

SAH

Roll No. _____ Annual 2018

Biology (New Scheme)
Paper : II**(INTER PART II CLASS 12th)(IV)**
Objective**Time : 20 Minutes**
Marks : 17**Code : 8467**

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 with marker or pen. Cutting or filling two or more circles will result in zero mark in that question.

- i. Every gene starts with initiation codon AUG which normally encodes the amino acid.
(A) arginine (B) citruline (C) lysine (D) methionine
- ii. The discoidal cap of cells above the blastocoel is called
(A) blastoderm (B) ectoderm (C) mesoderm (D) endoderm
- iii. Oestrus cycle, a reproductive cycle is found in all females except
(A) cat (B) cow (C) human being (D) lion
- iv. Gestation period in human female is
(A) 250 days (B) 280 days (C) 300 days (D) 310 days
- v. Which hormone in male stimulates the production of testosterone
(A) TSH (B) FSH (C) LTH (D) ICSH
- vi. The vertebral column of human consist of vertebrae
(A) 31 (B) 32 (C) 33 (D) 34
- vii. Angular thickening in their primary wall is present in
(A) parenchyma (B) collenchyma (C) sclernchyma (D) tracheids
- viii. A diluted solution compared to cell concentration is termed as
(A) Hypertonic (B) Hypotonic (C) Isotonic (D) Para tonic
- ix. One gram of ammonia requires how much amount of water for its excretions.
(A) 50 ml (B) 100 ml (C) 250 ml (D) 500 ml
- x. About 95 % of our daily energy requirement are filled by
(A) Nuclear energy (B) Hydroelectric power (C) Geothermal energy (D) Fossil fuel
- xi. In temperate grassland, the rate of primary production is
(A) 700 -1500 g/m^2 (B) 4000 g/m^2 (C) 1500-3000 g/m^2 (D) 6000 g/m^2
- xii. In 1917, the term Niche was first proposed by American Ornithologist named
(A) Earnest Haeckel (B) Joseph Grinnell (C) Lamarck (D) Darwin
- xiii. Archeobacteria can tolerate temperature upto
(A) 60°C (B) 90°C (C) 120°C (D) 150°C
- xiv. Cystic fibrosis patients lack a gene that codes for trans-membrane carrier of
(A) calcium ions (B) sodium ions (C) chloride ions (D) potassium ions
- xv. Secretors have dominant secretor gene "Se" on chromosome.
(A) 9 (B) 19 (C) 21 (D) 24
- xvi. Phragmoplast is formed by vesicals originate from
(A) endoplasmic reticulum (B) golgi complex (C) chloroplast (D) mitochondria
- xvii. The autosomal non-disjunction in man in which 21st pair of chromosome fail to segregate resulting in gametes with 24 chromosome is
(A) Down's syndrome (B) turner's syndrome (C) klinfilter syndrome (D) jacob's syndrome

SAT

2018 Jb 8 L

Roll No. _____ Annual 2018.

Biology (New Scheme)

(INTER PART II – CLASS 12th)

Time : 2.40 Hours

SUBJECTIVE

Marks : 68

Paper : II

Note:- Section I is compulsory. Attempt any 3 questions from Section II.

(SECTION – I)

2. Write short answers to any Eight parts: (8 x 2 = 16)

- i. What is meant by lithotripsy?
- ii. What is ADH and how does it function?
- iii. Differentiate between osmoconformers and osmoregulators.
- iv. What is Ricket? Give its cause and cure.
- v. What is Rigor Mortis?
- vi. How muscle fatigue is resulted?
- vii. Differentiate between viviparous and ovoviviparous.
- viii. What is parthenocary?
- ix. What type of animals are found in littoral zone?
- x. What are alpine and boreal coniferous forests?
- xi. Differentiate between climate and weather.
- xii. Define eutrophication.

3. Write short answers to any Eight parts: (8 x 2 = 16)

- i. Differentiate between diurnal rhythms and circannual rhythms.
- ii. What are neurons? Give examples.
- iii. Differentiate between gastrin and secretin.
- iv. What is codominance?
- v. What is Rh blood group system? Who first discovered its antigen?
- vi. What is Bombay phenotype?
- vii. Differentiate between gene linkage and crossing over.
- viii. What is gene sequencing?
- ix. What is cell suspension culture? Give an example.
- x. Differentiate between ectoparasites and endoparasites.
- xi. Define mutualism. Give an example.
- xii. Differentiate between mycorrhiza and lichens.

4. Write short answers to any Six parts: (6 x 2 = 12)

- i. Differentiate between inhibitory and compensatory effects.
- ii. Give four name of key events in animal development.
- iii. What is Alkaptonuria?
- iv. What is nucleosome?
- v. Define transformation.
- vi. What is mitosis? Give its two significances.
- vii. What is malignant tumor?
- viii. What are vestigial organs? Give example.
- ix. What is natural selection?

Section-II

Note:- Attempt any three (3) questions: (3 x 8 = 24)

- | | |
|------------------------------------------------------------------------------|---|
| 5. (a) Describe excretory system of planaria. | 4 |
| (b) Define the terms (i) Habitat (ii) Succession (iii) Pioneers (iv) Biomass | 4 |
| 6. (a) Describe locomotion in paramecium. | 4 |
| (b) Discuss Meselson and Stahl's experiment regarding replication of DNA. | 4 |
| 7. (a) Discuss in detail the Neurons. | 4 |
| (b) Describe the importance of forests. | 4 |
| 8. (a) Elaborate the process of child birth in human. | 4 |
| (b) What is incomplete dominance? Explain it with an example. | 4 |
| 9. (a) Write a note on abnormal development. | 4 |
| (b) Discuss the Theory of Lamarck with reference to evolution of species. | 4 |