بیولوژی - ایس ایس-III

نظرات

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BIOLOGY SSC-II

Time allowed: 2:40 Hours
Total Marks Sections B and C: 53

NOTE: Answer any eleven parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 33)

Q. 2 Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

(i) List the types of blood vessels present in vertebrates.
(ii) Why is it necessary to know the blood group of donor before giving blood to the patient?
(iii) List the types of Dialysis.
(iv) How does the Tropic movement occur in plants? Write down its reasons and list its types.
(v) Write down the functions of Tendons and Ligaments in relation to movement in Animals.
(vi) Write a short note on Peripheral Nervous System.
(vii) What is Colourblindness?
(viii) Define Vegetative propagation in flowering plants. Write down its types with one example of each.
(ix) Write a short note on Double fertilization with respect to the life cycle of flowering plants.
(x) What is Nucleotide? Write down its chemical composition.
(xi) Write down the application of genetic engineering for the welfare of mankind.
(xii) Write down the theories of Evolution presented by Thomas Malthus and Aristotle.
(xiii) Why is Nitrogen gas necessary for organisms? List the four stages of Nitrogen Cycle.
(xiv) What are Sericulture and Apiculture? Give their importance in human life.
(xv) Write down the life cycle of liver fluke.

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks. (2 x 10 = 20)

Q. 3 Write down the structure of human EAR. Also draw the diagram. How does the ear work? (10)

Q. 4 a. What is 'POLLINATION'? Write down its types. Write down the characteristics of flowers pollinated by water and air? (05)
b. What is Cloning? (02)
c. What are Spermatogenesis and Oogenesis? (03)

Q. 5 a. Write about Monohybrid Cross in the light of Mendel’s Experiment. (05)
b. Explain the types of Blood cells. (05)
(24) قسمت دوم (33)

селولوز موجود ہے کیا؟ (11) کئی عوام سے سوال کیا گیا ہے۔

(1) نہیں
(2) یہ موجود ہے
(3) یہ لاہور میں موجود ہے
(4) یہ کراچی میں موجود ہے
(5) یہ جبید میں موجود ہے
(6) یہ بنگال میں موجود ہے
(7) یہ پنجاب میں موجود ہے
(8) یہ سندھ میں موجود ہے
(9) یہ ضلع میں موجود ہے
(10) یہ وسیع میں موجود ہے

(25) قسمت دوم (20)

(1) کئی عوام سے سوال کیا گیا ہے۔

10
5
2
3
5
5

---28A 1210 (L)---
BIOLOGY SSC-II
SECTION - A (Marks 12)

Time allowed: 20 Minutes

NOTE:- Section - A is compulsory. All parts of this section are to be answered on the question paper itself. It should be completed in the first 20 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) The evaporation of water from the top of the leaf reduces the concentration of water but increases the concentration of
   A. Transpiration  B. Concentration gradient  C. Solvent  D. Solute

(ii) The incomplete, minute and non-nucleated cells found in human blood are called
   A. Leucocyte  B. Thrombocyte  C. Esinophil  D. Basophil

(iii) CO₂ is produced as a result of
   A. Translocation  B. Transpiration  C. Respiration  D. Reduction

(iv) The renal tubule of Nephron is much longer and it originates from the
   A. Renal Pelvis  B. Collecting duct  C. Malpighian Tubules  D. Bowman’s capsule

(v) As a result of the secondary growth, the thickness of of a plant increases
   A. Stem  B. Fruit  C. Roots  D. Leaves

(vi) A severe sickening pain with abnormal appearance of joints along with swelling shows
    A. Dislocation of joints  B. Rheumatoid arthritis  C. Osteoarthritis  D. None of these

(vii) The fluid which provides cushioning and ions to the brain and spinal cord is called
     A. Connective Tissue fluid  B. Intracranial fluid  C. Cerebrospinal fluid  D. Interstitial fluid

(viii) The particles in the endolymph strikes the sensitive cells of
      A. Cochlea  B. Eye  C. Brain  D. None of these

(ix) In which stage of the development of Frog is the Yolk plug formed?
    A. Blastulation  B. Ovulation  C. Gasulation  D. Cleavage

(x) Cytosine and Thymine are the smaller single ring bases called
    A. Pyrimidine  B. Alkane  C. Alike  D. Purine

(xi) Which of the following is considered a vestigial organ in the human body?
     A. Bile duct  B. Gall bladder  C. Spleen  D. Appendix

(xii) Vaccination of BCG to the children encourages the development of
     A. AIDS  B. Malaria  C. Antigen  D. Antibody

For Examiner’s use only:

Total Marks: 12
Marks Obtained: ________

--- 25A 1210 (ON) ---
بیٹلوجی - ایس ایس - II
حنض: 30 مینی

سوالات پر نظر

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Q. 2
Attempt any ELEVEN parts. The answer to each part should not exceed 3 to 4 lines. (11 x 3 = 33)

(i) Write down the chemical composition of plasma of blood.
(ii) Write down the symptoms of Angina pectoris.
(iii) Write down the functions of human kidney.
(iv) How does locomotion take place in Volvox?
(v) Which principle is involved in the working of joint of human elbow?
(vi) What are ‘Growth Regulators’ in plants?
(vii) Write short notes on the following:

   a. Neuron
   b. Islets of Langerhans
   (viii) Write down the steps involved in binary fission in Bacteria.
   (ix) What do you mean by Crossing Over? Write down its significance.
   (x) What is ‘Genetic Engineering’? Write down its application.
   (xi) Write down any three hypothesis developed on account of Evolution.
   (xii) Write down the purposes of Deforestation.
   (xiii) Write a short note on the Carbon Cycle.
   (xiv) What is Germination? List the types of seed germination.
   (xv) How are the pests controlled biologically?

SECTION – C (Marks 20)

Note: Attempt any TWO questions. All questions carry equal marks.

Q. 3
a. Describe Systemic circulation.
   (05)
b. What is the Heart Bag (Pericardium)?
   (03)
c. How does circulation take place in insects?
   (02)

Q. 4
   (04)
b. Describe the Nervous disorders?
   (04)
c. Write down the effects of nicotine on human health.
   (02)

Q. 5
a. Explain the chemical composition of DNA.
   (05)
b. Differentiate between Transcription and Translation.
   (03)
c. Replication of DNA is Semiconservative. Why?
   (02)

--- 2SA 1210 (ON) ---
(Islets of Langerhans)

(11x3=33)

(2x10=20)
Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

(i) The single circuit heart is found in
A. Amphibians  B. Reptiles  C. Fish  D. Mammals

(ii) The transport system facilitates
A. The elimination of metabolic wastes of each cell
B. To adjust in the habitat
C. Movement of materials
D. All of these

(iii) In Amoeba excretion of Ammonia takes place through
A. Cell membrane  B. Nucleus  C. Mitochondria  D. Golgi complex

(iv) The common mineral salt present in sweat is
A. Calcium Oxalate  B. Potassium Sulphate  C. Iron Sulphide  D. Sodium Chloride

(v) Locomotion or movement in Amoeba through finger like processes is brought about by flow of
A. Cytoplasm  B. Endoplasm  C. Ectoplasm  D. Nucleoplasm

(vi) In which part of stem, is the cambium present?
A. Pith  B. Middle part  C. Inner part  D. Outer part

(vii) The myelin sheath which covers the Axon of Neuron is made up of
A. Vitamin  B. Fats  C. Proteins  D. Carbohydrates

(viii) Which of the following is an example of Multiple fission occurring in unicellular organism?
A. Chlamydomonas  B. Euglena  C. Plasmodium  D. Paramecium

(ix) In the development of a frog as soon as the nervous system is formed, the embryo becomes
A. Gastrula  B. Blastula  C. Monula  D. Neurula

(x) In the structure of DNA, which enzyme helps in binding the fresh nucleotides to the template strand?
A. Lysase  B. Amylase  C. Polymerase  D. Endonuclease

(xi) Appearance of a trait in an individual is its
A. Genome  B. Karyotype  C. Phenotype  D. Genotype

(xii) The theory of evolution modified in the light of modern evidence from Genetics, Molecular Biology, Palaeontology, Ecology and Ethology was proposed by
A. Darwin  B. Hugo de Vries  C. August Weismann  D. Lamarck

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Total Marks: 12
Marks Obtained: 

26A 1210 (L)