

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 cigarette smoke, number of carcinogens is:
(A) 50 (B) 30 (C) 40 (D) 45
2. Plants store large amount of water in their cells for:
(A) transpiration (B) guttation (C) turgidity (D) photosynthesis
3. Myelin sheath is secreted by cells:
(A) schwann (B) dendrites (C) white blood (D) red blood
4. In human, number of spinal nerve pairs is:
(A) 30 (B) 32 (C) 33 (D) 31
5. The cells forming cartilage are called:
(A) osteocytes (B) osteoblast (C) chondrocytes (D) melanocytes
6. The latest method of vegetative propagation is:
(A) cutting (B) grafting (C) cloning (D) layering
7. The unit of androecium is:
(A) stigma (B) stamen (C) style (D) ovary
8. DNA molecule wrapped around the protein is:
(A) histone (B) haemoglobin (C) fibrinogen (D) casin
9. Alternate forms of a gene are called:
(A) trait (B) alleles (C) loci (D) genotype
10. Since 1800 A.D, the amount of CO₂ increased is:
(A) 20% (B) 30% (C) 40% (D) 50%
11. Which enzyme is used to dissolve blood clots?
(A) lypase (B) pepsin (C) tripson (D) urokinase
12. Sir Alexander Flamming was awarded Noble Prize in:
(A) 1940 AD (B) 1945 AD (C) 1950 AD (D) 1960 AD

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) What is the difference between stomata and lenticels?
- (ii) How the voice of our conversation is produced?
- (iii) Write the name of two parts of renal corpuscle.
- (iv) Define guttation.
- (v) What is meant by renal tubule?
- (vi) How does coordination in unicellular organisms take place?
- (vii) What is the difference between receptors and response?
- (viii) What is meant by positive feedback mechanism?

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

- (i) Define cartilage. write name of its two types.
- (ii) Define antagonism.
- (iii) Define fragmentation and give an example.
- (iv) Define pollination and cross pollination.
- (v) Differentiate between epicotyle and hypocotyl.
- (vi) What are two sources of variations?
- (vii) State Mendel's Law of Independent Assortment.
- (viii) Define Co-Dominance.

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

- (i) What is meant by ecosystem?
- (ii) Define biomass.
- (iii) Write the name of two types of fermenters.
- (iv) Write some uses of aspergillus.
- (v) What are synthetic drugs?
- (vi) Define antibodies.
- (vii) Write the name of two narcotics drugs.
- (viii) Define antigens.

(PART - II)

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

- Q5. (a) Write in detail the types of dialysis. 5
- (b) Write disorders of eye. How can these be removed? 4
- Q6. (a) Describe arthritis and its types. 5
- (b) What is germination of seed? Explain its types with examples. 4
- Q7. (a) What is meant by water pollution? Describe its effects. 5
- (b) Describe the scope and importance of biotechnology in the field of medicine and environment. 4

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Q1.

12

1. Which antibiotic is bactericidal?
(A) tetracycline (B) sulpha drugs (C) cephalosporins (D) thiazide
2. To preserve pickle, fruits and vegetables, these are mixed with:
(A) water and yogurt (B) onion and garlic (C) salt and acid (D) flour and salt
3. The smallest unit in ecological organization is:
(A) population (B) species (C) community (D) ecosystem
4. Which one is an example of discontinuous variations?
(A) weight (B) intelligence (C) blood groups (D) height
5. In law of independent assortment ratio of phenotype is:
(A) 9 : 3 : 1 : 3 (B) 9 : 3 : 2 : 2 (C) 9 : 3 : 3 : 1 (D) 9 : 3 : 3 : 3
6. The flower of the plant in which pollination occurs through wind is:
(A) rose (B) grass (C) sunflower (D) water lily
7. Which one is the middle part of carpel.
(A) filament (B) style (C) stigma (D) ovary
8. Example of ball and socket joints is:
(A) skull joints (B) hip joints (C) elbow joints (D) knee joints
9. Which hormone increases the level of calcium ions in blood?
(A) thyroxin (B) adrenaline (C) insulin (D) parathormone
10. Which one is not included in the symptoms of diabetes mellitus?
(A) weakening of muscles (B) tiredness
(C) difficulty in breathing (D) loss of weight
11. Which thing is reabsorbed by the descending limb of loop of Henle?
(A) salts (B) glucose (C) water (D) urea
12. After larynx, air enters into:
(A) pharynx (B) oesophagus (C) trachea (D) bronchi

Sahiwal 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) What is meant by cellular respiration?
- (ii) Write bad effects of smoking.
- (iii) What is osmosis?
- (iv) Define halophytes with an example.
- (v) Write the name of four parts of urinary system.
- (vi) Define response. Give an example.
- (vii) Explain brain stem.
- (viii) Describe any two causes of epilepsy.

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

(5×2=10)

- (i) Differentiate between endoskeleton and exoskeleton.
- (ii) Where are fixed joints found?
- (iii) How does fragmentation take place?
- (iv) What is double fertilization?
- (v) What are STDs? Write name of one STD.
- (vi) What are nucleosomes?
- (vii) Differentiate between genotype and phenotype.
- (viii) Write the name of "Darwin's" book.

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

(5×2=10)

- (i) Define parasitism.
- (ii) Define food chain and food web.
- (iii) Define biotechnology.
- (iv) What is fermenter?
- (v) Write two uses of formic acid.
- (vi) Define pharmacology and pharmacy.
- (vii) What are Hallucinogens?
- (viii) Describe the uses of fermenter

(PART - II)

Note: Attempt any TWO questions.

(2×9=18)

- Q5. (a) Describe the function of human kidney. 5
- (b) How does the process of hearing take place in ear? Explain it. 4
- Q6. (a) Define joints and explain the types of joints. 5
- (b) Describe four methods of natural vegetative propagation. 4
- Q7. (a) Define ecosystem. Describe its biotic components in detail. 5
- (b) Describe in detail basic steps in genetic engineering. 4