itself. Answers **MUST NOT** be ticked in the Question book-let.
6. **There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.**
7. Use only Black or Blue **BALL POINT PEN** of good quality in the OMR Answer-Sheet.
8. BEFORE ANSWERING THE QUESTIONS, THE CANDIDATES SHOULD ENSURE THAT THEY HAVE BEEN SUPPLIED CORRECT AND COMPLETE BOOK-LET. COMPLAINTS, IF ANY, REGARDING MISPRINTING ETC. WILL NOT BE ENTERTAINED 30 MINUTES AFTER STARTING OF THE EXAMINATION.

| Question No. | Questions |
|---|---|
| 1. | Menstruation is due to sudden drop of:<br>(1) FSH (2) Estrogen<br>(3) LH (4) Progesterone |
| 2. | Fertilization occurs in which part of the fallopian tube:<br>(1) Infundibulum (2) Ampulla<br>(3) Isthmus (4) Fimbriae |
| 3. | ART used for male infertility where sperm is directly injected into the ovum:<br>(1) IVF (2) ICSI<br>(3) GIFT (4) ZIFT |
| 4. | Artificial seed production uses:<br>(1) Pollen (2) Somatic embryos<br>(3) Ovules (4) Zygotes |
| 5. | In angiosperms, triple fusion results in:<br>(1) Zygote (2) Ovule<br>(3) Endosperm (4) Embryo sac |

| Question No. | Questions |
|---|---|
| 6. | Which organism can reproduce through binary fission and also form spores?<br>(1) Paramecium (2) Amoeba<br>(3) Rhizopus (4) Plasmodium |
| 7. | Which of the following is a bacterial STD?<br>(1) AIDS (2) Herpes<br>(3) Gonorrhea (4) Warts |
| 8. | Apomixis is used in agriculture to :<br>(1) Increase hybrid vigor<br>(2) Increase recombination<br>(3) Avoid fertilization<br>(4) Produce genetically variable seeds |
| 9. | Fragmentation occurs in:<br>(1) Hydra (2) Spirogyra<br>(3) Amoeba (4) Yeast |

| Question No. | Questions |
|---|---|
| 10. | The function of the synergids in the embryo sac is to :<br>(1) Produce endosperm<br>(2) Help in fertilization by guiding pollen tube<br>(3) Develop into zygote<br>(4) Form antipodals |
| 11. | Preservatives in food prevent :<br>(1) Change in flavor (2) Growth of microorganisms<br>(3) Oxidation (4) Emulsification |
| 12. | Which is a commonly used antioxidant in packaged food?<br>(1) BHT (2) Vitamin B complex<br>(3) Sodium chloride (4) Lactic acid |
| 13. | Which is a disinfectant?<br>(1) Silver nitrate<br>(2) Tincture iodine<br>(3) Hydrogen peroxide (strong solution)<br>(4) Zinc |

| Question No. | Questions |
|---|---|
| 14. | Which soap molecule part interacts with oil and grease?<br>(1) Hydrophilic head (2) Ionic group<br>(3) Hydrophobic tail (4) Water molecule |
| 15. | Electrolysis involves:<br>(1) Magnetic field<br>(2) Heat conduction<br>(3) Chemical decomposition by electricity<br>(4) Radioactivity |
| 16. | Which of the following is an example of a macromolecular colloid?<br>(1) Milk (2) Rubber<br>(3) Smoke (4) Fog |
| 17. | Which compound can be used as both antiseptic and disinfectant?<br>(1) Hydrogen peroxide (2) Penicillin<br>(3) Sodium benzoate (4) Ampicillin |
| 18. | The basic unit of a crystalline solid is called:<br>(1) Lattice point (2) Unit cell<br>(3) Atom (4) Molecule |

| Question No. | Questions |
|---|---|
| 19. | Which of the following best describes soaps?<br>(1) Acidic salts of long-chain fatty acids<br>(2) Basic salts of fatty acids<br>(3) Neutral esters<br>(4) Acidic & Esters |
| 20. | Macro element essential for plants is :<br>(1) Iron (2) Zinc<br>(3) Calcium (4) Copper |
| 21. | *Primary productivity* refers to :<br>(1) Energy released during respiration<br>(2) Energy available at the top level of pyramid<br>(3) Amount of biomass produced by consumers<br>(4) Rate of biomass production by producers |
| 22. | The term "hotspot" in biodiversity refers to areas that :<br>(1) Are extremely hot<br>(2) Have low biodiversity & more habitant<br>(3) Are rich in endemic species and under threat<br>(4) Have only endangered species |

| Question No. | Questions |
|---|---|
| 23. | *Red Data Book* is maintained for :<br>(1) Extinct animals (2) Extinct plants<br>(3) Endangered species (4) Living fossils |
| 24. | Which zone has maximum biodiversity?<br>(1) Arctic & Antarctica (2) Desert ecosystems<br>(3) Temperate forests (4) Tropical rainforests |
| 25. | Which gas is mainly responsible for ozone layer depletion?<br>(1) $CO_2$ (2) $CH_4$<br>(3) CFCs (4) $SO_2$ |
| 26. | An example of *in situ* biodiversity conservation is :<br>(1) Seed bank (2) Botanical garden<br>(3) National Park (4) Zoological park |
| 27. | The main cause of radioactive increase in the environment is :<br>(1) Automobile exhaust (2) Nuclear power plants<br>(3) Ozone depletion (4) Open defecation |
| 28. | Which of the following pollutants is primarily responsible for aci rain?<br>(1) $CO_2$ (2) $SO_2$<br>(3) $O_3$ (4) $CH_4$ |

| Question No. | Questions |
|---|---|
| 29. | Which of the following is a consequence of deforestation?<br>(1) Increased ozone<br>(2) Enhanced carbon fixation<br>(3) Soil erosion<br>(4) Decrease in greenhouse gases |
| 30. | Which of the following is an effect of the greenhouse effect?<br>(1) Ozone formation<br>(2) Increase in Earth's average temperature<br>(3) Ozone hole<br>(4) Desertification in polar regions |
| 31. | Which technique is primarily used in recombinant DNA technology?<br>(1) Southern Blotting (2) PCR<br>(3) Gene cloning (4) Northern blotting |
| 32. | Bt toxin gene has been cloned from:<br>(1) Agrobacterium (2) Rhizobium<br>(3) Bacillius thuringiensis (4) Escherichia coli |

| Question No. | Questions |
|---|---|
| 33. | What is the main purpose of gene therapy?<br>(1) Replace defective genes (2) Clone organisms<br>(3) Cure disease (4) Create Super genes |
| 34. | Golden rice is a genetically modified crop rich in:<br>(1) Iron (2) Vitamin A<br>(3) Vitamin C (4) Calcium |
| 35. | Which of the following organism is used for producing human insulin?<br>(1) Agrobacterium (2) Bacillus<br>(3) E. coli (4) Yeast |
| 36. | Biosafety protocols aim to :<br>(1) Improve productivity (2) Protect biodiversity<br>(3) Reduce pollution (4) Enhance shelf-life |
| 37. | The term 'biopiracy' refers to :<br>(1) Illegal cloning<br>(2) Patent violation of indigenous knowledge<br>(3) Unsafe vaccines<br>(4) Unauthorized use of antibiotics |

| Question No. | Questions |
|---|---|
| 38. | In genetic engineering, restriction enzymes are used to :<br>(1) Join DNA (2) Ligate DNA<br>(3) Cut DNA (4) Denature DNA |
| 39. | Bt crops are genetically modified to :<br>(1) Increase nutrient content (2) Resist herbicides<br>(3) Produce insecticidal protein (4) Resist viral infections |
| 40. | A vector must have which one of the following features:<br>(1) Small size & Origin of replication<br>(2) Origin of replication & antibiotic resistance<br>(3) Small size & Antibiotic resistance gene<br>(4) Antibiotic resistance |
| 41. | The central dogma of molecular biology is :<br>(1) DNA → RNA → Protein (2) RNA → DNA → Protein<br>(3) Protein → RNA → DNA (4) RNA → Protein → DNA |
| 42. | Evolution through mutation and recombination is explained in:<br>(1) Darwin's theory (2) Modern synthetic theory<br>(3) Lamarkism (4) Catastrophism |

| Question No. | Questions |
|---|---|
| 43. | Which of the following is a chromosomal disorder?<br>(1) Haemophilia (2) Thalassemia<br>(3) Colour blindness (4) Turner's syndrome |
| 44. | Which type of evolution is indicated by the presence of similar anatomical features in different species?<br>(1) Divergent evolution (2) Adaptive radiation<br>(3) Convergent evolution (4) Artificial selection |
| 45. | Thalassemia affects:<br>(1) Blood clotting (2) Melanin production<br>(3) Hemoglobin formation (4) Bleeding disorder |
| 46. | Which of the following is a mechanism of evolution?<br>(1) Food chain (2) Reproduction<br>(3) Natural selection (4) Carbon dating |
| 47. | Genetic drift is most likely to occur in:<br>(1) Large populations<br>(2) Populations under selection pressure<br>(3) Small isolated populations<br>(4) Mutated populations only |

| Question No. | Questions |
|---|---|
| 48. | Typhoid is transmitted primarily through:<br>(1) Insect bite (2) Contaminated water<br>(3) Sexual contact (4) Air droplets |
| 49. | Ringworm is caused by a :<br>(1) Bacterium (2) Virus<br>(3) Protozoan (4) Fungus |
| 50. | Vaccines development is by stimulating:<br>(1) Toxin production (2) Pathogen growth<br>(3) Immune response (4) Hormone secretion |
| 51. | Which of the following is an outbreeding device?<br>(1) Bisexual flower (2) Self-incompatibility<br>(3) Fertilization (4) Anther dehiscence |
| 52. | Double fertilization is a characteristic feature of :<br>(1) Gymnosperms (2) Bryophytes<br>(3) Angiosperms (4) Algae |
| 53. | Which of the following disorders is caused by a sex-linked recessive gene?<br>(1) Thalassemia (2) Sickle cell anemia<br>(3) Haemophilia (4) Down's syndrome |

| Question No. | Questions |
|---|---|
| 54. | In polygenic inheritance, the phenotype is influenced by:<br>(1) A single dominant gene (2) A single recessive gene<br>(3) Multiple genes (4) Environmental factors only |
| 55. | The packaging of DNA into chromosomes involves:<br>(1) Lipids (2) Non histones<br>(3) Histone proteins (4) RNA polymerase |
| 56. | DNA replication is :<br>(1) Conservative (2) Dispersive<br>(3) Semiconservative (4) Degenerative |
| 57. | Which syndrome is caused by the presence of an extra X chromosome in males?<br>(1) Turner's syndrome (2) Klinefelter's syndrome<br>(3) Down's syndrome (4) Edward's syndrome |
| 58. | The Hardy-Weinberg principle is applicable under:<br>(1) Natural selection<br>(2) Mutation<br>(3) Large population without mutation<br>(4) Gene flow |

| Question No. | Questions |
|---|---|
| 59. | The Lac Operon is an example of :<br>(1) Gene amplification (2) Gene deletion<br>(3) Gene regulation (4) Gene mutation |
| 60. | Who first performed the experiment demonstrating bacterial transformation?<br>(1) Griffith (2) Hershey<br>(3) Avery (4) Watson |
| 61. | HIV primarily attacks which type of immune cells:<br>(1) B-Cells (2) Cytotoxic T-cells<br>(3) Helper T-cells (4) Natural killer cells |
| 62. | Adolescence is the period between the ages of :<br>(1) 6–12 years (2) 10–19 years<br>(3) 18–25 years (4) 1–5 years |
| 63. | Long-term alcohol abuse can be detected by dysfunction of :<br>(1) Lungs (2) Liver<br>(3) Pancreas (4) Intestine |

| Question No. | Questions |
|---|---|
| 64. | Which of the following is used in single-cell protein production?<br>(1) Saccharomyces cerevisiae (2) Rhizobium<br>(3) Mucor (4) Spirulina |
| 65. | The aim of biofortification is to :<br>(1) Increase food yield (2) Increase taste of food<br>(3) Improve nutrient quality (4) Decrease fertilizers |
| 66. | Apiculture involves the management of :<br>(1) Silkworms (2) Honeybees<br>(3) Fish (4) Poultry |
| 67. | Artificial insemination is commonly used in:<br>(1) Animal tissue culture (2) Animal husbandry<br>(3) Cloning (4) Cross–pollination |
| 68. | Lactobacillus is important in the production of :<br>(1) Dhokla (2) Dosa<br>(3) Yogurt (4) Soft drinks |
| 69. | Methane is produced during sewage treatment by:<br>(1) Methanogens (2) Cyanobacteria<br>(3) Fungus (4) Algae |

| Question No. | Questions |
|---|---|
| 70. | Trichoderma species act as:<br>(1) Antibiotic producers (2) Biocontrol agents<br>(3) Fuel producers (4) Vitamin supplement |
| 71. | The role of Agrobacterium tumefaciens in genetic engineering is :<br>(1) Antibiotic production (2) Inducing tumors<br>(3) Delivering genes (4) Inducing fertilization |
| 72. | What type of vaccine is produced using recombinant DNA technology?<br>(1) Killed pathogen (2) Live-attenuated vaccine<br>(3) Subunit vaccine (4) Toxoid vaccine |
| 73. | The primary goal of the Human Genome Project was to:<br>(1) Create synthetic DNA<br>(2) Identify all genes in human DNA<br>(3) Cure genetic disorders<br>(4) Engineer superhumans |
| 74. | Which method is commonly used to insert foreign DNA into cells?<br>(1) Centrifugation (2) Electroporation<br>(3) Chromatography (4) Spectroscopy |

| Question No. | Questions |
|---|---|
| 75. | Which is a concern associated with GM crops?<br>(1) Reduced yield (2) Nutrient deficiency<br>(3) Biosafety and ecological impact (4) Short shelf life |
| 76. | Which of the following best defines a *niche* in ecology?<br>(1) Total area occupied by a species<br>(2) Role and position a species has in its environment<br>(3) Number of individuals in a population<br>(4) Type of food consumed by the species |
| 77. | In mutualism,<br>(1) One species benefits, the other harmed<br>(2) Both species are benefitted<br>(3) One species benefits, the other unaffected<br>(4) Both species are neutral |
| 78. | Which of the following is NOT a density-dependent population attribute?<br>(1) Birth & death rate (2) Population density<br>(3) Species distribution (4) Earthquake |

| Question No. | Questions |
|---|---|
| 79. | The pyramid of biomass in terrestrial ecosystem is :<br>(1) Always inverted (2) Always upright<br>(3) Diamond-shaped (4) Not defined |
| 80. | Which of the following cycles does *carbon fixation* belong to?<br>(1) Nitrogen cycle (2) Phosphorus cycle<br>(3) Sulphur cycle (4) Carbon cycle |
| 81. | Which of the following structure is absent in bacterial cells?<br>(1) Ribosomes (2) Nucleus<br>(3) Plasma membrane (4) Cell wall |
| 82. | The movement of water across semipermeable membrane is called:<br>(1) Diffusion (2) Osmosis<br>(3) Active Transport (4) Facilitated diffusion |
| 83. | Polymorphism is best exhibited in:<br>(1) Obelia (2) Hydra<br>(3) Physalia (4) Aurelia |
| 84. | Gymnosperms are characterized by:<br>(1) Naked seeds (2) Enclosed seeds<br>(3) Flowers (4) Fruits |

| Question No. | Questions |
|---|---|
| 85. | Which of the following is a complex permanent tissue?<br>(1) Parenchyma (2) Collenchyma<br>(3) Sclerenchyma (4) Xylem |
| 86. | Following is involuntary muscle found in hollow organs:<br>(1) Skeletal (2) Cardiac<br>(3) Smooth (4) Striated |
| 87. | Which tissue helps in dispersal of seed?<br>(1) Endosperm (2) Embryo<br>(3) Pericarp (4) Cotyledon |
| 88. | Which structure prevents self-pollination in plants?<br>(1) Ovule (2) Petal<br>(3) Self-incompatibility gene (4) Integument |
| 89. | Which among the following is *true* about cleistogamous flowers?<br>(1) Promote cross-pollination (2) Always open for pollinators<br>(3) Do not require pollinators (4) Do not produce seeds |
| 90. | The acrosome of sperm is derived from:<br>(1) Mitochondria (2) Golgi apparatus<br>(3) Nucleus (4) Lysosome |

| Question No. | Questions |
|---|---|
| 91. | Which of the following is a property of crystalline solids?<br>(1) Irregular shape (2) Sharp melting point<br>(3) Isotropic nature (4) No definite structure |
| 92. | An example of an amorphous solids is :<br>(1) Quartz (2) Sugar<br>(3) Glass (4) Diamond |
| 93. | Which of the following is not a type of binding force in solids ?<br>(1) Ionic (2) Metallic<br>(3) Hydrogen bonding (4) Gravitational |
| 94. | Which of the following represents a suspension?<br>(1) Blood (2) Muddy water<br>(3) Salt in water (4) Air |
| 95. | A true solution is :<br>(1) Heterogeneous and transparent<br>(2) Homogeneous and transparent<br>(3) Heterogeneous and opaque<br>(4) Homogeneous and opaque |

| Question No. | Questions |
|---|---|
| 96. | A characteristics of lyophobic colloids is :<br>(1) High stability (2) Strong affinity to solvent<br>(3) Easily coagulated (4) Self-preparing |
| 97. | Which law states that the mass of substances deposited during electrolysis is proportional to the quantity of electricity passed?<br>(1) Ohm's law (2) Faraday's first law<br>(3) Faraday's second law (4) Avogadro's law |
| 98. | A substance used to destroy or inhibit microbes on living tissues is:<br>(1) Disinfectant (2) Antiseptic<br>(3) Antibiotic (4) Preservative |
| 99. | Antacids help to relieve:<br>(1) Bacterial infections (2) Allergies<br>(3) Headache (4) Acidity |
| 100. | Which is not an artificial sweetening agent?<br>(1) Sucralose (2) Saccharin<br>(3) Glucose (4) Aspartame |

# B.Sc Genetics 4 year Entrance Exam 2025 Answer Key

| Q. No. | A | B | C | D |
|---|---|---|---|---|
| 1 | 2 | 4 | 3 | 4 |
| 2 | 2 | 3 | 2 | 2 |
| 3 | 3 | 3 | 2 | 2 |
| 4 | 1 | 4 | 4 | 2 |
| 5 | 4 | 3 | 3 | 3 |
| 6 | 1 | 3 | 2 | 2 |
| 7 | 3 | 2 | 2 | 3 |
| 8 | 3 | 2 | 3 | 1 |
| 9 | 3 | 3 | 1 | 2 |
| 10 | 2 | 2 | 2 | 2 |
| 11 | 4 | 3 | 2 | 2 |
| 12 | 2 | 3 | 3 | 1 |
| 13 | 2 | 1 | 3 | 3 |
| 14 | 2 | 2 | 3 | 3 |
| 15 | 3 | 3 | 3 | 3 |
| 16 | 2 | 2 | 3 | 2 |
| 17 | 3 | 2 | 2 | 1 |
| 18 | 1 | 3 | 3 | 2 |
| 19 | 2 | 3 | 3 | 2 |
| 20 | 2 | 2 | 1 | 3 |
| 21 | 2 | 1 | 2 | 4 |
| 22 | 3 | 2 | 2 | 3 |
| 23 | 3 | 4 | 3 | 3 |
| 24 | 3 | 3 | 1 | 4 |
| 25 | 3 | 3 | 4 | 3 |
| 26 | 3 | 3 | 1 | 3 |
| 27 | 2 | 3 | 3 | 2 |
| 28 | 3 | 2 | 3 | 2 |
| 29 | 3 | 4 | 3 | 3 |
| 30 | 1 | 3 | 2 | 2 |
| 31 | 1 | 4 | 2 | 3 |
| 32 | 2 | 2 | 1 | 3 |
| 33 | 4 | 2 | 3 | 1 |
| 34 | 3 | 2 | 3 | 2 |
| 35 | 3 | 3 | 3 | 3 |
| 36 | 3 | 2 | 2 | 2 |
| 37 | 3 | 3 | 1 | 2 |
| 38 | 2 | 1 | 2 | 3 |
| 39 | 4 | 2 | 2 | 3 |
| 40 | 3 | 2 | 3 | 2 |
| 41 | 3 | 2 | 3 | 1 |
| 42 | 2 | 1 | 3 | 2 |

19/6/25

19-6-2025

## B.Sc Genetics 4 year Entrance Exam 2025 Answer Key

| Q. No. | A | B | C | D |
|---|---|---|---|---|
| 43 | 2 | 3 | 2 | 4 |
| 44 | 4 | 3 | 2 | 3 |
| 45 | 3 | 3 | 3 | 3 |
| 46 | 2 | 2 | 2 | 3 |
| 47 | 2 | 1 | 2 | 3 |
| 48 | 3 | 2 | 4 | 2 |
| 49 | 1 | 2 | 2 | 4 |
| 50 | 2 | 3 | 4 | 3 |
| 51 | 3 | 3 | 1 | 2 |
| 52 | 3 | 3 | 2 | 3 |
| 53 | 1 | 2 | 4 | 3 |
| 54 | 2 | 2 | 3 | 3 |
| 55 | 3 | 3 | 3 | 3 |
| 56 | 2 | 2 | 3 | 3 |
| 57 | 2 | 2 | 3 | 2 |
| 58 | 3 | 4 | 2 | 3 |
| 59 | 3 | 2 | 4 | 3 |
| 60 | 2 | 4 | 3 | 1 |
| 61 | 3 | 2 | 4 | 3 |
| 62 | 3 | 3 | 3 | 2 |
| 63 | 2 | 4 | 3 | 2 |
| 64 | 2 | 2 | 4 | 4 |
| 65 | 3 | 2 | 3 | 3 |
| 66 | 2 | 3 | 3 | 2 |
| 67 | 2 | 2 | 2 | 2 |
| 68 | 4 | 2 | 2 | 3 |
| 69 | 2 | 4 | 3 | 1 |
| 70 | 4 | 3 | 2 | 2 |
| 71 | 4 | 3 | 2 | 3 |
| 72 | 3 | 2 | 3 | 3 |
| 73 | 3 | 2 | 4 | 2 |
| 74 | 4 | 4 | 2 | 2 |
| 75 | 3 | 3 | 2 | 3 |
| 76 | 3 | 2 | 3 | 2 |
| 77 | 2 | 2 | 2 | 2 |
| 78 | 2 | 3 | 2 | 4 |
| 79 | 3 | 1 | 4 | 2 |
| 80 | 2 | 2 | 3 | 4 |
| 81 | 2 | 2 | 4 | 2 |
| 82 | 3 | 3 | 2 | 2 |
| 83 | 4 | 3 | 2 | 3 |
| 84 | 2 | 3 | 2 | 1 |

19/6/25

19-06-2025

## B.Sc Genetics 4 year Entrance Exam 2025 Answer Key

| Q. No. | A | B | C | D |
|---|---|---|---|---|
| 85 | 2 | 3 | 3 | 4 |
| 86 | 3 | 3 | 2 | 1 |
| 87 | 2 | 2 | 3 | 3 |
| 88 | 2 | 3 | 1 | 3 |
| 89 | 4 | 3 | 2 | 3 |
| 90 | 3 | 1 | 2 | 2 |
| 91 | 2 | 2 | 3 | 2 |
| 92 | 1 | 2 | 3 | 3 |
| 93 | 3 | 3 | 1 | 4 |
| 94 | 3 | 1 | 2 | 2 |
| 95 | 3 | 4 | 3 | 2 |
| 96 | 2 | 1 | 2 | 3 |
| 97 | 1 | 3 | 2 | 2 |
| 98 | 2 | 3 | 3 | 2 |
| 99 | 2 | 3 | 3 | 4 |
| 100 | 3 | 2 | 2 | 3 |

19/6/25

19-06-2025