

NOTE: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question.

Q1.

12

1. **In genetic engineering plasmid is used as:**
(A) Donor (B) Ligase (C) Endonuclease (D) Vector
2. **Medicine derived from plant is;**
(A) Interferon (B) Thymosin (C) Insuline (D) Morphine
3. **Total chemicals in tobacco smoke are:**
(A) 1000 (B) 2000 (C) 3000 (D) 4000
4. **The name of tube between kidney and urinary bladder is:**
(A) Ureter (B) Urethra (C) Nephron (D) Renal Tubule
5. **Name of gland beneath the larynx in human neck is:**
(A) Pancrease (B) Adrenal (C) Thyroid (D) Liver
6. **The round hole in the centre of Iris is called:**
(A) Retina (B) Pupil (C) Sclera (D) Cornea
7. **Name of the mature bone cell is:**
(A) Chondrocyte (B) Oocyte (C) Osteocyte (D) Neuron
8. **An example of diploid cell is:**
(A) Egg Cell (B) Zygote (C) Sperm cell (D) Endosperm nucleus
9. **Example of stem tuber is:**
(A) Tulip (B) Ginger (C) Garlic (D) Potato
10. **Alternative forms of a gene are called:**
(A) DNA (B) Chromosome (C) Allele (D) Gamete
11. **Units of inheritance is called:**
(A) Phenotype (B) Alleles (C) Genotype (D) Genes
12. **Basic source of energy for all ecosystem is:**
(A) Sun (B) Fire (C) Electricity (D) Nutrients

Sargodha Board 2019 (First Group)

Roll No.(in Figures): (in Words):

Maximum Marks: 48

SUBJECTIVE TYPE Time Allowed :1.45 Hours
(PART - I)

Q2. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) How will you differentiate between stoma and a lenticel?
- (ii) What is meant by passive smoking?
- (iii) Write any four symptoms of Asthma.
- (iv) Define Hydrophytes and give one example.
- (v) Define Excretion.
- (vi) Define Receptors and give at least two examples.
- (vii) Write the two functions of Mid Brain.
- (viii) Define positive feedback and give example.

Q3. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) Differentiate between flexion and extension.
- (ii) State four role of the skeletal system.
- (iii) Define double fertilization.
- (iv) How does budding occurs in Corals?
- (v) State the role of water or moisture for seed Germination.
- (vi) Differentiate between breeds and varieties or cultivars.
- (vii) State the Theory of Special Creation.
- (viii) What is meant by Punnet Square?

Q4. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) What is Eutrophication? Write its any one reason.
- (ii) What is global warming? Write its effects.
- (iii) Define ammonification.
- (iv) Write two objectives of Genetic engineering.
- (v) What is Gene Therapy?
- (vi) Differentiate between Antiseptics and Antibiotics.
- (vii) Define Pharmacology.
- (viii) What is Marijuana? Write its two bad effects.

(PART - II)

Note: Attempt any TWO questions.

(2×9=18)

- Q5. (a) Define dialysis. Also explain haemodialysis.** 4
(b) Describe in detail posterior lobe of pituitary gland. 5
- Q6. (a) What is arthritis? Describe its three types.** 4
(b) Explain the reproductive system of male rabbit. 5
- Q7. (a) Define pollution. Write down the effects of air pollution.** 4
(b) Describe the basic steps in Genetic Engineering. 5

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Q1.

12

1. **Conversion of Nitrogen gas into nitrates is called:**
(A) Nitrogen Fixation (B) Nitrification (C) Ammonification (D) Denitrification
2. **This product uses in the production of vinegar and beverages.**
(A) Formic Acid (B) Acrylic Acid (C) Ethanol (D) Glycerol
3. **Sir Alexander Fleming Discovered the:**
(A) Tetracycline (B) Aspirine (C) Cephalosporin (D) Penicillin
4. **The empty space present in nose is called:**
(A) Bronchi (B) Nasal Cavity (C) Eardrum (D) Pharynx
5. **Waste materials that are secreted by Keekar.**
(A) Gums (B) Latex (C) Resins (D) Mucilage
6. **The largest endocrine gland in Human body is:**
(A) Adrenal Gland (B) Parathyroid Gland (C) Thyroid Gland (D) Pancreas
7. **A pigment present in cones.**
(A) Aqueous Humour (B) Rhodopsin (C) Iodopsin (D) Vitreous Humour
8. **The movement of an animal as a whole from one place to another is called:**
(A) Support (B) Movement (C) Locomotion (D) Growth
9. **Some invertebrates also reproduce through binary fission.**
(A) Sexual Reproduction (B) Asexual Reproduction
(C) Pollination (D) Cloning
10. **The units of Androecium are called:**
(A) Sepals (B) Petals (C) Carpels (D) Stamens
11. **The specific combination of genes in an individual is called:**
(A) Genotype (B) Phenotype (C) Dominant (D) Recessive
12. **Guanine forms pair with:**
(A) Adenine (B) Thymine (C) Cytosine (D) Carbon

Sargodha Board 2019 (Second Group)

Roll No.(in Figures): (in Words):

Maximum Marks: 48

SUBJECTIVE TYPE (PART - I)

Time Allowed :1.45 Hours

Q2. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) What are vocal cords? What is their function?
- (ii) What is Cellular respiration?
- (iii) Differentiate between acute bronchitis and chronic bronchitis.
- (iv) What is difference between transpiration and guttation?
- (v) What is skin? What is its function?
- (vi) What is feedback Mechanism?
- (vii) What is somatic nervous system?
- (viii) Write two functions of oxytocin Hormone.

Q3. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) Write down the difference between elastic cartilage and fibrous cartilage.
- (ii) What do you know about Andreas vesalius?
- (iii) Define multiple fission. Give example.
- (iv) Write down two disadvantages of vegetative propagation.
- (v) What do you know about micropyle?
- (vi) What is test Cross? Why is it needed?
- (vii) Differentiate between phenotype and genotype.
- (viii) What is meant by natural selection?

Q4. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) What is meant by ecosystem?
- (ii) Differentiate between food chain and food web.
- (iii) What are endoparasites? Write an example.
- (iv) Write two advantages of using fermenters.
- (v) What is meant by genetic engineering?
- (vi) Define Pharmacology.
- (vii) Differentiate between antiseptics and disinfectants.
- (viii) Differentiate between antigens and antibodies.

(PART - II)

Note: Attempt any TWO questions. (2×9=18)

- Q5. (a) Explain the role of skin and lungs in homeostasis. 4**
(b) Describe the structure and function of spinal cord in detail. 5
- Q6. (a) What is arthritis? Discuss its types. 4**
(b) What do you know about budding and fragmentation? Explain with examples. 5
- Q7. (a) Write a note on Mutualism and Commensalism. 4**
(b) Describe basic steps in genetic engineering. 5