

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. Destroy micro organisms found on non-living objects.
(A) disinfectants (B) antibiotics (C) antiseptics (D) sedatives
2. The example of ectoparasite is:
(A) mosquito (B) tape worm (C) ascaris (D) plasmodium
3. The alternate forms of a gene are called:
(A) loci (B) alleles (C) phenotypes (D) genotypes
4. The example of suckers is:
(A) potato (B) garlic (C) mint (D) ginger
5. Decreases the level of calcium ions in blood:
(A) calcitonin (B) parathormone (C) vasopressin (D) oxytocin
6. These plants have very deep roots:
(A) hydrophytes (B) xerophytes (C) halophytes (D) mesophytes
7. The bronchi present in air passageway are:
(A) 1 (B) 2 (C) many (D) none of these
8. In neuron, nucleus is found in:
(A) myelin sheath (B) axons (C) cell body (D) node of ranvier
9. It is found as covering the ends of long bones:
(A) hyaline cartilage (B) elastic cartilage (C) fibrous cartilage (D) inelastic cartilage
10. The fourth whorl of flower is:
(A) calyx (B) androecium (C) gynoecium (D) corolla
11. In DNA nucleotide guanine forms pair with:
(A) cytosine (B) thymine (C) uracil (D) adenine
12. The industrial product from aspergillus is:
(A) formic acid (B) ethanol (C) glycerol (D) acrylic acid

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 is the difference between breathing and respiration.
- (ii) What is meant by "Lenticels"?
- (iii) Define glomerular filtrate.
- (iv) What is meant by tissue rejection?
- (v) Define hydrophytes with an example.
- (vi) Define stimulus with an example.
- (vii) Write the types of neuron on the basis of their function. (only names)
- (viii) What are the activities of autonomic nervous system?

Q3. Write short answers to any FIVE (5) questions:

(5×2=10)

- (i) Write down two differences between tendons and ligaments.
- (ii) What do you know about osteoporosis?
- (iii) Define alternation of generation in plants.
- (iv) What is the difference between cutting and grafting?
- (v) Define multiple fission. Also give an example.
- (vi) What is meant by genotype? Write the names of its types.
- (vii) What is Punnett square? What is its use?
- (viii) What are the advantages of artificial selection?

Q4. Write short answers to any FIVE (5) questions:

(5×2=10)

- (i) What is meant by "denitrification"?
- (ii) Write two effects of acid rain.
- (iii) Define biotechnology. When was human insulin prepared with the help of bacteria?
- (iv) Differentiate between alcoholic fermentation and lactic acid fermentation.
- (v) What is genetic engineering?
- (vi) Define pharmacology.
- (vii) What are analgesics? Give examples.
- (viii) What is Marijuana? Write its two bad effects.

(PART - II)

Note: Attempt any TWO questions.

(2×9=18)

- Q5. (a) What do you know about xerophytes and halophytes? Explain it. 5
- (b) Describe the structure of neuron. Also draw its diagram. 4
- Q6. (a) Write types of joints. Also explain. 5
- (b) Write advantages and disadvantages of vegetative propagation in plants. 4
- Q7. (a) Write note on nitrogen cycle. 5
- (b) Describe the achievements of genetic engineering. 4

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Q1.

12

1. **Organisms with modified genetic set up are called:**
(A) hybrid (B) transgenic (C) transformed (D) rearranged
2. **Position of genes on chromosome is called:**
(A) genome (B) nucleosome (C) trait (D) locus
3. **Rhizopus reproduces asexually by:**
(A) binary fission (B) budding (C) spore formation (D) egg formation
4. **Our skull has _____ bones.**
(A) 14 (B) 24 (C) 22 (D) 32
5. **Oval window is found in:**
(A) middle ear (B) external ear (C) internal ear (D) eye
6. **Gaseous exchange occurs in human beings in:**
(A) pharynx (B) trachea (C) bronchi (D) alveoli
7. **The study of drug composition, properties and medical application is called:**
(A) pharmacology (B) pharmaceutical (C) pharmacy (D) drug science
8. **All ecosystems of the world together form:**
(A) population (B) community (C) habitat (D) biosphere
9. **Transmission of characteristics from parents to offspring is:**
(A) genetics (B) inheritance (C) Trait (D) chromosome
10. **Connection between embryo and uterus wall is called:**
(A) cervix (B) follicle (C) placenta (D) vagina
11. **A hormone testosterone is secreted by:**
(A) pancreas (B) gonads (C) thyroid gland (D) adrenal gland
12. **The elimination of metabolic waste from body is called:**
(A) excretion (B) respiration (C) osmoregulation (D) thermoregulation

Gujranwala Board 2018 (Second 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) Write two functions of nasal cavity.
- (ii) Differentiate between acute and chronic bronchitis.
- (iii) What is meant by homeostasis?
- (iv) Write two osmotic adjustments in hydrophytes.
- (v) What is dialysis? Write the names of its types.
- (vi) Write the names of types of co-ordination in organisms.
- (vii) Write the functions of rods and cones cells.
- (viii) Write the names of two hormones of posterior lobe of pituitary gland.

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

- (i) Define joint, also write the names of its types.
- (ii) What are osteocytes?
- (iii) HIV stands for what?
- (iv) What is the function of cowper's gland?
- (v) Define multiple fission.
- (vi) What is meant by "theory of special creation"?
- (vii) Define incomplete dominance.
- (viii) Differentiate between phenotype and genotype.

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

- (i) Write down two bad effects of acid rain.
- (ii) What is meant by commensalism? Give two examples.
- (iii) Write down any two objectives of genetic engineering.
- (iv) Write the names and uses of any two industrial products produced through fermentation.
- (v) What is meant by recombinant DNA?
- (vi) What is the contribution of Joseph Lister in Biology?
- (vii) Explain drugs from minerals with the help of examples.
- (viii) Define narcotics. Also give examples.

(PART - II)

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

- Q5. (a) Explain osmoregulatory function of kidney.** 5
(b) What is meant by "nerve cell or neuron"? Explain its types. 4
- Q6. (a) What is meant by "arthritis"? Write down its types.** 5
(b) What is meant by "tissue culture"? How new plants are grown by using this method? 4
- Q7. (a) How carbon cycle takes place in nature? Explain.** 5
(b) How many methods are used for fermentation? Explain in detail. 4