### Tsi12Bio

## **Tenkasi District**



Common First Revision Test - January 2025

### Standard 12

Time Allowed: 3.00 Hours

BIOLOGY

Maximum Marks: 70

PART - I [BIO-BOTANY] Part - A

Marks: 35

### Choose the best answer:

8×1=8

- 1) Which one of the following generates new genetic combinations leading to variations?
  - a) Vegetative reproduction

b) Parthenogenesis

c) Sexual reproduction

d) Nucellar polyembryony

2) If haploid number in a cell is 18. The double monosomic and trisomic number will be

a) 35 and 37

b) 34 and 35

c) 37 and 35

d) 17 and 19

- 3) Which one of the following is not correct statement?
  - a) Ti plasmid causes the bunchy top disease.
    - b) Multiple cloning site is known as polylinker.
    - c) Non viral method transfection of Nucleic acid in cell.
    - d) Polylactic acid is a kind of biodegradable and bioactive thermosplastic.
- The phenotype ratio of complementary genes

a) 9:7

b) 9:3:3:1

c) 9:3:4

d) 9:6:1

- 5) Sticky glands of Boerhaavia and Cleome support
  - a) Anemochory
- b) Zoochory
- c) Autochory
- d) Hydrochory
- 6) About 70% of the total global carbon is found in
  - a) Forests
- b) Grasslands
- c) Agro ecosystems 7) Assertion (A) : Genetic variation provides the raw material for selection.
- d) Oceans

Reason (R) individuals.

Genetic variations are differences in genotypes of the

a) A is right and R is wrong.

- b) A is wrong and R is right. d) Both A and R is wrong.
- c) Both A and R is right.
- 8) Which one of the following matches is correct?
  - a) Palmyra
- Native of Brazil
- b) Saccharum Stereocide
- Abundant in Kanyakumari Natural sweetener
- d) Palmyra serp
- Fermented to give ethanol.

#### Part - B

# II. Answer any four of the following questions:

4×2=8

- 9) Draw and label the structure of male gametophyte.
- 10) Define Test cross.
- 11) Differentiate cooling and non cooling strand.
- 12) List out the types of plant tissue culture.
- 13) Which method is involved in the removal of cadmiumn from the contaminated soil? Define with example.
- 14) Mention the benefits of seed treatment.

#### Part - C

## III. Answer any three of the following questions: [Q.No. 19 is compulsory]

3×3=9

- 15) A person got irritation while applying chemical dye. What would be your suggestion for alternative.
- 16) Generally the pyramid of number in forest ecosystem looks spirella shape. State your reason.
- 17) Differentiate habitat and Niche.
- 18) What are the organisms used in single cell protein?
- 19) A detached leaf of Bryophyllum produces new plants. How?

Kindly Send Me Your Questions & Answer Keys to us: padasalai.net@gmail.com

Tsi12Bio Part - D IV. Answer all questions: 2x5 = 1020) a) Bring out the inheritance of chloroplast gene with an example. (OR) b) What is gene mapping? Write its uses. a) Generally human activities are against the ecosystem. As a student, how will you help to protect ecosystem? b) Give an account of active principle and medicinal value of Nilavembu, Keezhanelli and Adathoda plants. PART - II [BIO-ZOOLOGY] Marks: 35 Section - I I. Choose the best answer. Write the answer with option: 8×1=8 Restorative Regeneration observed in \_\_\_\_ c) Honeybes d) Apbis a) Star fish b) Humanbeing 2) \_\_\_\_\_ are elongated and pyramidal and provide nourishment to sperm till maturation. b) Interstitial cell c) Sertolicells a) Leydigcells 3) The average foetal heart beat between \_ b) 82 times a) 72 times d) 120 and 160 times c) 110-120 times Co-dominant blood group is \_\_\_\_ . d) O . c) B b) AB a) A' 5) Sucker fish on shark is an example of \_\_ d) Parasitism a) Amensalism b) Competition c) Commensalism 6) Which of the following region has maximum bio-diversity \_ b) Tropical forest a) Taiga c) Temperate rain forest d) Mangroves 7) \_\_\_\_\_ is referred as queen of drugs. c) Chloromycetin d) Kenamycin a) Penicillin b) Erythromycin 8) The Athlete's foot disease in human is caused by \_ a) Bacteria b) Fungi d) Protozoans c) Virus Section - II 4×2=8 II. Answer any four questions: 9) Define Apolysis. 10) What is meant by Braxton - Hick's contractions? 11) Write down the symptoms of Turner's syndrome. 12) Define Haematopoiesis. 13) Any two advantages of cloning in Animals. 14) What is meant by "4R"? **Section - III** III. Answer any three questions: [Q.No. 19 is compulsory] 15) Differenciate Insitu and Exsitu conservation. 16) Any three adaptation of Aquatic animals. 17) When does antibiotic resistance develop? the form of the second 18) Explain connective link. 19) Note on Oral Contraceptives. Section - IV

IV. Answer all the questions: 2×5=10

20) Write a brief account about In vitro fertilization. (OR) ABO blood groups.

21) Describe the structure of Immunoglobulin. (OR) Effects of Noise pollution.