

KK12Bio

Kanniyakumari District
Common First Revision Test - January 2024



**Standard 12
BIOLOGY**

Marks: 70

Time: 3.00 Hours

Note: Answer Part I (Bio-Botany) and Part II (Bio-Zoology) in separate answer sheets.

Marks: 35

**Part - I (Bio-Botany)
Section-1**

8×1=8

- i) Answer all the questions
ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer

- 1) Epiphyllus buds are in
a) Chrysanthemum b) Agave c) Curcuma d) Scilla
- 2) which mendelian idea is depicted by a cross in which the F₁ generation resembles both the parents
a) Incomplete dominance b) law of dominance
c) Inheritance of one gene d) Co-dominance
- 3) Changing the AGC to AGA represents
a) missense mutation b) non-sense mutation
c) frameshift mutation d) deletionmutation.
- 4) Choose the incorrect pair about the artificial seeds
a) Artificial seeds produce - Non-identical plants
b) Stored by - Cryopreservation
c) Easy to test - genotype of plants
d) Easy method to produce - genetically engineered plants
- 5) Dionea, Bladder wort and Saracenia are
a) Epiphytes b) Commonsals c) Predators d) Parasites
- 6) Which of the following is/are not the mechanism of decomposition
a) Eluviation b) Catabolism c) Anabolism d) Fragmentation
- 7) Choose the correct statement about Azolla
i) Azolla is a free floating water fern
ii) Azolla fisces the atmospheric nitrogen in association with Anabaena azolla
iii) It is used as a bio-fertilizer
iv) It is not suitable for rice crop
a) i, ii and iii only b) i and ii only c) i, ii and iv only d) ii, iii and iv only
- 8) Which among the following is termed as 'Black Gold of India'
a) Cardamen b) Piper nigrum
c) Cannalsis Sativa d) Opium

Section - 2

Answer any four of the following questions.

4×2=8

- 9) "The endosperm of Angeosperm is different from the endosperm of Gymnosperm" Do you agree Justify your answer.
- 10) Give the name of scientist who rediscovered Mendelism
- 11) Define recombination
- 12) What are the materials used to grow micro organism like spirulina?
- 13) Compare gaseous cycle and sedimentary cycle.
- 14) What is pseudo cereals? Give an example.

Section - 3

Answer any three of the following questions. (Q.No. 19 is compulsory)

3×3=9

- 15) What is polyembryory? How it can commercially exploited?
- 16) Differentiate exonuclease and Endonuclease
- 17) What is redifferentiation?
- 18) What is seed ball?
- 19) What is Ozone hole?

Section - 4

Answer all the questions.

2×5=10

- 20) Draw and label the parts of Ovule.

(OR)

Bringout the inheritance of chloroplast gene with an example.

- 21) What are the advantages of seed dispersal

(OR)

What is hybridization? Explain any three types.

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Part - II (Bio-zoology)
Section-1

Marks: 35

i) Answer all the questions

8×1=8

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer

- 1) The skene's glands of the female are homologous to

a) Bulbourethral glands of the male	b) Cowper's gland of the male
c) Prostate gland of the male	d) Glans penis of the male
- 2) If buds are formed from the outer surface of the parent body, it is called as

a) Gemmules	b) Endogenous budding
c) Fragmentation	d) Exogenous budding
- 3) Patau's syndrome is also referred to as

a) 13-Trisomy	b) 18-Trisomy
c) Turner's Syndrome	d) 21-Trisomy
- 4) Colostrum is rich in

a) IgD	b) IgE	c) IgM	d) IgA
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- 5) Interferons are

a) Antibiotics	b) Anti-Bacterial substances
c) Anti-fungal substanes	d) Anti-viral substances
- 6) The "Golden age of reptiles" was

a) Mesozoic era	b) Cenozoic era
c) Paleozoic era	d) Proterozoic era
- 7) The animals that are at higher risk of extinction due to Habitat destruction is

a) Amphibians	b) Mammals	c) Echinoderms	d) Birds
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- 8) Enzyme used for removing oily stains from the clothes

a) Cellulose	b) Pectinase	c) Protease	d) Lipase
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Section-2

Answer any four of the following questions.

4×2=8

- 9) Differentiate foeticide and infanticide
- 10) What is amniocentesis?
- 11) Write the central dogma of protein synthesis
- 12) List out the symptoms of Filariasis.
- 13) What is Co extinction?
- 14) Define the term 'Superbug'?

Section-3

Answer any three of the following questions.

3×3=9

Question Number 19 is compulsory.

- 15) What is known as "Let down Reflex"?
- 16) List out any three causes of Biodiversity loss.
- 17) What is bioremediation? Name any one microorganism involved in bioremediation.
Methylophilum methylotrophicum
- 18) Differentiate - Natality and Mortality.
- 19) Name the hormone secreted by the thymus gland and write down any two functions of that hormone.

Section-4

Answer all the following questions.

2×5=10

- 20) a) Explain the structure of immunoglobulin with the diagram
(OR)
b) Give an account on properities of soil.
- 21) a) Explain the classical model Lac operon produced by Jacob and Monod.
(OR)
b) Explain the evolutionary path of man.