



# BIOLOGY

# **BOOKS - FULL MARKS BIOLOGY (TAMIL ENGLISH)**

# **SAMPLE PAPER - 2**



1. Inner most layer of anther wall is .....

A. Endothecium

B. Endothelium

C. Epithelium

D. Tapetum

Answer: D



2. Test cross involves

A. Crossing between two genotypes with recessive trait

B. Crossing between two  $F_1$  hybrids

- C. Crossing between  $F_1$  hybrid with double recessive genotype
- D. Crossing between two genotypes with dominant trait

#### Answer: C

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**3.** Asserlion (A) : Gamma rays are generally use to induce mutation in wheat varieties.

Reason (R) : Because they carry lower energy to non-ionize electrons from

atom

A. A is correct, R is correct explanation of A

B. A is correct, R is not a correct explanation of A.

C. A is correct, R is wrong explanation of A

D. A and R are wrong

#### Answer: C

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4. Self-ligation is prevented by .....

A. DNA polymerase

B. Helicase

C. Alkaline phosphate

D. DNA ligase

Answer: C

5. Match the following :

Column I

# $\operatorname{Column} \operatorname{II}$

- 1. Totipotency (A) Reversion of mature cells into meristem
- 2. Dedifferentiation (B) B
- 3. Explant (C
- 4. Differentiation
- (B) Biochemical and structural changes of cell(C) Properties of living cells develops into entire
- (D) Selected plant tissue transferred to culture m

^	1	2	3	4
А.	C	A	3 D	В
р	1	2	$3 \ B$	4
ь.	A	C	B	D
c	1	<b>2</b>	3 D	4
C.	B	A	D	C
Р	1	2	${3 \atop C}$	4
υ.	D	B	C	A

## Answer: A

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6. A specific place in an ecosystem, where an organism lives and performs

its functions is

A. habitat

B. niche

C. landscape

D. biome

Answer: B

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7. Find the wrongly matched pair.

A. Endemism - Species confined to a given region and not found

anywhere else.

B. Hotspots - Western ghats

C. Ex-situ conservation - Zoological parks

D. Sacred groves - Saintri hills of Rajasthan

Answer: D

- 8. The plant source of marijuana is .....
  - A. Andrographis paniculata
  - B. Phyllanthus maderspatesis
  - C. Cannobis sativa
  - D. Papaver somniferum

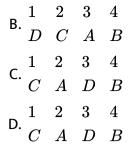
## Answer: C

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9. Match the following.

Types of Asexual reproduction	Organsims
A. Endogenous budding	i. Star fish
B. Parthenogenesis	ii. Tapeworm
C. Fragmentation	iii. Noctiluca
D. Regeneration	iv. Honey bees

A. 
$$\begin{array}{cccccccc} 1 & 2 & 3 & 4 \\ C & D & B & A \end{array}$$



Answer: A

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10. The male sex hormone testosterone is secreted from .....

A. Sertoli cells

B. Leydig cells

C. Epididymis

D. Prostate gland

Answer: B

**11.** Select the incorrect action of hormonal contraceptive pills from the following

A. Inhibition of spermatiogenesis

B. Inhibition of ovulation

C. Changes in cervical mucus impairing its abilitiy to allow passage

and transport of spem

D. Alteration in uterine endometrium to make it unsustainable for

implantation

Answer: A

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**12.** Father of a child is colour blind and mother is carrier for colour blindness, the possibility of the child being colour blind is.....

B. 0.5

C. 1

D. 0.75

#### Answer: B

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**13.** Which of the following is the correct sequence of events with reference to the central dogma ?

A. Transcription, Translation, Replication

B. Transcription, Replication, Translation

C. Duplication, Translation, Transcription

D. Replication, Transcription, Translation

## Answer: D

14. Who proposed the Germplasm theory?

A. August Weismann

B. Darwin

C. Lamarck

D. Alfred wallace

### Answer: A

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15. AIDS virus has .....

A. Single stranded RNA

**B. Single stranded DNA** 

C. Double stranded RNA

D. Double stranded DNA

# Answer: C

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16. Assertion (A) : Streptomycin is an antibiotic

Reason (R) : Antibiotics are microbial products inhibits the growth of pathogenic microbe.

A. A is right, R is wrong

B. R explain A

C. A and R are wrong

D. A and R are right. R does not explain A

#### Answer: B



1. Pollination in Gymnosperms in different from Angiosperms' - Give

reasons.

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# **2.** A B CC B D E F G H I

From the above figure identify the type of mutation and explain it.

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3. Write the various steps involved in cell suspension culture.

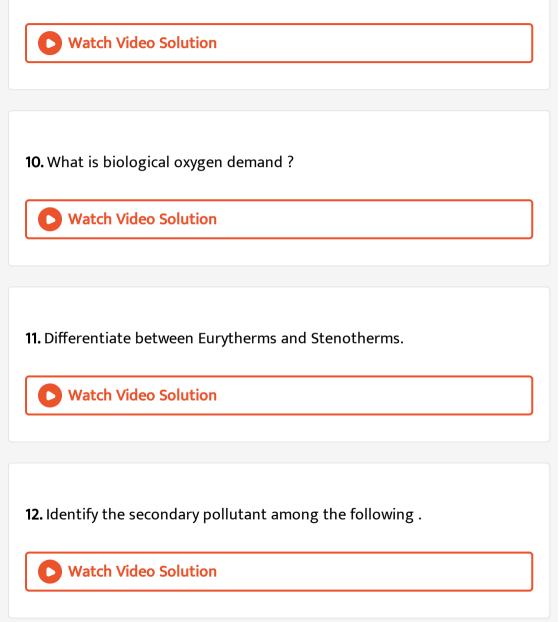


4. Pyramid of energy is always upright. Give reasons.

5.	Describe	in	brief	about	Actinomy	ycetes.
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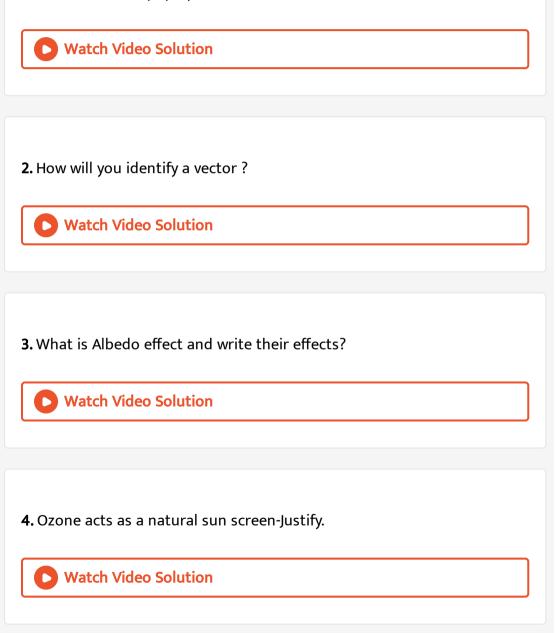
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<ul> <li>6. Explain the law of dominance in monohybrid cross.</li> <li>Watch Video Solution</li> </ul>
7. What is inhibin ? State its functions.
Watch Video Solution
8. Construct a flow chart showing criss-cross inheritance.           Watch Video Solution

**9.** How does Mutation theory of Dev. Vries differ from Lamarck and Darwin's view in the origin of new species.





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5. Which is called as "The King of Bitters"? Mention their medicinal

importance.

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<b>6.</b> What is amniocentesis ? Why a statutory ban is imposed on this technique ?
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7. DNA acts as genetic material for majority of living organisms and not the RNA. Give reasons to support the statement. Vatch Video Solution
8. Draw and label the structure of Immunoglobulin.

<b>9.</b> Explain how "Rosie" is different from a normal cow.
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<b>10.</b> Extinction of a keystone species led to loss of biodiversity. Justify.
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Part Iv
<b>1.</b> With a suitable diagram, explain the structure of an ovule.
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<b>2.</b> List out the significance of ploidy.
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# **3.** Explain the basic concepts involved in plant tissue culture.

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4. Write a note on carbon foot print.           • Watch Video Solution
5. Write a note on menstrual cycle.           Watch Video Solution
6. Write the salient features of genetic code.          • Watch Video Solution

7. Suggest some of the ways to prevent drug and alcohol abuse.

