

India's Number 1 Education App

BIOLOGY

BOOKS - FULL MARKS BIOLOGY (TAMIL ENGLISH)

SAMPLE PAPER -4

Bio Botany Part I

1. In majority of plants pollen is liberated at

- A. 1 celled stage
- B. 2 celled stage
- C. 3 celled stage
- D. 4 celled stage

Answer: B



2. Which one of the following is an example for

polygenic inheritance ?

A. Flower color in Mirabilis jalapa

- B. Pod shape in garden pea
- C. Production of male honey bee
- D. Skin color in humans

Answer: D

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3. Assertion (A): Complete linkage is noticed in

male species of Drosophila.

Reason (R): Completely linked genes show

some crossing over.

A. A is true, R is false

B. Both A and R are false

C. A is true, R is not correct explanation of

Α

D. R explains A

Answer: A

4. Virus free plants are developed from

A. Organ culture

B. Meristem culture

C. Protoplast culture

D. Cell suspension culture

Answer: B

5. The unit of measuring ozone thickness i s

A. Joule

B. Kilos

C. Dobson

D. Watt

Answer: C

6. If 1200 Joules of solar energy is trapped by producers, how much of joules of energy does the organism in the third tropic level will receive?

- A. 120 joules
- B. 2 joules
- C. 1.2 joules
- D. 0.12 joules

Answer: C



7. Dwarfing gene of wheat is

A. Pal 1

B. Atomita 1

C. Norin 10

D. Pelita 2

Answer: C

8. Which of the following matches are correct.

- (a) Palmyra
- Native of Brazil
- (b) Saccharum(c) Steveocide
- Abundant in Kanyakumari
- Natural sweetner
- (d) Palmyra sap f
 - fermented to give ethanol

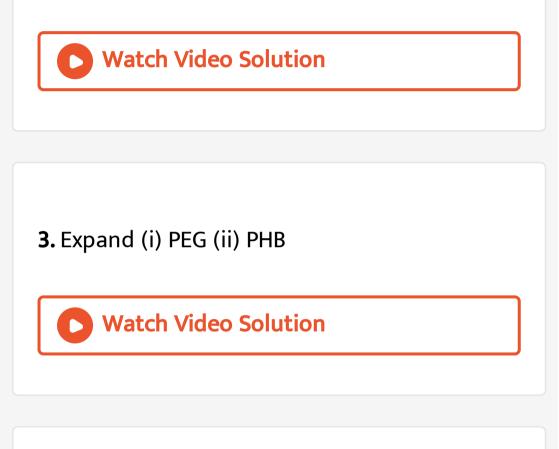


Bio Botany Part li

1. Write the origin and area of cultivation of

green gram and red gram.

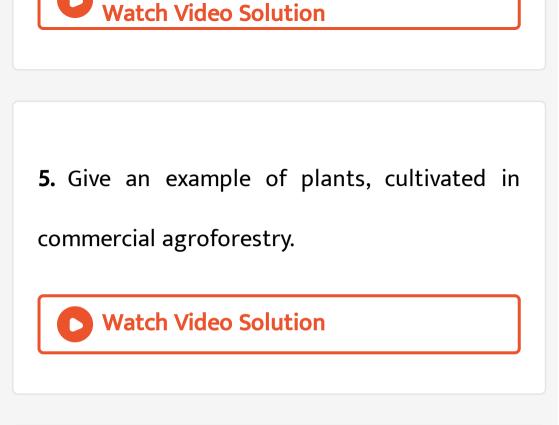
2. State the law of independent assortment.



4. Based on the material used, how will you

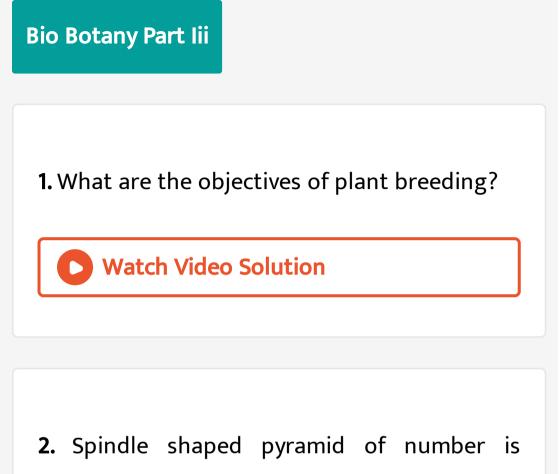
classify the culture technology?





6. How does an orchid ophrys ensures its

pollination by bees?



noticed in forest ecosystem. Give Reasons.

3. Distinguish between mound layering and air

layering.



4. Explain the sex determination mechanism in

Caricapapaya.



5. Write the protocol for artificial seed preparation.
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6. (a) Bring out the inheritance of chloroplast

gene with one example.



7. (b) Explain in detail about various types of

direct gene transfer method.

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8. (a) Explain the steps involved in protoplast culture.



9. (b) Write a note on Henna.

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Bio Zoology Part I

1. The animals which give birth to young ones are

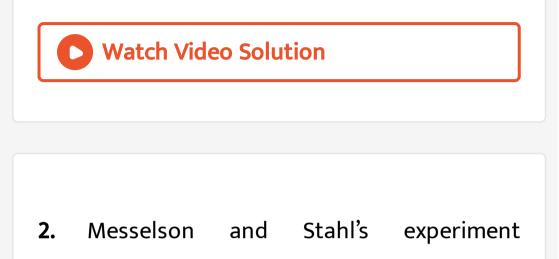
A. Oviparous

B. Ovoviviparous

C. Viviparous

D. Both a and b

Answer: C



proved.....

A. Transduction

B. Transformation

C. DNA is the genetic material

reflication.

Answer: D



3. Match column I with column II.

Column I

- A) Copper releasing IUD (i) LNG-20
- B) Hormone releasing
- C) Nonmedicated IUD
- D) Minipills

Column II

- (ii) Lippers's loop IUD
 - (iii) Saheli
 - (iv) Multiload-375

A. A-(iv), B-(ii), C-(i), D-(iii)

B. A-(iv), B-(i), C-(iii), D-(ii)

C. A-(i), B-(iv), C-(ii), D-(iii)

D. A-(iv), B-(i), C-(ii), D-(iii)

Answer: D

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4. Choose the correctly matched pair.

- (a) Amphetamines
- Stimulant

(b) LSD

Narcotic

(c) Heroin

- Psychotropic
- (d) Benzodiazepine Pain killer

5. The first clinical gene therapy was done for

the treatment of

A. AIDS

B. Cancer

C. Cystic fibrosis

D. SCID

Answer: D



A. Conform

B. Regulate

C. Migrate

D. Suspend

Answer: B

7. Select the correct linear equation describing

the species area relationship?

B. $Z \log A = \log S + \log C$

C. $\log S = \log C + Z \log A$

D. $\log C = \log S \pm Z \log C$

Answer: B

8. Oil strains in laundry can be removed

using....

A. Peptidane

B. Protease

C. Amylase

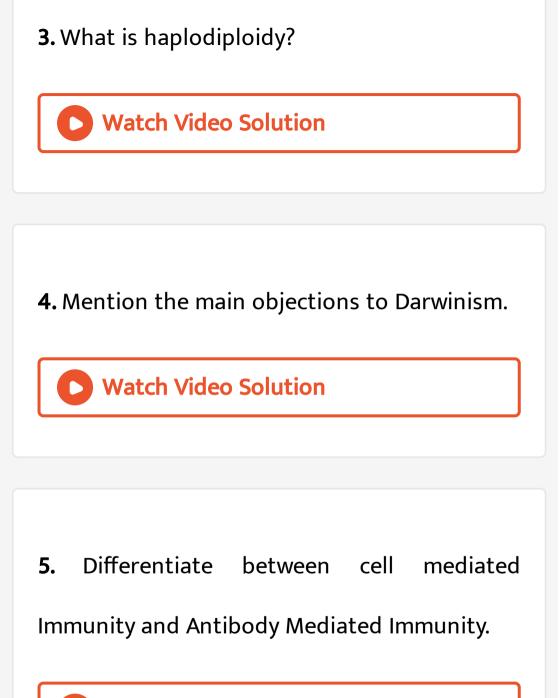
D. Lipase

Answer: D

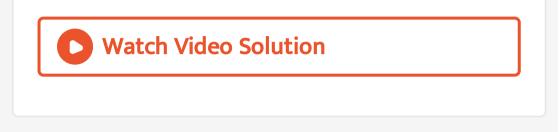
1. The unicellular organisms which reproduce by binary fission are considered immortal. Justify.

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2. What is colostrum? Write its significance.



6. What are attenuated recombinant vaccines?



Bio Zoology Part Iii

1. Alien species invasion is a threat to endemic

species - substantiate this statement.

2. In what way Peyang conserved the forests?



3. Ammiocentesis, the foetal sex determination

test, is banned in our country, Is it necessary?

Comment.



4. Write the objectives of Human Genome project.

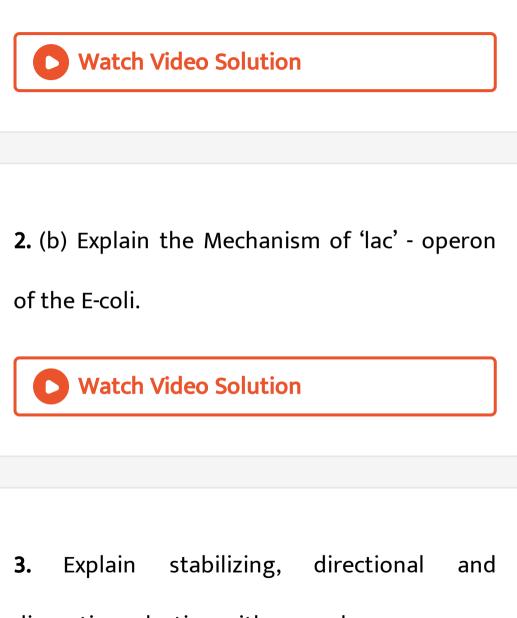
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5. Explain the role of cry-genes in genetically modified crops.

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Bio Zoology Part Iv

1. Describe the structure of a sperm



disruptive selection with examples.





4. (b) Tabulate the types of innate immunity

and their action mechanism.