Warning:- Please, do not write anything on this question paper except your Roll No.

1219 (Inter Part – II) (Session 2015-17 to 2017-19)

Biology (Objective) Paper (II)

Time Allowed:- 20 minutes **PAPER CODE 4465** Maximum Marks:- 17

Note:- You have four choices for each objective type question as A, B, C and D. The choice which you think is correct; fill that circle in front of that question number. Use marker or pen to fill the circles. Cutting or filling two or more circles will result in zero mark in that question. Write **PAPER CODE, which is printed on this question paper,** on the both sides of the Answer Sheet and fill bubbles accordingly, otherwise the student will be responsible for the situation. Use of Ink Remover or white correcting fluid is not allowed.

Q.1

1. Desert ecosystem of Bhakkar and Mianwali is
   (A) Thar (B) Thal (C) Cholistan (D) Rohi
2. Establishment of new forests where no forest existed previously
   (A) Afforestation (B) Reforestation (C) Deforestation (D) Forestation
3. Detection of change and signalling for effector's response to control system is
   (A) Positive feed back (B) Negative feed back (C) Feed back mechanism (D) Feed forward mechanism
4. Aldosterone is involved in
   (A) Transport of potassium ions into kidneys (B) Uptake of Sodium in Loop of Henle (C) Transport of water (D) Reabsorption of water
5. Proteins that bind to calcium in muscle contraction
   (A) Actin (B) Myosin (C) Tropomyosin (D) Troponin
6. Action of Venus Fly trap is
   (A) Nyctynasty (B) Photonasty (C) Haptonasty (D) Thermonasty
7. Testosterone is secreted by
   (A) Sertoli cells (B) Interstitial cells (C) Germinal epithelium (D) Prostrate gland
8. All of the following are day neutral plants EXCEPT.
   (A) Pea (B) Wheat (C) Maize (D) Cotton
9. Contractile ring in cytokinesis is formed by
   (A) Tubulin (B) Actin and Myosin (C) Keratin (D) Cyclins
10. Trisomy of chromosome 18 is found in
    (A) Down's syndrome (B) Patau syndrome (C) Edward syndrome (D) Jacob's syndrome
11. The number of spinal nerves in man
    (A) 24 (B) 62 (C) 12 (D) 31
12. Pigment free area that appear at the time of fertilization in amphibians is
    (A) Animal pole (B) Vegetal pole (C) Yolk (D) Grey crescent
13. Each Okazaki fragment is synthesized by
    (A) RNA polymerase (B) DNA polymerase I (C) DNA polymerase II (D) DNA polymerase III
14. Which traits are more common in male humans
    (A) X-linked dominant (B) X-linked recessive (C) Sex limited (D) Sex influenced
15. Polyhydroxy butyrate is
    (A) Antithrombin III (B) Nutra sweet (C) Biodegradable plastic (D) Anti body from soyabean
16. According to Endosymbiontic hypothesis, the aerobic bacteria developed into
    (A) Ribosomes (B) Chloroplasts (C) Mitochondria (D) Golgi bodies
17. Bacteria in the root nodules fix nitrogen and convert it into
    (A) Nitrate (B) Nitrite (C) Amino acids (D) Ammonia

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1219 (Inter Part-II) (Session 2015-17 to 2017-19)

Biology (Subjective) Paper (II)

Time Allowed: 2.40 hours Maximum Marks: 68

SAR

Section ---------- I

2. Answer briefly any Eight parts from the followings:- **8 × 2 = 16**

(i) Differentiate between ureotelic and uricotelic.

(ii) What is flame cell, give its function?

(iii) How plants respond to cold stress?

(iv) What is Hydrostatic skeleton, give example?

(v) What are synovial joints?

(vi) Write two adaptations in birds that help them for flight.

(vii) Give at least two uses of PCR amplification and analysis.

(viii) Write down the average rain fall of grassland and temperate deciduous forest.

(ix) Differentiate between weather and climate.

(x) What is gene pharming?

(xi) Define soil, give its basic constituents.

(xii) What is Eutrophication?

3. Answer briefly any Eight parts from the followings:- **8 × 2 = 16**

(i) Define Reflex action and Reflex Arc.

(ii) Define the term synapse.

(i) What do you know about Latent learning.

(iv) Sketch the life cycle of a BRYOPHYTE.

(v) What do you know about Apomixis?

(vi) Define climacteric.

(vii) Differentiate genotype from phenotype

(viii) Define and explain codominance.

(ix) What do you know about mycorrhiza.

(x) Differentiate population from community.

(xi) Define pleiotropy. Explain it with any one example.

(xii) What do you know about plant biomass of an ecosystem.

4. Answer briefly any Six parts from the followings:- **6 × 2 = 12**

(i) What is morulla?

(ii) What is hensen's node?

(iii) What is Apoptosis?

(iv) What are the functions of mitotic apparatus.

(v) What is a theory of special creation.

(vi) What is genetic drift?

(vii) Differentiate between template strand and coding strand?

(viii) What is inversion?

(ix) Differentiate between leading and lagging strands of DNA.

Section ---------- II **(8 × 3 = 24)**

Note: Attempt any three questions.

5. (a) Explain the process of excretion in cockroach, with diagram.

   (b) Describe the symbiotic relationships in organisms.

6. (a) Describe locomotion in Paramecium. (b) Describe the process of Transcription.

7. (a) Describe the role of pancreas as an endocrine gland.

   (b) Write a note on green-house effect.

8. (a) Explain female reproductive system in humans.

   (b) Explain the genetic basis of human blood groups.

9. (a) Write a note on embryonic induction.

   (b) Explain the theory of inheritance of acquired characteristics.