

FIRST TERMINAL EXAMINATION -2022-23

STD-12th SCIENCE

SUB-BIOLOGY

TIME-2.30 HR.

MARKS-50 M

Section-A

Que.1 Select and write the correct answer.

(7)

- a) In ovule, meiosis occurs in
- | | |
|---------------|--------------------------|
| 1. Integument | 2. Nucellus |
| 3. Megaspore | 4. Megaspore mother cell |
- b) Test tube baby technique is called..... .
- | | |
|---------------------------|----------------------------|
| 1. In vivo fertilization | 2. In situ fertilization |
| 3. In Vitro fertilization | 4. Artificial Insemination |
- c) Small swellings on the surface of the chromosome are called
- | | |
|----------------|-----------------|
| 1. centromeres | 2. chromonemata |
| 3. chromomeres | 4. telomeres |
- d) Which of the following is NOT part of protein synthesis?
- | | |
|------------------|-----------------|
| 1. Replication | 2. Translation |
| 3. Transcription | 4. All of these |
- e) The Cranial capacity of Neanderthal man was
- | | |
|------------|------------|
| 1. 600 cc | 2. 940 cc |
| 3. 1400 cc | 4. 1600 cc |
- f) Surface tension is due to
- | | |
|------------------------|-------------|
| 1. Diffusion | 2. Osmosis |
| 3. Gravitational force | 4. Cohesion |
- g) Water is essential for growth because it is necessary
- | | |
|--------------------|----------------|
| 1. For turgidity | 2. As nutrient |
| 3. As raw material | 4. For gravity |

Que.2 Answer the following.

(7)

- Give full form of IAA.
- Which type of solution will bring about deplasmolysis?
- What is protobiogenesis?
- Where is H1 histone present?
- Give one example of complete linkage.
- Enlist the external genital organs in female.
- How many haploid cells are present in a mature embryo sac?

Section-B

Attempt any Eight.

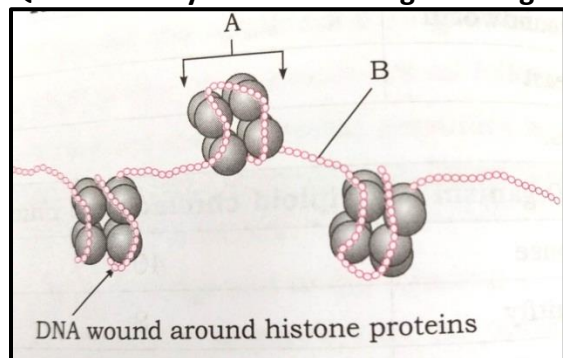
(16)

- Que.3 Give scientific reasons of Parthenocarpic fruits are without seeds.
- Que.4 How polyembryony can be commercially exploited.
- Que.5 Give two differences between blastula and gastrula.
- Que.6 Write a short note on Tubectomy.

Que.7 What are the reasons of Mendel's success ?

Que.8 Enlist the characteristics of genetic code.

Que.9 Identify A and B in the given diagram.



Que.10 Complete the given chart.

Era	Dominating group of animal
1. Coenozoic
2.	Reptiles
3. Palaeozoic
4.	Lower Invertebrates

Que.11 Describe the structure of root hair.

Que.12 Match the following columns.

Column A	Column B (Organisms)
1. Symbiotic nitrogen fixation	a. Nitrobacter
2. Denitrification	b. Cyanobacteria
3. Free living nitrogen fixers	c. Rhizobium
4. Nitrification	d. Paracoccus

Que.13 What is short day plant? Give any two examples.

Section - C

Attempt any four.

(12)

Que.14. Give the graphical representation of test cross and back cross.

Que.15 What are the functions of male accessory glands?

Que.16 Draw a labelled diagram of t- RNA carrying Glutamic acid.

Que.17 What is disruptive selection ?Give example.

Que.18 Draw neat labelled diagram of development of female gametophyte.

Que.19 Write on macro and micro nutrients required for plant growth.

Section – D

Attempt any two

(8)

Que.20 Describe the development of male gametophyte before pollination in angiosperms.

Que.21 Describe the phases of menstrual cycle and their hormonal control.

Que.22 What is criss – cross inheritance ? Explain with suitable example.