



## BIOLOGY

### BOOKS - MTG BIOLOGY (ENGLISH)

#### STRATEGIES FOR ENHANCEMENT IN FOOD PRODUCTION

##### Mcqs

1. India and china have more than 70 % of world livestock population.

However, their contribution to world farm produce is only

A. 10 %

B. 25 %

C. 40 %

D. 50 %

**Answer: B**



[Watch Video Solution](#)

2. Which of the following procedures are followed in dairy farm management ?

- (i) Regular inspections and visits by veterinary doctors.
- (ii) Usage of manure to increase copy yields.
- (iii) Adequate environmental condition is provided.
- (iv) Weeding away unproductive and harmful plants from the brood house.

- A. (i) and (ii)
- B. (i) and (ii)
- C. (iii) and (iv)
- D. All of these

**Answer: B**



[Watch Video Solution](#)

3. Which of the following is the "bird flu virus" ?

- A. *H5N1*
- B. *Haemophilus influenzae*
- C. HIV
- D. Rhino virus

**Answer: A**



**Watch Video Solution**

4. Read the following statements select the correct option.

Statement 1 : Ranikhet disease is a disease of poultry.

Statement 2: It is caused by a virus.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.

D. Both statements 1 and 2 are incorrect.

**Answer: A**



**Watch Video Solution**

5. The infectious and contagious bacterial disease that affects cattle, buffaloes, horses, sheeps and goats is

A. anthrax

B. rinderpest

C. tick fever

D. necrosis

**Answer: A**



**Watch Video Solution**



6. The term "breed" refers to

- A. a group of animals not related by descent but similar in most characters
- B. a group of animals related by descent and similar in most characters
- C. a group of animals related by descent but have almost different characteristics
- D. a group of animals neither related by descent nor have similar characteristics.

**Answer: B**



**Watch Video Solution**

7. Which of the following is an improved variety of chicken ?

A. Jersey

B. Leghorn

C. Himgiri

D. Kalyan Sona

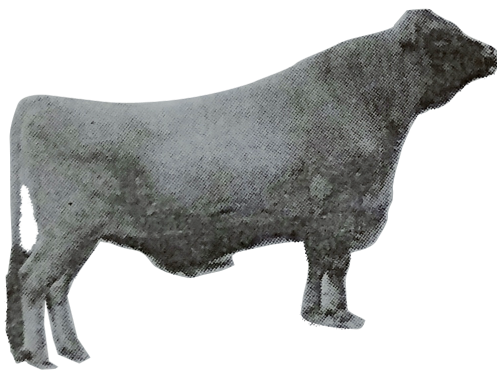
**Answer: B**



**Watch Video Solution**

8. A is an improved breed of cattle and B is an improved breed of chicken.

Which of the following options correctly identifies A and B ?



**A**



**B**

A. A -Jersey, B-Leghorn

B. A-Surti, B-Sangamneri

C. A-Marwari, B-Sirohi

D. A-Beetal, B-Jamunapari

**Answer: A**



**Watch Video Solution**

**9. Which of the following two matches are incorrect ?**

	Exotic breeds of cattle	Country of origin
(i)	Jersey	Holland
(ii)	Holstein-Friesian	Germany
(iii)	Ayrshire	Scotland
(iv)	Brown Swiss	Switzerland

A. (i) and (iii)

B. (i) and (ii)

C. (ii) and (iii)

D. (ii) and (iv)

**Answer: B**



**Watch Video Solution**

**10.** In which of the following options, the different breeds are not correctly placed ?

- |    |                   |                  |
|----|-------------------|------------------|
| A. | Breeds of buffalo | Breeds of cattle |
|    | Murrah            | Hallikar         |
| B. | Breeds of buffalo | Breeds of cattle |
|    | Bhadawari         | Kankrej          |
| C. | Breeds of buffalo | Breeds of cattle |
|    | Mehsana           | Tharparkar       |
| D. | Breeds of buffalo | Breeds of cattle |
|    | Chegu             | Jaffarabadi      |

**Answer: D**



**Watch Video Solution**

**11.** Read of the following statements regarding poultry farm management.

(i) Poultry birds include chicken, ducks, turkey and geese.

(ii) Brooder house should be crowd-free, rain proof and protected from predators.

(iii) The most common egg-type variety used for commercial production throughout the world is single comb white leghorn and its various strains.

(iv) Approximately 14 to 16 hours of light including daylight are required for optimum egg production.

Which of the above statements are correct ?

A. (iii) and (iv)

B. (i),(ii) and (iii)

C. (i),(iii) and (iv)

D. (i),(ii),(iii) and (iv)

**Answer: D**



**Watch Video Solution**

**12.** Which of the following is a draught breed of Indian cattle ?

- A. Malvi
- B. Gir
- C. Sahiwal
- D. Deoni

**Answer: A**



**Watch Video Solution**

**13.** Holstein-Friesian, Brown Swiss and Jersey are all well known

- A. exotic breeds of cow
- B. exotic breeds of goat
- C. exotic breeds of poultry
- D. animal husbandry scientists.

**Answer: A**



**Watch Video Solution**

14. Which one of the following is a breed of cattle ?

- A. Ayrshire
- B. Ghagus
- C. Kadaknath
- D. Scampi

**Answer: A**



**Watch Video Solution**

15. Which one of the following poultry birds is not an English breed ?

- A. Sussex
- B. Australorp
- C. Orpington

D. Minorca

**Answer: D**



**Watch Video Solution**

**16.** High milk yielding cross bred Frieswal cow is the product of

A. Brown Swiss × Sahiwal

B. Friesian × Sahiwal

C. Holstein × Tharparkar

D. Brown Swiss × Red sindhi.

**Answer: B**



**Watch Video Solution**



17. What strategy would you suggest if a person wants to evolve a pure line in an animal ?

- A. Cross-breeding
- B. Inbreeding
- C. Out-breeding
- D. Artificial insemination

**Answer: B**



**Watch Video Solution**

18. Fill up the blanks in the following paragraph by selecting the correct option.

Inbreeding increase i. This inbreeding is necessary if we want to evolve a ii in any animal. Inbreeding exposes harmful iii genes that are eliminated by selection.

- A. (i) heterozygosity, (ii) pure line, (iii) dominant
- B. (i) heterozygosity, (ii) breed, (iii) recessive
- C. (i) homozygosity, (ii) pure line, (iii) recessive
- D. (i) homozygosity, (ii) breed, (iii) dominant

**Answer: C**



**Watch Video Solution**

**19.** Which of the following statements is not correct regarding inbreeding ?

- A. It is the breeding between animals of the same breed.
- B. It decreases homozygosity.
- C. It exposes harmful recessive genes.
- D. It helps in accumulation of superior genes.

**Answer: B**



[Watch Video Solution](#)

**20.** The term "inbreeding depression" is related to

- A. increased fertility and productivity
- B. increased milk production
- C. reduced fertility and productivity
- D. reduced milk production.

**Answer: C**



[Watch Video Solution](#)

**21.** Continued inbreeding, especially close inbreeding generally results in

- A. inbreeding depression
- B. inbreeding stimulation
- C. inbreeding hybridisation

D. inbreeding mutation.

**Answer: A**



**Watch Video Solution**

**22.** Study the following statements regarding inbreeding and select the incorrect ones.

- (i) The inbreeding strategies allow the desirable qualities of two different breeds to be combined.
- (ii) It increases homozygosity.
- (iii) It also helps in elimination of less desirable genes.
- (iv) Continued inbreeding increases fertility and productivity.

A. (i) and (ii)

B. (ii) and (iii)

C. (iii) and (iv)

D. (i) and (iv)

**Answer: D**



**Watch Video Solution**

**23.** Given below are four statements (i)-(iv). Which two of the following statements are correct ?

- (i) It is estimated that more than 70 percent of the world livestock population is in India and China.
- (ii) Stringent cleanliness and hygiene (both of the cattle and the handlers) are of paramount importance while milking, storage and transport of the milk and products.
- (iii) Out-breeding is the breeding between animals of the same breed only.
- (iv) Crosses between different breeds is called inbreeding.

A. (i) and (ii)

B. (ii) and (iv)

C. (i) and (iv)

D. (ii) and (iii)

**Answer: A**



**Watch Video Solution**

**24.** A breed of cow is mated with closely related breed for five generations. It was found that production of milk has reduced subsequently and the animals are not keeping good health. Which of the following methods of animals breeding can overcome this problem?

- A. Hybridisation
- B. Controlled breeding
- C. Out-crossing
- D. Crossing breeding

**Answer: C**



**Watch Video Solution**

**25.** The breeding carried out between animals of different breeds is called

- A. out-crossing
- B. cross-breeding
- C. inbreeding
- D. both (a) and (b)

**Answer: B**



**Watch Video Solution**

**26.** Fill up the blanks by selecting the correct option.

In cross-breeding, \_\_\_\_\_ of one breed are mated with \_\_\_\_\_ of another breed.

- A. superior males, normal females
- B. normal males, superior, superior females
- C. normal males, normal females

D. superior males, superior females

**Answer: D**



**Watch Video Solution**

**27. Which of the following is example of cross-breed ?**

A. Mule

B. Hilsa

C. Hisardale

D. Sahiwal

**Answer: C**



**Watch Video Solution**

**28. Hisardale is a new breed of sheep developed in Punjab by crossing**



- A. Merino ram and Bikaneri ewe
- B. Assel ram and White leghorn ewe
- C. Rhode Island ram and White leghorn ewe
- D. Cochin ram and Ghagus ewe.

**Answer: A**



**Watch Video Solution**

**29.** Crossing of individual of two different species to produce a hybrid is called

- A. intersepcific hybridisation
- B. intervarietal hybridisation
- C. intergeneric hybridisation
- D. intravarietal hybridisation.

**Answer: A**



30. A mule is produced by the interspecific hybridisation between



- A. Hisardale and merino rams
- B. male donkey and mare
- C. female donkey and a male horse
- D. Merino ram and Bikaneri ewe.

**Answer: B**



Watch Video Solution

**31.** Fill in the blanks in the following statements by selecting the correct option.

(i) All hybrids of poultry are produced by \_\_\_\_\_ inbred stocks.

(ii) Super hybrids are obtained when genetically parents are used in the cross.

(iii) A \_\_\_\_\_ is produced from a cross between female horse (mare) and male donkey.

A. (i) mating, (ii) same, (iii) mule

B. (i) crossing, (ii) same, (iii) hinny

C. (i) crossing, (ii) different, (iii) mule

D. (i) mating, (ii) different, (iii) hinny

**Answer: C**



Watch Video Solution

**32.** Match the terms given in column I with their descriptions given in column II and select the correct option from the codes given below.

Column-I

- (A) Out-crossing
- (B) Interspecific hybridisation
- (C) Cross-breeding
- (D) Inbreeding

Column-II

- (i) Mating of closely related individuals
- (ii) Mating of animals of same breed
- (iii) Mating of animals of two different breeds
- (iv) Mating of animals belonging to different species

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

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

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

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

**Answer: A**



**Watch Video Solution**

**33.** Artificial insemination involves

A. super ovulation

- B. semen collection
- C. egg collection
- D. embryo collection.

**Answer: B**



**Watch Video Solution**

**34.** Read the following statements and select the incorrect one.

- A. Semen is preserved for artificial insemination by heating.
- B. Mating of animals within the same breed, but having no common ancestors on either side of their pedigree upto 4-6 generations is called as out crossing.
- C. Example of interspecific hybridisation is mule.
- D. Hinny is a hybrid between the female ass and stallion.

**Answer: A**



[Watch Video Solution](#)

**35.** Artificial breeding of cattle is brought about by

- A. artificial insemination
- B. super ovulation and embryo transplanation
- C. MOET
- D. all of these

**Answer: D**



[Watch Video Solution](#)

**36.** MOET stands for

- A. Multiple Ovulation and Egg Transfer Technology
- B. Multiple Ovary and Embryo Transfer Technology
- C. Multiple Ovulation Embryo Transfer Technology

## D. Method of Egg Transfer Technology.

**Answer: C**



**Watch Video Solution**

**37.** Given below are the three statements each with one or two blanks.

Select the option which correctly fills up of the blank in any two statements.

A. Inbreeding helps in accumulation of i and elimination of ii.

B. In MOET a cow is administered hormones, with i like activity, to induce follicular maturation and super ovulation.

C. Hisardale is a new breed of sheep developed in Punjab by crossing i and ii.

A. A-(i) less desirable genes, (ii) superior genes B-FSH

B. A-(i)superior genes, (ii) less desirable genes, (ii) less C-(i) Bikaneri ewes (ii) Marino rams

C. B-(i) LH

C-(i) Sahiwal ewes, (ii) Deoni rams

D. B-(i) progesterone

C-(i) Kankrej ewes, (ii) Dangi rams

**Answer: B**



**Watch Video Solution**

**38.** Given below are four statements (A-D) each with one or two blanks.

Select option which correctly fills up the blanks in any two statements.

(A) Multiple ovulation i transfer technology is for ii improvement.

(B) In it a cow is administered i to induce follicular maturation and ii ovulation.

(C) Instead of one egg per cycle, i eggs are produced through it.

(D) The fertilised i at ii celled stages are recovered non-surgically and transferred to surrogate mothers.

A. (A)-(i) pipeline, (B)-(i) oestrogen, (ii) poly



B. (A)-(i) embryo, (ii) herd, (D)-(i) zygote, (ii) 4-6

C. (C)-(i) 6-8, (D)-(i) eggs, (ii) 4-8

D. (B)-(i) FSH, (ii) super, (C)-(i) 6-8

**Answer: D**



**Watch Video Solution**

**39. Multiple ovulation embryo transfer technology is related to**

A. transfer of super embryo

B. transfer of super eggs

C. super ovulation and embryo transfer

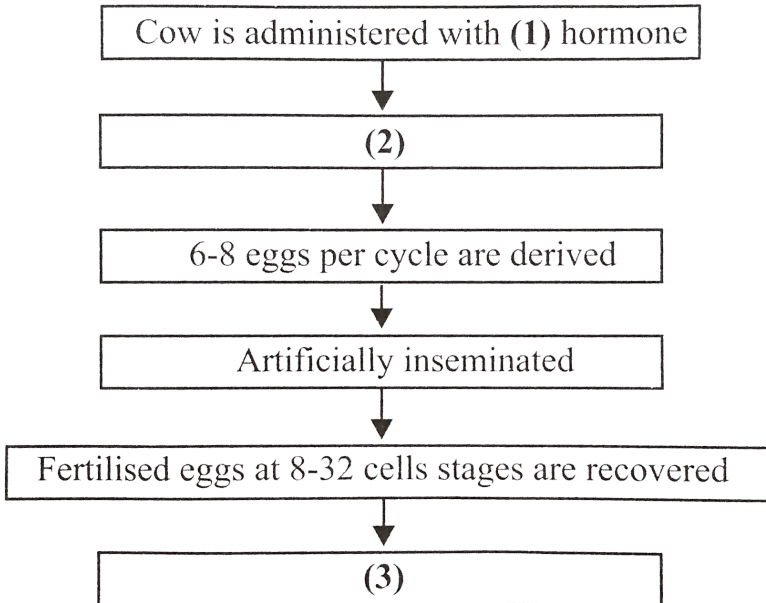
D. both (a) and (b)

**Answer: C**



**Watch Video Solution**

40. Given flow chart represents different steps pf MOET. Study the flow chart carefully and select the correct answer for (1),(2) and (3).



A. 1-FSH, 2-super ovulation due to induced follicular maturation, 3-

Transfer to surrogate mother.

B. 1-LH, 2-super ovulation due to induced follicular maturation, 3-

Transfer to surrogate mother

C. 1-Progesterone, 2-Super ovulation due to induced follicular maturation, 3-Transfer to surrogate mother

D. 1-FSH, 2-Transfer to surrogate mother, 3-Super-ovulation due to induced follicular maturation

**Answer: A**



**Watch Video Solution**

**41.** Lean meat' is considered to be high quality because it has

A. lesser but easily digestible protein

B. lesser lipid content

C. more fat that makes the meat softer

D. longer table life due to lesser chances of infection.

**Answer: B**



**Watch Video Solution**

**42.** In livestock breeding experiments, which of the following stages is transferred to surrogate mothers?

- A. Unfertilised eggs
- B. Fertilised eggs
- C. 8 to 32 celled embryo
- D. Frozen semen

**Answer: C**



**Watch Video Solution**

**43.** The term 'apiculture' refers to

- A. tissue culture
- B. pisciculture
- C. bee-keeping

D. animal-keeping

**Answer: C**



**Watch Video Solution**

**44.** Which of the following plays a role in indigenous system of medicine?

A. Plant breeding

B. Fisheries

C. Apiculture

D. MOET

**Answer: C**



**Watch Video Solution**

**45.** In honey, the main constituent is

A. calcium

B. sugar

C. protein

D. water

**Answer: B**



**Watch Video Solution**

**46.** Beewax is the secretion of abdominal glands of

A. drones

B. worker bees

C. queen bees

D. worker and queen bees.

**Answer: B**



**Watch Video Solution**

**47.** Select the incorrect statement from the following.

- A. Apiculture provides additional income generating source to the farmers.
- B. Bee-keeping is labour intensive process.
- C. Bee venom is used to cure certain diseases like gout and arthritis.
- D. Honey is used as laxative antiseptic and sedative.

**Answer: B**



**Watch Video Solution**

**48.** *Apis dorsata* is

- A. little bee
- B. rock bee

C. European bee

D. Indian bee

**Answer: B**



**Watch Video Solution**

**49.** Which of the following points are important for successful bee-keeping?

- (i) Knowledge of the nature and habits of bees.
- (ii) Selection of suitable location for keeping the beehives.
- (iii) Management of beehives different seasons.
- (iv) Cross hybridisation among the selected parents.

A. (i),(iii) and (iv)

B. (ii) and (iv)

C. (i), (ii) and (iii)

D. (i) and (iii)



**Answer: C**



**Watch Video Solution**

**50.** The use of honeybee is

- A. to help in pollination
- B. production of bees wax
- C. production of honey
- D. all of these

**Answer: D**



**Watch Video Solution**

**51.** Keeping beehives in crop fields during flowering period increases

- A. crop yield

B. honey yield

C. weeds yields

D. both (a) and (b).

**Answer: D**



**Watch Video Solution**

**52.** Select the correct option to fill up the blanks in the following statements.

(i) Controlled breeding experiments are carried out using\_\_\_\_\_.

(ii) In MOET technology, the fertilised eggs at\_\_\_\_\_ cells stages, are recovered and transferred to surrogate mothers.

(iii) In MOET technology, the cow produces\_\_\_\_\_eggs instead of one egg.

(iv) \_\_\_\_\_ is an industry devoted to the catching, processing or selling of fish.

A. (i) artificial insemination, (ii) 8-32, (iii) 6-8, (iv) Fisheries

B. (i) artificial insemination, (ii) 8-32, (iii) 6-8, (iv) Silviculture

C. (i) artificial insemination, (ii) 6-8, (iii) 8-32, (iv) Pisciculture

D. (i) artificial insemination, (ii) 4-8, (iii) 8-32, (iv) Fisheries

**Answer: A**



**Watch Video Solution**

**53. Which of the following is not a freshwater fish ?**

A. Salmon

B. Mrigal

C. Catla

D. Rohu

**Answer: A**



**Watch Video Solution**

**54.** Which of the following are the fishery by-products?

(i) Oil , (ii) Manure

(iii) Glue , (iv) Isinglass

(v) Shagreen , (vi) Leather

A. (i), (ii) and (vi)

B. (iii), (iv) and (v)

C. (i), (iii) and (vi)

D. All of these

**Answer: D**



**Watch Video Solution**

**55.** Which of the following are common freshwater fishes ?

A. Mackerel and rohu

B. Rohu, common carp and Catla

C. Hilsa and sardine

D. None of these

**Answer: B**



**Watch Video Solution**

**56. Which one of the following is a marine fish ?**

A. Rohu

B. Hilsa

C. Catla

D. Common carp

**Answer: B**



**Watch Video Solution**

57. Which one of the following is an exotic catp species ?

- A. Labeo rohita
- B. Cyprinus carpio
- C. Labeo bata
- D. Cirrihinus mrigala

**Answer: B**



**Watch Video Solution**

58. Which of the following is not correctly matched?

	Common name	Scientific name
(i)	Bombay duck	Harpadon
(ii)	Pomphret	Stromateus
(iii)	Salmon	Anguilla
(iv)	Sardine	Aluitheronema
(v)	singhi	Heteropneustes

A. (ii) and (v)

B. (i) and (iii)

C. (iii) and (v)

D. (iii) and (iv)

**Answer: D**



**Watch Video Solution**

**59.** Aquaculture is the rearing and management of

A. molluscs and crustaceans

B. only freshwater fishes

C. economically useful aquatic plants and animals

D. only aquatic plants

**Answer: C**



**Watch Video Solution**

**60.** Aquaculture does not include

- A. prawns
- B. fishes
- C. silkworms
- D. shell fishery.

**Answer: C**



**Watch Video Solution**

**61.** Which of the following is correctly matched?

- A. Sericulture-Fish
- B. Aquaculture-Mosquito
- C. Apiculture-Honeybee
- D. Pisciculture - Silkmoth



**Answer: C**



**Watch Video Solution**

**62.** Germplasm collection is the collection of

- A. germ cells
- B. semens
- C. plants/seeds with all the diverse alleles for all genes
- D. egg cells.

**Answer: C**



**Watch Video Solution**

**63.** Select the option showing the correct sequential steps to produce a new genetic variety of a crop.

- A. Selection of parents → Hybridisation of selected parents →  
Germplasm collection → Selection of superior recombinants →  
Testing and release of new varieties
- B. Germplasm collection → Selection of parents → Hybridisation  
of selected parents → Selection of superior recombinants →  
Testing and release of new varieties
- C. Selection of superior recombinants → Germplasm collection →  
Hybridisation of selected parents → Selection of parents →  
Testing and release of new varieties
- D. Germplasm collection → Selection of parents → Hybridisation  
of selected parents → Testing and release of new varieties →  
Selection of superior recombinants

**Answer: B**



**View Text Solution**

64. Major percentage of India's Gross Domestic Product is constituted by

- A. industry
- B. agriculture
- C. export
- D. small scale cottage industry.

**Answer: B**



**Watch Video Solution**

65. Match column I with column II and select the correct option from the codes given below.

Column I		Column II
A. Green revolution	(i)	Milk production
B. Pisciculture	(ii)	Crop plants
C. White revolution	(iii)	Fish production
D. Blue revolution	(iv)	Rearing of fishes

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

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

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

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

**Answer: D**



**Watch Video Solution**

**66.** The Nobel Laureate, who developed semi-dwarf wheat varieties in Mexico was

A. Norman E. Borlaug

B. Herbert Boyer

C. William Harvey

D. Typhoid Mary

**Answer: A**



**Watch Video Solution**

67. Jaya and Ratna are the semi-dwarf varieties of

- A. wheat
- B. rice
- C. cowpea
- D. mustard

**Answer: B**



**View Text Solution**

68. Which of the following are the species that are crossed to give sugarcane varieties with high sugar, high yield, thick stems and ability to grow in the sugarcane belt of North India ?

- A. *Saccharum robustum* and *Saccharum officinarum*
- B. *Saccharum barberi* and *Saccharum officinarum*
- C. *Saccharum sinense* and *Saccharum officinarum*

D. *Saccharum barberi* and *Saccharum robustum*

**Answer: B**



**Watch Video Solution**

**69.** Consider the following three statements and select the correct option starting which ones are true (T) and which ones are false (F).

- (i) Hybridisation is crossing of two or more types of plants for bringing their traits together in progeny.
- (ii) Semi-dwarf rice varieties were derived from IR-8 and Taichung Native -1.
- (iii) Hybrid breeding have led to the development of several high yielding resistant to water stress.

A.  $\begin{matrix} (i) & (ii) & (iii) \\ F & T & T \end{matrix}$

B.  $\begin{matrix} (i) & (ii) & (iii) \\ T & T & F \end{matrix}$

C.  $\begin{matrix} (i) & (ii) & (iii) \\ F & T & F \end{matrix}$

D.  $\begin{matrix} (i) & (ii) & (iii) \\ T & T & T \end{matrix}$

**Answer: D**



**Watch Video Solution**

**70.** Which of the following statements is not correct plant breeding ?

- A. It reduce the dependence on fungicides and bactericides.
- B. It provides somaclonal variation.
- C. It is independent of germplasm collection.
- D. It involves self-pollination of plants

**Answer: C**



**Watch Video Solution**

**71.** Turnip mosaic disease is caused by

- A. bacteria

B. viruses

C. nematodes

D. fungi

**Answer: B**



**Watch Video Solution**

**72. Which of the following disease is caused by virus ?**

A. Tobacco mosaic

B. Late blight of potato

C. Turnip mosaic

D. Both (a) and (b)

**Answer: D**



**Watch Video Solution**



73. Which of the following is incorrectly matched ?

- |    | Disease               | Causative organism |
|----|-----------------------|--------------------|
| A. | Green revolution      | Bacteria           |
| B. | Brown rust of wheat   | Fungi              |
| C. | Late blight of potato | Virus              |
| D. | Red rot of sugarcane  | Fungi              |

**Answer: C**



**Watch Video Solution**

74. Which of the following disease is caused by bacteria ?

- A. Tobacco mosaic
- B. Black rot of crucifers
- C. Red rot of sugarcane
- D. Late blight of potato

**Answer: B**



**Watch Video Solution**

**75. Black rust of wheat is caused by**

A. Puccinia

B. Albugo

C. Ustilago

D. Cystopus

**Answer: A**



**Watch Video Solution**

**76. Match column I (crop) with column II (corresponding disease resistant variety) and select the correct option from the given codes.**

	Column I	Column II
A.	Cowpea	(i) Himgiri
B.	Wheat	(ii) Pusa komal
C.	Chilli	(iii) Pusa Sadabahar
D.	Brassica	(iv) Pusa Swarnima

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

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

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

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

**Answer: B**



**Watch Video Solution**

**77.** Which one of the following crop varieties correctly matches with its resistance to a disease ?

- |    |                |                        |
|----|----------------|------------------------|
| A. | Variety        | Resistance to disease  |
|    | Pusa komal     | – Bacterial blight     |
| B. | Variety        | Resistance to disease  |
|    | Pusa Sadabahar | – White rust           |
| C. | Variety        | Resistance to disease  |
|    | Pusa Swarnim   | – Tobacco Mosaic Virus |

	Variety	Resistance to disease
D.	Pusa Shubhra	–Chilli Mosaic Virus

**Answer: A**



**Watch Video Solution**

**78.** Which of the following is incorrectly paired?

- A. Wheat-Himgiri
- B. Milch breed - Sahiwal
- C. Rice - Ratna
- D. Pusa komal - Brassica

**Answer: D**



**Watch Video Solution**

**79.** Which of the following is an example of mutation breeding?

- A. (a) Pusa Swarnim, resistant to white rust
- B. (b) Mung bean, resistant to yellow mosaic virus
- C. (c) Pusa Sadabahar, resistant to chilli mosaic virus
- D. (d) Pusa Gaurav, resistant to aphids

**Answer: B**



**Watch Video Solution**

**80.** Yellow mosaic virus resistant variety " Parbhani Kranti" belongs to

- A. bhindi
- B. barley
- C. chilli
- D. cauliflower.

**Answer: A**



**Watch Video Solution**

**81.** Hairy leaves of many plants are associated with

- A. resistant to insect pests
- B. resistance to viruses
- C. resistance to fungi
- D. resistance to bacteria.

**Answer: A**



**Watch Video Solution**

**82.** Resistance to jassides in cotton plants and to cereal leaf beetle in wheat plants is due to

- A. biochemical characters
- B. physiological characters
- C. morphological characters

D. none of these

**Answer: C**



**Watch Video Solution**

**83.** Maize generates resistance against stem borers by having

- A. (a) low aspartic acid, high nitrogen and sugar content
- B. (b) low aspartic acid and sugar but high nitrogen content
- C. (c) high aspartic acid and nitrogen but low sugar content
- D. (d) high aspartic acid, low nitrogen and sugar content.

**Answer: D**



**Watch Video Solution**

**84.** Which of the following statements is correct regarding nectarless cotton varieties?

- A. They do not attract stem sawfly
- B. They are produced by mutation breeding.
- C. They do not attract bollworms.
- D. They attract cereal leaf beetle

**Answer: C**



**Watch Video Solution**

**85.** Match column I (crop) with column II (corresponding insect pests resistant variety) and select the correct option from the given codes.

Column I

Column II

- |                  |       |             |
|------------------|-------|-------------|
| A. Flat bean     | (i)   | Pusa Gaurav |
| B. Okra (Bhindi) | (ii)  | Pusa Sem-2  |
| C. Brassica      | (iii) | Pusa Sawani |

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



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

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

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

**Answer: B**



**Watch Video Solution**

**86.** Biofortifications refers to the development of crop plants which are

A. resistant to disease

B. resistant to insect pests

C. having improved nutritional quality

D. having improved iron content.

**Answer: C**



**Watch Video Solution**

87. A wheat variety, Atlas 66, which has been used as a donor for improving cultivated wheat is rich in

- A. iron
- B. carbohydrates
- C. proteins
- D. vitamins.

**Answer: C**



**Watch Video Solution**

88. Shakti, Rattan and Protina varieties of maize) are rich in

- A. lysine
- B. glycine
- C. fats
- D. carbohydrates.

**Answer: A**



**Watch Video Solution**

**89.** Which of the following can be used for cultivation of SCP ?

A. Animal manure

B. Straw

C. Molasses

D. All of these

**Answer: D**



**Watch Video Solution**

**90.** 250 g of *Methylophilus methlotrophus* can be expected to produce \_\_\_\_\_ tonnes of proteins.

A. 15

B. 25

C. 40

D. 50

**Answer: B**



**Watch Video Solution**

**91.** Single cell protein can be obtained from

A. bacteria

B. algae

C. fungi

D. all of these

**Answer: D**



**Watch Video Solution**

**92.** Which of the following statements is/are not correct for single cell protein (SCP)?

- (i) The biomass is obtained from unicellular microorganisms only.
- (ii) It provides a protein rich supplement.
- (iii) They can be grown easily on materials like waste water from potato processing plants, straw, manure, sewage, etc.
- (iv) It helps to minimise environmental pollution.
- (v) SCP has to be processed before use.

A. (i), (ii) and (iv)

B. (iii) only

C. (v) only

D. (i) only

**Answer: D**



**Watch Video Solution**

**93.** Which of the following should be used as an explant to generate a disease free plant ?

- A. Anther
- B. Ovary cell
- C. Shoot tip
- D. Young embryo

**Answer: C**



**Watch Video Solution**

**94.** Totipotency refers to

- A. capacity to generate genetically identical plants
- B. capacity to generate a whole plant from any plant cell/explant
- C. capacity to generate hybrid protoplasts
- D. recovery of healthy plants from diseased plants.

**Answer: B**



**Watch Video Solution**

**95.** Match column I with column II and select the correct answer from the given codes.

Column I		Column II	
A.	Wax	(i)	Interspecific hybridisation
B.	Pollinator	(ii)	Micropopagation
C.	Mule	(iii)	Bee
D.	Tissue culture	(iv)	Apiculture

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

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

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

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

**Answer: B**



**Watch Video Solution**

**96.** Hormone responsible for growth of the root in micropropagation is

- A. auxin
- B. gibberellin
- C. cytokinin
- D. abscisic acid.

**Answer: A**



**Watch Video Solution**

**97.** Micropropagation involves

- A. vegetative multiplication of plants by using microorganisms
- B. vegetative multiplication of plants by using small explants
- C. vegetative multiplication of plants by using microspores
- D. non-vegetative multiplication of plants by using microspores and megaspores.



**Answer: B**



**Watch Video Solution**

**98.** Which of the following shows the correct sequence of steps of plants tissue culture ?

A. Sterilisation → Hardening → Selection of explant →

Inoculation → Regeneration → Plantlet transfer

B. Selection of explant → Inoculation → Regeneration →

Sterilisation → Hardening → Plantlet transfer

C. Selection of explant → Sterilisation → Inoculation →

Regeneration → Hardening → Plantlet transfer

D. Hardening → Sterilisation → Selection of explant →

Inoculation → Regeneration → Plantlet transfer

**Answer: C**





[Watch Video Solution](#)

**99.** Somaclones are

- A. somatic hybrids
- B. genetically identical to the original plant
- C. used to recover disease free plants
- D. sterile plants.

**Answer: B**



[Watch Video Solution](#)

**100.** Meristem culture is used

- A. to produce disease free plants
- B. in germplasm conservation
- C. in rapid clonal multiplication

D. all of these

**Answer: D**



**Watch Video Solution**

**101.** Meristem culture is the culture of

A. axillary or apical shoot meristems

B. anthers

C. plant seeds

D. young embryos

**Answer: A**



**Watch Video Solution**

**102.** A plant cell without cell wall is called

- A. proplast
- B. protoplast
- C. nucleoplasm
- D. explant.

**Answer: B**



**Watch Video Solution**

**103.** A somatic hybride between potato and tomato is named as

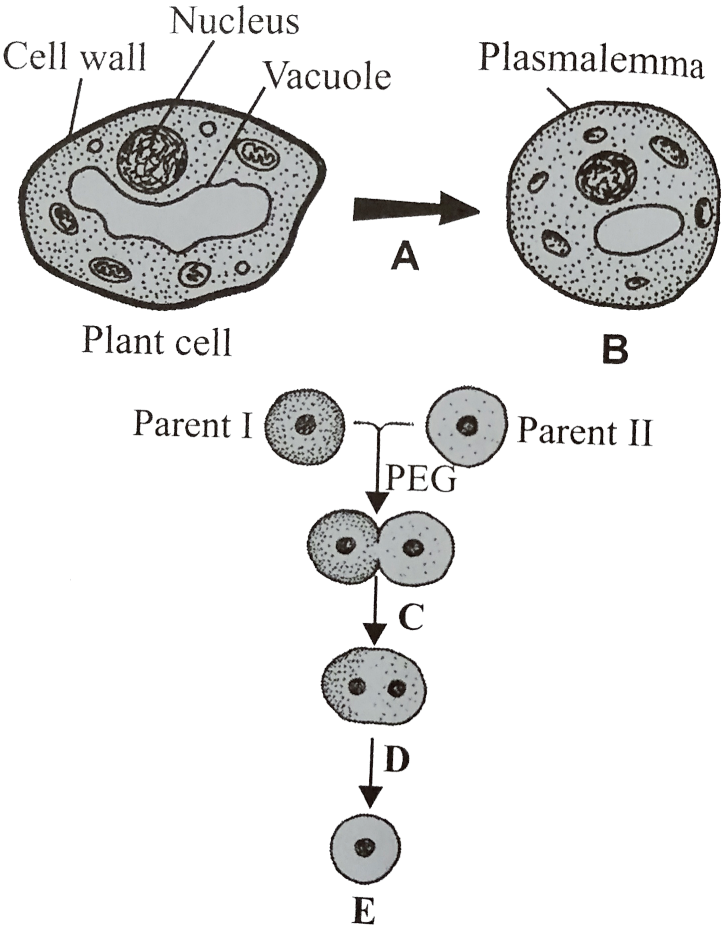
- A. bomato
- B. mopato
- C. pomato
- D. topamo

**Answer: C**



**Watch Video Solution**

**104.** Given below is the flow chart showing the process of somatic hybridisation. Identify A,B,C,D and E.



A-Cell fusion , B-Nuclear fusion, C-Cellulase and pectinase, D-  
Ptotoplast, E-Somatic hybride cell

B. A-Cellulase and pectinase, B-Protoplast, C-Cell fusion, D-Nuclear Fusion, E-Somatic hybrid cell

C. A-Protoplast, B-Nuclear fusion, C-Somatic hybride cell, D-Cellulase and pectinase, E-Cell fusion

D. A-Cellulase and pectinase, B-Protoplast, C-Nuclear fusion, D-cell fusion, E-Somatic hybrid cell

**Answer: B**



**Watch Video Solution**

**105.** The enzymes required to obtain protoplast from a plant cell are

A. cellulase

B. chitinase

C. pectinase

D. both (a) and (c ).

**Answer: D**



**Watch Video Solution**

### Higher Order Thinking Skills

**1. Direction :** Carefully read the following information to answer Q.no.1 and Q.no.2

An egg farmer is experimenting with different feed rations with the aim of increasing his production whilst reducing the cost of the feed per egg produced. The data from two feeding experiments is given below.

### Experiment 1

Protein concentration in feed (%)	10	11	12	13	14	15	16
Total vitamin level (mg/kg)	100	100	100	100	100	100	100
Cost of feed ration per 100 hens per day	6.00	7.00	7.50	8.00	8.50	8.75	9.00
Number of eggs per 100 hens per day	70	70	75	80	85	80	80

### Experiment 2

Protein concentration in feed (%)	14	14	14	14	14	14	14
Total vitamin level (mg/kg)	50	75	100	125	150	175	200
Cost of feed ration per 100 hens per day	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Number of eggs per 100 hens per day	70	80	85	90	95	95	95

Which feed composition give the least cost per egg produced ?

- A. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
16      100
- B. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      50
- C. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      100
- D. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      150

**Answer: D**



**Watch Video Solution**



2. Direction : Carefully read the following information to answer Q.no.1 and Q.no.2

An egg farmer is experimetnting with different feed rations with the aim of increasing his production whilst reducing the cost of the feed per egg produced. The data from two feeding experiments is given below.

Experiment 1

Protein concentration in feed (%)	10	11	12	13	14	15	16
Total vitamin level (mg/kg)	100	100	100	100	100	100	100
Cost of feed ration per 100 hens per day	6.00	7.00	7.50	8.00	8.50	8.75	9.00
Number of eggs per 100 hens per day	70	70	75	80	85	80	80

Experiment 2

Protein concentration in feed (%)	14	14	14	14	14	14	14
Total vitamin level (mg/kg)	50	75	100	125	150	175	200
Cost of feed ration per 100 hens per day	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Number of eggs per 100 hens per day	70	80	85	90	95	95	95

What are the independent variable in each of the two experiments?

A.

Experiment 1	Experiment 2
Maximum daily egg production	Maximum daily egg production

B.

Experiment 1

Protein concentration in the feed

Experiment 2

Total vitamin level in the feed

C.

Experiment 1

Total vitamin level the in the feed

Experiment 2

Protein concentration in feed

D.

Experiment 1

cost of feed ration per egg produced

Experiment 2

cost of feed ration per egg pr

**Answer: B**



**Watch Video Solution**

3. A certain type of grass has a diploid chromosome number of 8. A similar species of grass has a diploid chromosome number of 10. Interspecific hybridisation between the two species results in sterile hybrids that can, nonetheless, reproduce vegetatively. The diploid chromosome number of these hybrids would be

A. 9

B. 16

C. 18

D. 20

**Answer: A**



**Watch Video Solution**

4. Inbreeding for five generations led to production of homozygous transgenic mice. However, these homozygous males or females were infertile. Which of the following approaches is most preferable and economical to obtain heterozygous transgenic animals continuously?

A. More transgenic founder ( $1^{st}$  animal) should be generated.

B. Crossing (breeding) of transgenic mice with wild type mice in earlier generations should be done for continued production of transgenic heterozygous offsprings.

C. Inbreeding should be avoided after  $5^{th}$  generation.

D. Homozygous transgenic mice should be mated with heterozygous transgenic mice for continued production of transgenic heterozygous offsprings.

**Answer: B**



**Watch Video Solution**

5. Many attempts to improve livestock in the tropics have been made by 'upgrading ' through crossbreeding them with temperate breeds. The major problems faced during the failed cattle breeding are

A. the breeding programmes have been too complicated in term of logistics, technology and requirements of resources without considering the infrastructure available.

B. indiscriminate crossbreeding of indigenous breeds with exotic breeds without enough consideration of environment conditions for production.

C. lack of analysis of the different socio-economic and culture roles that livestock play in each situation, usually leading to wrong breeding objectives and neglect of the potential of various indigenous breeds of livestock.

D. All of these

**Answer: D**



**Watch Video Solution**

6. Which of the following statements does not provide an explanation for hybrid vigour ?

A. Under certain circumstances, heterozygotes are superior to either possible homozygotes.

B. Disease-causing, homozygous recessive phenotypes from either parent are masked in the hybrids.

- C. Offspring from a hybrid cross usually possess the best of two desirable parents.
- D. Inherently, hybrids have no deleterious mutations.

**Answer: D**



**Watch Video Solution**

### **Ncert Exemplar Problems**

1. The chances of contracting bird flu from a properly cooked (above  $100^{\circ}C$ ) chicken and egg are
- A. very high
- B. high
- C. moderate
- D. none

**Answer: D**



**Watch Video Solution**

2. A group of animals which are related by descent and share many similarities are referred to as

- A. breed
- B. race
- C. variety
- D. species

**Answer: A**



**Watch Video Solution**

3. Inbreeding is carried out in animal husbandry because it

- A. increases vigour
- B. improves the breed
- C. increases heterozygosity
- D. increases homozygosity.

**Answer: D**



**Watch Video Solution**

**4. Sonalika and Kalyan Sona are varieties of**

- A. wheat
- B. rice
- C. millet
- D. tobacco

**Answer: A**



**Watch Video Solution**



5. Which one of the following is not a fungal disease ?

- A. Rust of wheat
- B. Smut of Bajra
- C. Black rot of crucifers
- D. Red rot of sugarcane

**Answer: C**



**Watch Video Solution**

6. In virus-infected plants the meristematic tissues in both apical and axillary buds are free of virus because

- A. the dividing cells are virus resistant
- B. meristems have anti viral compounds

C. the cell division of meristems are faster the rate of viral multiplication

D. viruses cannot multiply meristem cell (s).

**Answer: C**



**Watch Video Solution**

7. Several South Indian states raise 2-3 crops of rice annually. The agronomic feature that makes this possible is because of

A. shorter rice plant

B. better irrigation facilities

C. early yielding rice variety

D. disease resistant rice variety.

**Answer: C**



**Watch Video Solution**

8. Which of the following combination would a sugarcane farmer look for in the sugarcane crop ?

- A. Thick stem, long internodes, high sugar content and disease resistant
- B. Thick stem, high sugar content and profuse flowering
- C. Thick stem, short internodes, high sugar content disease resistant
- D. Thick stem. Low sugar content, disease resistant

**Answer: A**



**Watch Video Solution**

9. Fungicides and antibiotics are chemicals that

- A. enhance yield and disease resistance
- B. kill pathogenic fungi and bacteria, respectively

C. kill all pathogenic microbes

D. kill pathogenic bacteria and fungi respectively.

**Answer: B**



**Watch Video Solution**

**10.** Use of certain chemicals and radiation to change the base sequences of genes of crop plants is termed

A. recombinant DNA technology

B. transgenic mechanism

C. mutations breeding

D. gene therapy

**Answer: C**



**Watch Video Solution**

11. The scientific process by which crop plants are enriched with certain desirable nutrients is called

- A. crop protection
- B. breeding
- C. bio-fortification
- D. bio-remediation

**Answer: C**



**Watch Video Solution**

12. The term 'totipotency' refers to the capacity of a

- A. cell to generate whole plant
- B. bud to generate whole plant
- C. seed to germinate
- D. cell to enlarge in size.

**Answer: A**



**Watch Video Solution**

**13.** Given below are a few statements regarding somatic hybridisation.

Choose the correct statements.

- (i) Protoplasts of different cells of the same plant are fused.
- (ii) Protoplasts from cells of different species can fused.
- (iii) Treatment of cell with cellulase and pectinase mandatory.
- (iv) The hybrid protoplast contains characters of only one parental protoplast.

A. (i) and (iii)

B. (i) and (ii)

C. (i) and (iv)

D. (ii) and (iii)

**Answer: D**



Watch Video Solution

14. An explant is

- A. dead plant
- B. part of the plant
- C. part of the plant used in tissue culture
- D. part of the plant that expresses a specific gene.

**Answer: C**



Watch Video Solution

15. The biggest constraint of plant breeding is

- A. availability of desirable gene in the crop and its wild relatives
- B. infrastructure
- C. trained manpower

D. transfer of genes from unrelated sources.

**Answer: A**



**Watch Video Solution**

**16.** Lysine and tryptophan are

- A. proteins
- B. non-essential amino acids
- C. essential amino acids
- D. aromatic amino acids

**Answer: C**



**Watch Video Solution**

**17.** Micropropagation is



A. propagation of microbes in vitro

B. propagation of plants in vitro

C. propagation of cells in vitro

D. growing plants on smaller scale.

**Answer: B**



**Watch Video Solution**

**18. Protoplast is**

A. another name for protoplasm

B. an animal cell

C. a plant cell without a cell wall

D. a plant cell

**Answer: C**



**Watch Video Solution**

19. To isolate protoplast, one needs

- A. pectinase
- B. cellulase
- C. both pectinase and cellulase
- D. chitinase

**Answer: C**



**Watch Video Solution**

20. Which one of the following is a marine fish ?

- A. Rohu
- B. Hilsa
- C. Catla

D. Common carp

**Answer: B**



**Watch Video Solution**

**21.** Which one of the following products of apiculture is used in cosmetics and polishes?

A. Honey

B. Oil

C. Wax

D. Royal jelly

**Answer: C**



**Watch Video Solution**

**22.** More than 70 per cent of livestock population is in

- A. Denmark
- B. India
- C. China
- D. India and China

**Answer: D**



**Watch Video Solution**

**23.** The agriculture sector of India employs about

- A. 50 percent of the population
- B. 70 percent of the population
- C. 30 percent of the population
- D. 60 percent of the population

**Answer: D**



**Watch Video Solution**

**24.** 33 percent of India's (Gross Domestic Product) comes from

- A. industry
- B. agriculture
- C. export
- D. small-scale cottage industries.

**Answer: B**



**Watch Video Solution**

**25.** A collection of all the alleles of all the genes of a crop plant is called

- A. germplasm collection

B. protoplasm collection

C. herbarium

D. somaclonal collection

**Answer: A**



**Watch Video Solution**

### Assertion Reason

1. Assertion: Breeding weeding, feeding and heeding are essential methods for livestock production.

Reason : Livestock management deals with processes and systems that increase yield and improve quality of products.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: B**



**Watch Video Solution**

**2. Assertion :** Light is essential in poultry farm management.

**Reason :** 14-16 hours of light including day light is required for optimum production of eggs.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.

D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**3. Assertion :** Loss of vigour called inbreeding depression occurs when inbreeding is continued for many generations.

**Reason :** Quarantine can be done to overcome the harmful effects of inbreeding depression.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true bur reason is false.

D. if both assertion and reason are false.



**Answer: C**



**Watch Video Solution**

**4. Assertion :** A single outcross often helps to overcome inbreeding depression.

**Reason :** Out-crossing is best breeding method for increasing milk productivity.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: B**



**Watch Video Solution**

5. Assertion : Hisardale is cross breed of sheep.

Reason : Hisardale is developed by crossing Bikaneri ewe and Marino ram.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true bur reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

6. Assertion : Artificial insemination is very economical method.

Reason : Fewer sperms are required in artificial insemination.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

7. Assertion : In MOET, hormones with progesterone-like activity are given to the cow for inducing super-ovulation.

Reason : After mating the embryos at 4-6 celled stage are recovered and transferred to surrogate mother.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.

- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: D**



**Watch Video Solution**

**8. Assertion :** Beehives are kept in crop field during flowering period.

**Reason :** Bees are pollinating agents.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.

D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**9. Assertion :** Phenotypic superiority of hybrid over either of its parents in one or more traits is termed hybrid vigour.

**Reason :** Suppression of expression of recessive harmful genes occurs in heterozygotes.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true bur reason is false.

D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**10. Assertion :** Emasculation is removal of male parts.

**Reason :** Bagging is not required for emasculated flowers.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: C**



**Watch Video Solution**

**11. Assertions :** Breeding and development of cultivars resistance to diseases enhances food production.

**Reason :** Cultivar resistance to disease reduces the dependence on use of fungicides and bacteriocides.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**12. Assertion :** Wild varieties of crop plants must be conserved.

**Reason :** Genome of wild plants serve as important resources for

selection of desired genes like genes for pest resistance.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**13. Assertion :** Biofortifications is the most practical aspect to improve health of the people.

**Reason :** Biofortifications is breeding crops with higher levels of vitamins or minerals or higher proteins and healthier fats.



- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**14.** Assertion : Single cell proteins can help to meet increasing demands of growing population.

Reason : SCP now can be produced in high amount commercially, using low cost substrates.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.

- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**15. Assertion :** In tissue culture, whole plant can be produced from plant cell.

**Reason :** The capacity to generate a whole plant from any cell/explant is called totipotency.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true but reason is false.

D. if both assertion and reason are false.

**Answer: B**



**Watch Video Solution**

## Strategies For Enhancement In Food Production

1. India and china have more than 70 % of world livestock population.

However, their contribution to world farm produce is only

A. 10 %

B. 25 %

C. 40 %

D. 50 %

**Answer: B**



Watch Video Solution

2. Which of the following procedures are followed in dairy farm management ?

- (i) Regular inspections and visits by veterinary doctors.
- (ii) Usage of manure to increase copy yields.
- (iii) Adequate environmental condition is provided.
- (iv) Weeding away unproductive and harmful plants from the brood house.

- A. (i) and (ii)
- B. (i) and (ii)
- C. (iii) and (iv)
- D. All of these

**Answer: B**



Watch Video Solution

3. Which of the following is the "bird flu virus" ?

- A. *H5N1*
- B. *Haemophilus influenzae*
- C. HIV
- D. Rhino virus

**Answer: A**



**Watch Video Solution**

4. Read the following statements select the correct option.

Statement 1 : Ranikhet disease is a disease of poultry.

Statement 2: It is caused by a virus.

- A. Both statements 1 and 2 are correct.
- B. Statement 1 is correct but statement 2 is incorrect.
- C. Statement 1 is incorrect but statement 2 is correct.

D. Both statements 1 and 2 are incorrect.

**Answer: A**



**Watch Video Solution**

5. The infectious and contagious bacterial disease that affects cattle, buffaloes, horses, sheeps and goats is

A. anthrax

B. rinderpest

C. tick fever

D. necrosis

**Answer: A**



**Watch Video Solution**

6. The term "breed" refers to

- A. a group of animals not related by descent but similar in most characters
- B. a group of animals related by descent and similar in most characters
- C. a group of animals related by descent but have almost different characteristics
- D. a group of animals neither related by descent nor have similar characteristics.

**Answer: B**



**Watch Video Solution**

7. Which of the following is an improved variety of chicken ?

A. Jersey

B. Leghorn

C. Himgiri

D. Kalyan Sona

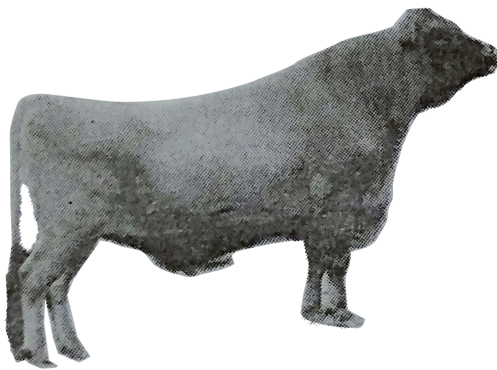
**Answer: B**



**Watch Video Solution**

**8.** A is an improved breed of cattle and B is an improved breed of chicken.

Which of the following options correctly identifies A and B ?



**A**



**B**

A. A -Jersey, B-Leghorn



B. A-Surti, B-Sangamneri

C. A-Marwari, B-Sirohi

D. A-Beetal, B-Jamunapari

**Answer: A**



**Watch Video Solution**

**9. Which of the following two matches are incorrect ?**

	Exotic breeds of cattle	Country of origin
(i)	Jersey	Holland
(ii)	Holstein-Friesian	Germany
(iii)	Ayrshire	Scotland
(iv)	Brown Swiss	Switzerland

A. (i) and (iii)

B. (i) and (ii)

C. (ii) and (iii)

D. (ii) and (iv)

**Answer: B**



**Watch Video Solution**

**10.** In which of the following options, the different breeds are not correctly placed ?

- |    |                   |                  |
|----|-------------------|------------------|
| A. | Breeds of buffalo | Breeds of cattle |
|    | Murrah            | Hallikar         |
| B. | Breeds of buffalo | Breeds of cattle |
|    | Bhadawari         | Kankrej          |
| C. | Breeds of buffalo | Breeds of cattle |
|    | Mehsana           | Tharparkar       |
| D. | Breeds of buffalo | Breeds of cattle |
|    | Chegu             | Jaffarabadi      |

**Answer: D**



**Watch Video Solution**

**11.** Read of the following statements regarding poultry farm management.

(i) Poultry birds include chicken, ducks, turkey and geese.

(ii) Brooder house should be crowd-free, rain proof and protected from predators.

(iii) The most common egg-type variety used for commercial production throughout the world is single comb white leghorn and its various strains.

(iv) Approximately 14 to 16 hours of light including daylight are required for optimum egg production.

Which of the above statements are correct ?

A. (iii) and (iv)

B. (i),(ii) and (iii)

C. (i),(iii) and (iv)

D. (i),(ii),(iii) and (iv)

**Answer: D**



**Watch Video Solution**

**12.** Which of the following is a draught breed of Indian cattle ?

- A. Malvi
- B. Gir
- C. Sahiwal
- D. Deoni

**Answer: A**



**Watch Video Solution**

**13.** Holstein-Friesian, Brown Swiss and Jersey are all well known

- A. exotic breeds of cow
- B. exotic breeds of goat
- C. exotic breeds of poultry
- D. animal husbandry scientists.

**Answer: A**



**Watch Video Solution**

14. Which one of the following is a breed of cattle ?

- A. Ayrshire
- B. Ghagus
- C. Kadaknath
- D. Scampi

**Answer: A**



**Watch Video Solution**

15. Which one of the following poultry birds is not an English breed ?

- A. Sussex
- B. Australorp
- C. Orpington

D. Minorca

**Answer: D**



**Watch Video Solution**

**16.** High milk yielding cross bred Frieswal cow is the product of

A. Brown Swiss × Sahiwal

B. Friesian × Sahiwal

C. Holstein × Tharparkar

D. Brown Swiss × Red sindhi.

**Answer: B**



**Watch Video Solution**

17. What strategy would you suggest if a person wants to evolve a pure line in an animal ?

- A. Cross-breeding
- B. Inbreeding
- C. Out-breeding
- D. Artificial insemination

**Answer: B**



**Watch Video Solution**

18. Fill up the blanks in the following paragraph by selecting the correct option.

Inbreeding increase i. This inbreeding is necessary if we want to evolve a ii in any animal. Inbreeding exposes harmful iii genes that are eliminated by selection.

- A. (i) heterozygosity, (ii) pure line, (iii) dominant
- B. (i) heterozygosity, (ii) breed, (iii) recessive
- C. (i) heterozygosity, (ii) pure line, (iii) recessive
- D. (i) homozygosity, (ii) breed, (iii) dominant

**Answer: C**



**Watch Video Solution**

**19.** Which of the following statements is not correct regarding inbreeding ?

- A. It is the breeding between animals of the same breed.
- B. It decreases homozygosity.
- C. It exposes harmful recessive genes.
- D. It helps in accumulation of superior genes.

**Answer: B**





[Watch Video Solution](#)

**20.** The term "inbreeding depression" is related to

- A. increased fertility and productivity
- B. increased milk production
- C. reduced fertility and productivity
- D. reduced milk production.

**Answer: C**



[Watch Video Solution](#)

**21.** Continued inbreeding, especially close inbreeding generally results in

- A. inbreeding depression
- B. inbreeding stimulation
- C. inbreeding hybridisation

D. inbreeding mutation.

**Answer: A**



**Watch Video Solution**

**22.** Study the following statements regarding inbreeding and select the incorrect ones.

- (i) The inbreeding strategies allow the desirable qualities of two different breeds to be combined.
- (ii) It increases homozygosity.
- (iii) It also helps in elimination of less desirable genes.
- (iv) Continued inbreeding increases fertility and productivity.

A. (i) and (ii)

B. (ii) and (iii)

C. (iii) and (iv)

D. (i) and (iv)

**Answer: D**



**Watch Video Solution**

**23.** Given below are four statements (i)-(iv). Which two of the following statements are correct ?

- (i) It is estimated that more than 70 percent of the world livestock population is in India and China.
- (ii) Stringent cleanliness and hygiene (both of the cattle and the handlers) are of paramount importance while milking, storage and transport of the milk and products.
- (iii) Out-breeding is the breeding between animals of the same breed only.
- (iv) Crosses between different breeds is called inbreeding.

A. (i) and (ii)

B. (ii) and (iv)

C. (i) and (iv)

D. (ii) and (iii)

**Answer: A**



**Watch Video Solution**

**24.** A breed of cow is mated with closely related breed for five generations. It was found that production of milk has reduced subsequently and the animals are not keeping good health. Which of the following methods of animals breeding can overcome this problem?

- A. Hybridisation
- B. Controlled breeding
- C. Out-crossing
- D. Crossing breeding

**Answer: C**



**Watch Video Solution**

25. The breeding carried out between animals of different breeds is called

- A. out-crossing
- B. cross-breeding
- C. inbreeding
- D. both (a) and (b)

**Answer: B**



**Watch Video Solution**

26. Fill up the blanks by selecting the correct option.

In cross-breeding, \_\_\_\_\_ of one breed are mated with \_\_\_\_\_ of another breed.

- A. superior males, normal females
- B. normal males, superior, superior females
- C. normal males, normal females

D. superior males, superior females

**Answer: D**



**Watch Video Solution**

**27. Which of the following is example of cross-breed ?**

A. Mule

B. Hilsa

C. Hisardale

D. Sahiwal

**Answer: C**



**Watch Video Solution**

**28. Hisardale is a new breed of sheep developed in Punjab by crossing**

- A. Merino ram and Bikaneri ewe
- B. Assel ram and White leghorn ewe
- C. Rhode Island ram and White leghorn ewe
- D. Cochin ram and Ghagus ewe.

**Answer: A**



**Watch Video Solution**

**29.** Crossing of individual of two different species to produce a hybrid is called

- A. intersepcific hybridisation
- B. intervarietal hybridisation
- C. intergeneric hybridisation
- D. intravarietal hybridisation.

**Answer: A**



30. A mule is produced by the interspecific hybridisation between



- A. Hisardale and merino rams
- B. male donkey and mare
- C. female donkey and a male horse
- D. Merino ram and Bikaneri ewe.

**Answer: B**





Watch Video Solution

**31.** Fill in the blanks in the following statements by selecting the correct option.

(i) All hybrids of poultry are produced by \_\_\_\_\_ inbred stocks.

(ii) Super hybrids are obtained when genetically parents are used in the cross.

(iii) A \_\_\_\_\_ is produced from a cross between female horse (mare) and male donkey.

A. (i) mating, (ii) same, (iii) mule

B. (i) crossing, (ii) same, (iii) hinny

C. (i) crossing, (ii) different, (iii) mule

D. (i) mating, (ii) different, (iii) hinny

**Answer: C**



Watch Video Solution

**32.** Match the terms given in column I with their descriptions given in column II and select the correct option from the codes given below.

Column-I

- (A) Out-crossing
- (B) Interspecific hybridisation
- (C) Cross-breeding
- (D) Inbreeding

Column-II

- (i) Mating of closely related individuals
- (ii) Mating of animals of same breed
- (iii) Mating of animals of two different breeds
- (iv) Mating of animals belonging to different species

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

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

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

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

**Answer: A**



**Watch Video Solution**

**33.** Artificial insemination involves

A. super ovulation

- B. semen collection
- C. egg collection
- D. embryo collection.

**Answer: B**



**Watch Video Solution**

**34.** Read the following statements and select the incorrect one.

- A. Semen is preserved for artificial insemination by heating.
- B. Mating of animals within the same breed, but having no common ancestors on either side of their pedigree upto 4-6 generations is called as out crossing.
- C. Example of interspecific hybridisation is mule.
- D. Hinny is a hybrid between the female ass and stallion.

**Answer: A**



[Watch Video Solution](#)

**35.** Artificial breeding of cattle is brought about by

- A. artificial insemination
- B. super ovulation and embryo transplanation
- C. MOET
- D. all of these

**Answer: D**



[Watch Video Solution](#)

**36.** MOET stands for

- A. Multiple Ovulation and Egg Transfer Technology
- B. Multiple Ovary and Embryo Transfer Technology
- C. Multiple Ovulation Embryo Transfer Technology

## D. Method of Egg Transfer Technology.

**Answer: C**



**Watch Video Solution**

**37.** Given below are the three statements each with one or two blanks.

Select the option which correctly fills up of the blank in any two statements.

A. Inbreeding helps in accumulation of i and elimination of ii.

B. In MOET a cow is administered hormones, with i like activity, to induce follicular maturation and super ovulation.

C. Hisardale is a new breed of sheep developed in Punjab by crossing i and ii.

A. A-(i) less desirable genes, (ii) superior genes B-FSH

B. A-(i)superior genes, (ii) less desirable genes, (ii) less C-(i) Bikaneri ewes (ii) Marino rams

C. B-(i) LH

C-(i) Sahiwal ewes, (ii) Deoni rams

D. B-(i) progesterone

C-(i) Kankrej ewes, (ii) Dangi rams

**Answer: B**



**Watch Video Solution**

**38.** Given below are four statements (A-D) each with one or two blanks.

Select option which correctly fills up the blanks in any two statements.

(A) Multiple ovulation i transfer technology is for ii improvement.

(B) In it a cow is administered i to induce follicular maturation and ii ovulation.

(C) Instead of one egg per cycle, i eggs are produced through it.

(D) The fertilised i at ii celled stages are recovered non-surgically and transferred to surrogate mothers.

A. (A)-(i) pipeline, (B)-(i) oestrogen, (ii) poly

B. (A)-(i) embryo, (ii) herd, (D)-(i) zygote, (ii) 4-6

C. (C)-(i) 6-8, (D)-(i) eggs, (ii) 4-8

D. (B)-(i) FSH, (ii) super, (C)-(i) 6-8

**Answer: D**



**Watch Video Solution**

**39. Multiple ovulation embryo tranfer technology is related to**

A. transfer of super embryo

B. transfer of super eggs

C. super ovulation and embryo trasnfer

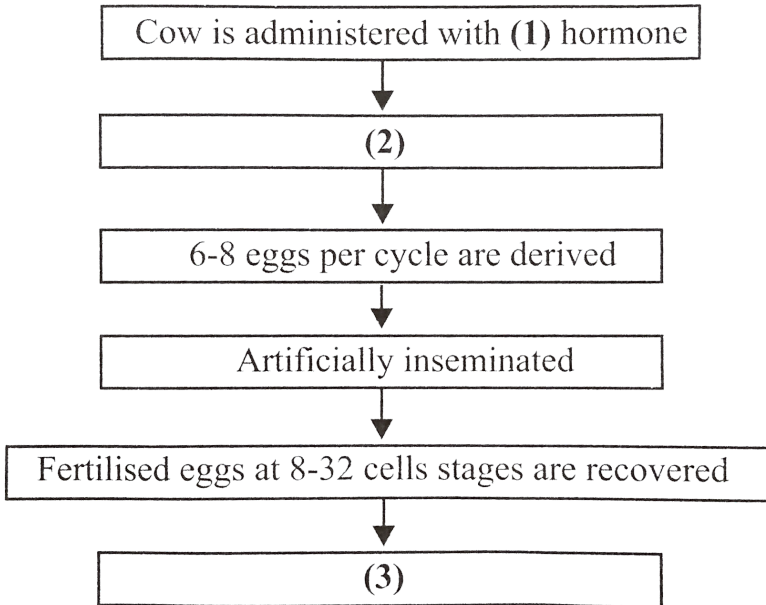
D. both (a) and (b)

**Answer: C**



**Watch Video Solution**

40. Given flow chart represents different steps pf MOET. Study the flow chart carefully and select the correct answer for (1),(2) and (3).



A. 1-FSH, 2-super ovulation due to induced follicular maturation, 3-  
Transfer to surrogate mother.

B. 1-LH, 2-super ovulation due to induced follicular maturation, 3-  
Transfer to surrogate mother



C. 1-Progesterone, 2-Super ovulation due to induced follicular maturation, 3-Transfer to surrogate mother

D. 1-FSH, 2-Transfer to surrogate mother, 3-Super-ovulation due to induced follicular maturation

**Answer: A**



**Watch Video Solution**

**41.** Lean meat' is considered to be high quality because it has

A. lesser but easily digestible protein

B. lesser lipid content

C. more fat that makes the meat softer

D. longer table life due to lesser chances of infection.

**Answer: B**



**Watch Video Solution**

**42.** In livestock breeding experiments, which of the following stages is transferred to surrogate mothers?

- A. Unfertilised eggs
- B. Fertiliser eggs
- C. 8 to 32 celled embryo
- D. Frozen semen

**Answer: C**



**Watch Video Solution**

**43.** The term 'apiculture' refers to

- A. tissue culture
- B. pisciculture
- C. bee-keeping

D. animal-keeping

**Answer: C**



**Watch Video Solution**

**44.** Which of the following plays a role in indigenous system of medicine?

A. Plant breeding

B. Fisheries

C. Apiculture

D. MOET

**Answer: C**



**Watch Video Solution**

**45.** In honey, the main constituent is

A. calcium

B. sugar

C. protein

D. water

**Answer: B**



**Watch Video Solution**

**46.** Beewax is the secretion of abdominal glands of

A. drones

B. worker bees

C. queen bees

D. worker and queen bees.

**Answer: B**



**Watch Video Solution**

**47.** Select the incorrect statement from the following.

- A. Apiculture provides additional income generating source to the farmers.
- B. Bee-keeping is labour intensive process.
- C. Bee venom is used to cure certain diseases like gout and arthritis.
- D. Honey is used as laxative antiseptic and sedative.

**Answer: B**



**Watch Video Solution**

**48.** *Apis dorsata* is

- A. little bee
- B. rock bee

C. European bee

D. Indian bee

**Answer: B**



**Watch Video Solution**

**49.** Which of the following points are important for successful bee-keeping?

- (i) Knowledge of the nature and habits of bees.
- (ii) Selection of suitable location for keeping the beehives.
- (iii) Management of beehives different seasons.
- (iv) Cross hybridisation among the selected parents.

A. (i),(iii) and (iv)

B. (ii) and (iv)

C. (i), (ii) and (iii)

D. (i) and (iii)

**Answer: C**



**Watch Video Solution**

**50.** The use of honeybee is

- A. to help in pollination
- B. production of bees wax
- C. production of honey
- D. all of these

**Answer: D**



**Watch Video Solution**

**51.** Keeping beehives in crop fields during flowering period increases

- A. crop yield

B. honey yield

C. weeds yields

D. both (a) and (b).

**Answer: D**



**Watch Video Solution**

**52.** Select the correct option to fill up the blanks in the following statements.

(i) Controlled breeding experiments are carried out using\_\_\_\_\_.

(ii) In MOET technology, the fertilised eggs at\_\_\_\_\_ cells stages, are recovered and transferred to surrogate mothers.

(iii) In MOET technology, the cow produces\_\_\_\_\_eggs instead of one egg.

(iv) \_\_\_\_\_ is an industry devoted to the catching, processing or selling of fish.

A. (i) artificial insemination, (ii) 8-32, (iii) 6-8, (iv) Fisheries

B. (i) artificial insemination, (ii) 8-32, (iii) 6-8, (iv) Silviculture



C. (i) artificial insemination, (ii) 6-8, (iii) 8-32, (iv) Pisciculture

D. (i) artificial insemination, (ii) 4-8, (iii) 8-32, (iv) Fisheries

**Answer: A**



**Watch Video Solution**

**53. Which of the following is not a freshwater fish ?**

A. Salmon

B. Mrigal

C. Catla

D. Rohu

**Answer: A**



**Watch Video Solution**

**54.** Which of the following are the fishery by-products?

(i) Oil , (ii) Manure

(iii) Glue , (iv) Isinglass

(v) Shagreen , (vi) Leather

A. (i), (ii) and (vi)

B. (iii), (iv) and (v)

C. (i), (iii) and (vi)

D. All of these

**Answer: D**



**Watch Video Solution**

**55.** Which of the following are common freshwater fishes ?

A. Mackerel and rohu

B. Rohu, common carp and Catla

C. Hilsa and sardine

D. None of these

**Answer: B**



**Watch Video Solution**

**56. Which one of the following is a marine fish ?**

A. Rohu

B. Hilsa

C. Catla

D. Common carp

**Answer: B**



**Watch Video Solution**

57. Which one of the following is an exotic catp species ?

- A. Labeo rohita
- B. Cyprinus carpio
- C. Labeo bata
- D. Cirrihinus mrigala

**Answer: B**



**Watch Video Solution**

58. Which of the following is not correctly matched?

	Common name	Scientific name
(i)	Bombay duck	Harpadon
(ii)	Pomphret	Stromateus
(iii)	Salmon	Anguilla
(iv)	Sardine	Aluitheronema
(v)	singhi	Heteropneustes

A. (ii) and (v)

B. (i) and (iii)

C. (iii) and (v)

D. (iii) and (iv)

**Answer: D**



**Watch Video Solution**

**59.** Aquaculture is the rearing and management of

A. molluscs and crustaceans

B. only freshwater fishes

C. economically useful aquatic plants and animals

D. only aquatic plants

**Answer: C**



**Watch Video Solution**

**60.** Aquaculture does not include

- A. prawns
- B. fishes
- C. silkworms
- D. shell fishery.

**Answer: C**



**Watch Video Solution**

**61.** Which of the following is correctly matched?

- A. Sericulture-Fish
- B. Aquaculture-Mosquito
- C. Apiculture-Honeybee
- D. Pisciculture - Silkmoth

**Answer: C**



**Watch Video Solution**

**62.** Germplasm collection is the collection of

- A. germ cells
- B. semens
- C. plants/seeds with all the diverse alleles for all genes
- D. egg cells.

**Answer: C**



**Watch Video Solution**

**63.** Select the option showing the correct sequential steps to produce a new genetic variety of a crop.

- A. Selection of parents → Hybridisation of selected parents → Germplasm collection → Selection of superior recombinants → Testing and release of new varieties
- B. Germplasm collection → Selection of parents → Hybridisation of selected parents → Selection of superior recombinants → Testing and release of new varieties
- C. Selection of superior recombinants → Germplasm collection → Hybridisation of selected parents → Selection of parents → Testing and release of new varieties
- D. Germplasm collection → Selection of parents → Hybridisation of selected parents → Testing and release of new varieties → Selection of superior recombinants

**Answer: B**



**View Text Solution**



64. Major percentage of India's Gross Domestic Product is constituted by

- A. industry
- B. agriculture
- C. export
- D. small scale cottage industry.

**Answer: B**



**Watch Video Solution**

65. Match column I with column II and select the correct option from the codes given below.

Column I

Column II

- |                     |       |                   |
|---------------------|-------|-------------------|
| A. Green revolution | (i)   | Milk production   |
| B. Pisciculture     | (ii)  | Crop plants       |
| C. White revolution | (iii) | Fish production   |
| D. Blue revolution  | (iv)  | Rearing of fishes |

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

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

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

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

**Answer: D**



**Watch Video Solution**

**66.** The Nobel Laureate, who developed semi-dwarf wheat varieties in Mexico was

A. Norman E. Borlaug

B. Herbert Boyer

C. William Harvey

D. Typhoid Mary

**Answer: A**



**Watch Video Solution**

67. Jaya and Ratna are the semi-dwarf varieties of

- A. wheat
- B. rice
- C. cowpea
- D. mustard

**Answer: B**



**View Text Solution**

68. Which of the following are the species that are crossed to give sugarcane varieties with high sugar, high yield, thick stems and ability to grow in the sugarcane belt of North India ?

- A. *Saccharum robustum* and *Saccharum officinarum*
- B. *Saccharum barberi* and *Saccharum officinarum*
- C. *Saccharum sinense* and *Saccharum officinarum*

D. *Saccharum barberi* and *Saccharum robustum*

**Answer: B**



**Watch Video Solution**

**69.** Consider the following three statements and select the correct option starting which ones are true (T) and which ones are false (F).

(i) Hybridisation is crossing of two or more types of plants for bringing their traits together in progeny.

(ii) Semi-dwarf rice varieties were derived from IR-8 and Taichung Native -1.

(iii) Hybrid breeding have led to the development of several high yielding resistant to water stress.

A.  $\begin{matrix} (i) & (ii) & (iii) \\ F & T & T \end{matrix}$

B.  $\begin{matrix} (i) & (ii) & (iii) \\ T & T & F \end{matrix}$

C.  $\begin{matrix} (i) & (ii) & (iii) \\ F & T & F \end{matrix}$

D.  $\begin{matrix} (i) & (ii) & (iii) \\ T & T & T \end{matrix}$

**Answer: D**



**Watch Video Solution**

**70.** Which of the following statements is not correct plant breeding ?

- A. It reduce the dependence on fungicides and bactericides.
- B. It provides somaclonal variation.
- C. It is independent of germplasm collection.
- D. It involves self-pollination of plants

**Answer: C**



**Watch Video Solution**

**71.** Turnip mosaic disease is caused by

- A. bacteria

B. viruses

C. nematodes

D. fungi

**Answer: B**



**Watch Video Solution**

**72. Which of the following disease is caused by virus ?**

A. Tobacco mosaic

B. Late blight of potato

C. Turnip mosaic

D. Both (a) and (b)

**Answer: D**



**Watch Video Solution**

73. Which of the following is incorrectly matched ?

- |    | Disease               | Causative organism |
|----|-----------------------|--------------------|
| A. | Green revolution      | Bacteria           |
| B. | Brown rust of wheat   | Fungi              |
| C. | Late blight of potato | Virus              |
| D. | Red rot of sugarcane  | Fungi              |

**Answer: C**



**Watch Video Solution**

74. Which of the following disease is caused by bacteria ?

- A. Tobacco mosaic
- B. Black rot of crucifers
- C. Red rot of sugarcane
- D. Late blight of potato

**Answer: B**



**Watch Video Solution**

**75.** Black rust of wheat is caused by

A. Puccinia

B. Albugo

C. Ustilago

D. Cystopus

**Answer: A**



**Watch Video Solution**

**76.** Match column I (crop) with column II (corresponding disease resistant variety) and select the correct option from the given codes.



	Column I	Column II
A.	Cowpea (i)	Himgiri
B.	Wheat (ii)	Pusa komal
C.	Chilli (iii)	Pusa Sadabahar
D.	Brassica (iv)	Pusa Swarnima

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

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

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

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

**Answer: B**



**Watch Video Solution**

**77.** Which one of the following crop varieties correctly matches with its resistance to a disease ?

- |    |                |                        |
|----|----------------|------------------------|
| A. | Variety        | Resistance to disease  |
|    | Pusa komal     | – Bacterial blight     |
| B. | Variety        | Resistance to disease  |
|    | Pusa Sadabahar | – White rust           |
| C. | Variety        | Resistance to disease  |
|    | Pusa Swarnim   | – Tobacco Mosaic Virus |

- |                 |                       |
|-----------------|-----------------------|
| Variety         | Resistance to disease |
| D. Pusa Shubhra | —Chilli Mosaic Virus  |

**Answer: A**



**Watch Video Solution**

**78.** Which of the following is incorrectly paired?

- A. Wheat-Himgiri
- B. Milch breed - Sahiwal
- C. Rice - Ratna
- D. Pusa komal - Brassica

**Answer: D**



**Watch Video Solution**

**79.** Which of the following is an example of mutation breeding?

- A. Pusa Swarnim, resistant to white rust
- B. Mung bean, resistant to yellow mosaic virus
- C. Pusa Sadabahar, resistant to chilli mosaic virus
- D. Pusa Gaurav, resistant to aphids

**Answer: B**



**Watch Video Solution**

**80. Yellow mosaic virus resistant variety " Parbhani Kranti" belongs to**

- A. bhindi
- B. barley
- C. chilli
- D. cauliflower.

**Answer: A**



**Watch Video Solution**

**81.** Hairy leaves of many plants are associated with

- A. resistant to insect pests
- B. resistance to viruses
- C. resistance to fungi
- D. resistance to bacteria.

**Answer: A**



**Watch Video Solution**

**82.** Resistance to jassides in cotton plants and to cereal leaf beetle in wheat plants is due to

- A. biochemical characters
- B. physiological characters
- C. morphological characters

D. none of these

**Answer: C**



**Watch Video Solution**

**83.** Maize generates resistance against stem borers by having

- A. low aspartic acid, high nitrogen and sugar content
- B. low aspartic acid and sugar but high nitrogen content
- C. high aspartic acid and nitrogen but low sugar content
- D. high aspartic acid, low nitrogen and sugar content.

**Answer: D**



**Watch Video Solution**

**84.** Which of the following statements is correct regarding nectarless cotton varieties?

- A. They do not attract stem sawfly
- B. They are produced by mutation breeding.
- C. They do not attract bollworms.
- D. They attract cereal leaf beetle

**Answer: C**



**Watch Video Solution**

**85.** Match column I (crop) with column II (corresponding insect pests resistant variety) and select the correct option from the given codes.

Column I

Column II

- |                  |       |             |
|------------------|-------|-------------|
| A. Flat bean     | (i)   | Pusa Gaurav |
| B. Okra (Bhindi) | (ii)  | Pusa Sem-2  |
| C. Brassica      | (iii) | Pusa Sawani |

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

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

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

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

**Answer: B**



**Watch Video Solution**

**86.** Biofortifications refers to the development of crop plants which are

A. resistant to disease

B. resistant to insect pests

C. having improved nutritional quality

D. having improved iron content.

**Answer: C**



**Watch Video Solution**

87. A wheat variety, Atlas 66, which has been used as a donor for improving cultivated wheat is rich in

- A. iron
- B. carbohydrates
- C. proteins
- D. vitamins.

**Answer: C**



**Watch Video Solution**

88. Shakti, Rattan and Protina varieties of maize) are rich in

- A. lysine
- B. glycine
- C. fats
- D. carbohydrates.



**Answer: A**



**Watch Video Solution**

**89.** Which of the following can be used for cultivation of SCP ?

A. Animal manure

B. Straw

C. Molasses

D. All of these

**Answer: D**



**Watch Video Solution**

**90.** 250 g of *Methylophilus methlotrophus* can be expected to produce \_\_\_\_\_ tonnes of proteins.

A. 15

B. 25

C. 40

D. 50

**Answer: B**



**Watch Video Solution**

**91.** Single cell protein can be obtained from

A. bacteria

B. algae

C. fungi

D. all of these

**Answer: D**



**Watch Video Solution**

**92.** Which of the following statements is/are not correct for single cell protein (SCP)?

- (i) The biomass is obtained from unicellular microorganisms only.
- (ii) It provides a protein rich supplement.
- (iii) They can be grown easily on materials like waste water from potato processing plants, straw, manure, sewage, etc.
- (iv) It helps to minimise environmental pollution.
- (v) SCP has to be processed before use.

A. (i), (ii) and (iv)

B. (iii) only

C. (v) only

D. (i) only

**Answer: D**



**Watch Video Solution**

**93.** Which of the following should be used as an explant to generate a disease free plant ?

- A. Anther
- B. Ovary cell
- C. Shoot tip
- D. Young embryo

**Answer: C**



**Watch Video Solution**

**94.** Totipotency refers to

- A. capacity to generate genetically identical plants
- B. capacity to generate a whole plant from any plant cell/explant
- C. capacity to generate hybrid protoplasts
- D. recovery of healthy plants from diseased plants.

**Answer: B**



**Watch Video Solution**

**95.** Match column I with column II and select the correct answer from the given codes.

Column I		Column II	
A.	Wax	(i)	Interspecific hybridisation
B.	Pollinator	(ii)	Micropopagation
C.	Mule	(iii)	Bee
D.	Tissue culture	(iv)	Apiculture

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

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

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

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

**Answer: B**



**Watch Video Solution**

**96.** Hormone responsible for growth of the root in micropropagation is

- A. auxin
- B. gibberellin
- C. cytokinin
- D. abscisic acid.

**Answer: A**



**Watch Video Solution**

**97.** Micropropagation involves

- A. vegetative multiplication of plants by using microorganisms
- B. vegetative multiplication of plants by using small explants
- C. vegetative multiplication of plants by using microspores
- D. non-vegetative multiplication of plants by using microspores and megaspores.

**Answer: B**



**Watch Video Solution**

**98.** Which of the following shows the correct sequence of steps of plants tissue culture ?

A. Sterilisation → Hardening → Selection of explant →

Inoculation → Regeneration → Plantlet transfer

B. Selection of explant → Inoculation → Regeneration →

Sterilisation → Hardening → Plantlet transfer

C. Selection of explant → Sterilisation → Inoculation →

Regeneration → Hardening → Plantlet transfer

D. Hardening → Sterilisation → Selection of explant →

Inoculation → Regeneration → Plantlet transfer

**Answer: C**





Watch Video Solution

**99.** Somaclones are

- A. somatic hybrids
- B. genetically identical to the original plant
- C. used to recover disease free plants
- D. sterile plants.

**Answer: B**



Watch Video Solution

**100.** Meristem culture is used

- A. to produce disease free plants
- B. in germplasm conservation
- C. in rapid clonal multiplication



D. all of these

**Answer: D**



**Watch Video Solution**

**101.** Meristem culture is the culture of

A. axillary or apical shoot meristems

B. anthers

C. plant seeds

D. young embryos

**Answer: A**



**Watch Video Solution**

**102.** A plant cell without cell wall is called

- A. proplast
- B. protoplast
- C. nucleoplasm
- D. explant.

**Answer: B**



**Watch Video Solution**

**103.** A somatic hybride between potato and tomato is named as

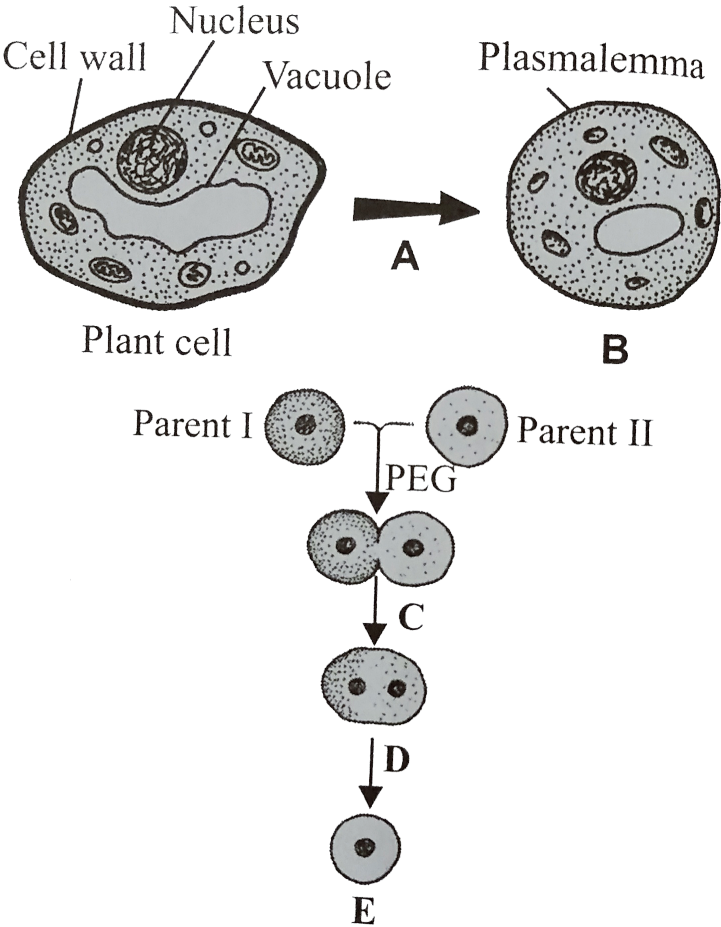
- A. bomato
- B. mopato
- C. pomato
- D. topamo

**Answer: C**



**Watch Video Solution**

104. Given below is the flow chart showing the process of somatic hybridisation. Identify A,B,C,D and E.



A-Cell fusion , B-Nuclear fusion, C-Cellulase and pectinase, D-  
Ptotoplast, E-Somatic hybride cell

B. A-Cellulase and pectinase, B-Protoplast, C-Cell fusion, D-Nuclear Fusion, E-Somatic hybrid cell

C. A-Protoplast, B-Nuclear fusion, C-Somatic hybride cell, D-Cellulase and pectinase, E-Cell fusion

D. A-Cellulase and pectinase, B-Protoplast, C-Nuclear fusion, D-cell fusion, E-Somatic hybrid cell

**Answer: B**



**Watch Video Solution**

**105.** The enzymes required to obtain protoplast from a plant cell are

A. cellulase

B. chitinase

C. pectinase

D. both (a) and (c ).

**Answer: D**



**Watch Video Solution**

**106.** Direction : Carefully read the following information to answer Q.no.1 and Q.no.2

An egg farmer is experimenting with different feed rations with the aim of increasing his production whilst reducing the cost of the feed per egg produced. The data from two feeding experiments is given below.

### Experiment 1

Protein concentration in feed (%)	10	11	12	13	14	15	16
Total vitamin level (mg/kg)	100	100	100	100	100	100	100
Cost of feed ration per 100 hens per day	6.00	7.00	7.50	8.00	8.50	8.75	9.00
Number of eggs per 100 hens per day	70	70	75	80	85	80	80

### Experiment 2

Protein concentration in feed (%)	14	14	14	14	14	14	14
Total vitamin level (mg/kg)	50	75	100	125	150	175	200
Cost of feed ration per 100 hens per day	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Number of eggs per 100 hens per day	70	80	85	90	95	95	95

Which feed composition give the least cost per egg produced ?

- A. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
16      100
- B. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      50
- C. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      100
- D. Protein (concentration (%))      Total vitamin level( $mg/kg$ )  
14      150

**Answer: D**



**Watch Video Solution**

107. Direction : Carefully read the following information to answer Q.no.1 and Q.no.2

An egg farmer is experimetnting with different feed rations with the aim of increasing his production whilst reducing the cost of the feed per egg produced. The data from two feeding experiments is given below.

Experiment 1

Protein concentration in feed (%)	10	11	12	13	14	15	16
Total vitamin level (mg/kg)	100	100	100	100	100	100	100
Cost of feed ration per 100 hens per day	6.00	7.00	7.50	8.00	8.50	8.75	9.00
Number of eggs per 100 hens per day	70	70	75	80	85	80	80

Experiment 2

Protein concentration in feed (%)	14	14	14	14	14	14	14
Total vitamin level (mg/kg)	50	75	100	125	150	175	200
Cost of feed ration per 100 hens per day	8.00	8.25	8.50	8.75	9.00	9.25	9.50
Number of eggs per 100 hens per day	70	80	85	90	95	95	95

What are the independent variable in each of the two experiments?

A.

Experiment 1	Experiment 2
Maximum daily egg production	Maximum daily egg production

B.

Experiment 1

Protein concentration in the feed

Experiment 2

Total vitamin level in the feed

C.

Experiment 1

Total vitamin level the in the feed

Experiment 2

Protein concentration in feed

D.

Experiment 1

cost of feed ration per egg produced

Experiment 2

cost of feed ration per egg pr

**Answer: B**



**Watch Video Solution**

**108.** A certain type of grass has a diploid chromosome number of 8. A similar species of grass has a diploid chromosome number of 10. Interspecific hybridisation between the two species results in sterile hybrids that can, nonetheless, reproduce vegetatively. The diploid chromosome number of these hybrids would be

A. 9



B. 16

C. 18

D. 20

**Answer: A**



**Watch Video Solution**

**109.** Inbreeding for five generations led to production of homozygous transgenic mice. However, these homozygous males or females were infertile. Which of the following approaches is most preferable and economical to obtain heterozygous transgenic animals continuously?

A. More transgenic founder ( $1^{st}$  animal) should be generated.

B. Crossing (breeding) of transgenic mice with wild type mice in earlier generations should be done for continued production of transgenic heterozygous offsprings.

C. Inbreeding should be avoided after  $5^{th}$  generation.

D. Homozygous transgenic mice should be mated with heterozygous transgenic mice for continued production of transgenic heterozygous offsprings.

**Answer: B**



**Watch Video Solution**

**110.** Many attempts to improve livestock in the tropics have been made by 'upgrading ' through crossbreeding them with temperate breeds. The major problems faced during the failed cattle breeding are

A. the breeding programmes have been too complicated in term of logistics, technology and requirements of resources without considering the infrastructure available.

B. indiscriminate crossbreeding of indigenous breeds with exotic breeds without enough consideration of environment conditions for production.

C. lack of analysis of the different socio-economic and culture roles that livestock play in each situation, usually leading to wrong breeding objectives and neglect of the potential of various indigenous breeds of livestock.

D. All of these

**Answer: D**



**Watch Video Solution**

**111.** Which of the following statements does not provide an explanation for hybrid vigour ?

A. Under certain circumstances, heterozygotes are superior to either possible homozygotes.

B. Disease-causing, homozygous recessive phenotypes from either parent are masked in the hybrids.

C. Offspring from a hybrid cross usually possess the best of two desirable parents.

D. Inherently, hybrids have no deleterious mutations.

**Answer: D**



**Watch Video Solution**

**112.** The chances of contracting bird flu from a properly cooked (above  $100^{\circ}C$ ) chicken and egg are

A. very high

B. high

C. moderate

D. none

**Answer: D**



**Watch Video Solution**

**113.** A group of animals which are related by descent and share many similarities are referred to as

- A. breed
- B. race
- C. variety
- D. species

**Answer: A**



**Watch Video Solution**

**114.** Inbreeding is carried out in animal husbandry because it

- A. increases vigour
- B. improves the breed
- C. increases heterozygosity

D. increases homozygosity.

**Answer: D**



**Watch Video Solution**

**115.** Sonalika and Kalyan Sona are varieties of

A. wheat

B. rice

C. millet

D. tobacco

**Answer: A**



**Watch Video Solution**

**116.** Which one of the following is not a fungal disease ?

- A. Rust of wheat
- B. Smut of Bajra
- C. Black rot of crucifers
- D. Red rot of sugarcane

**Answer: C**



**Watch Video Solution**

**117.** In virus-infected plants the meristematic tissues in both apical and axillary buds are free of virus because

- A. the dividing cells are virus resistant
- B. meristems have anti viral compounds
- C. the cell division of meristems are faster the rate of viral multiplication
- D. viruses cannot multiply meristem cell (s).

**Answer: C**



**Watch Video Solution**

**118.** Several South Indian states raise 2-3 crops of rice annually. The agronomic feature that makes this possible is because of

- A. shorter rice plant
- B. better irrigation facilities
- C. early yielding rice variety
- D. disease resistant rice variety.

**Answer: C**



**Watch Video Solution**

**119.** Which of the following combination would a sugarcane farmer look for in the sugarcane crop ?



- A. Thick stem, long internodes, high sugar content and disease resistant
- B. Thick stem, high sugar content and profuse flowering
- C. Thick stem, short internodes, high sugar content disease resistant
- D. Thick stem. Low sugar content, disease resistant

**Answer: A**



**Watch Video Solution**

**120.** Fungicides and antibiotics are chemicals that

- A. enhance yield and disease resistance
- B. kill pathogenic fungi and bacteria, respectively
- C. kill all pathogenic microbes
- D. kill pathogenic bacteria and fungi respectively.

**Answer: B**



[Watch Video Solution](#)

**121.** Use of certain chemicals and radiation to change the base sequences of genes of crop plants is termed

- A. recombinant DNA technology
- B. transgenic mechanism
- C. mutations breeding
- D. gene therapy

**Answer: C**



[Watch Video Solution](#)

**122.** The scientific process by which crop plants are enriched with certain desirable nutrients is called

- A. crop protection

- B. breeding
- C. bio-fortification
- D. bio-remediation

**Answer: C**



**Watch Video Solution**

**123.** The term 'totipotency' refers to the capacity of a

- A. cell to generate whole plant
- B. bud to generate whole plant
- C. seed to germinate
- D. cell to enlarge in size.

**Answer: A**



**Watch Video Solution**

**124.** Given below are a few statements regarding somatic hybridisation.

Choose the correct statements.

- (i) Protoplasts of different cells of the same plant are fused.
- (ii) Protoplasts from cells of different species can fused.
- (iii) Treatment of cell with cellulase and pectinase mandatory.
- (iv) The hybrid protoplast contains characters of only one parental protoplast.

A. (i) and (iii)

B. (i) and (ii)

C. (i) and (iv)

D. (ii) and (iii)

**Answer: D**



**Watch Video Solution**

**125.** An explant is

- A. dead plant
- B. part of the plant
- C. part of the plant used in tissue culture
- D. part of the plant that expresses a specific gene.

**Answer: C**



**Watch Video Solution**

**126.** The biggest constraint of plant breeding is

- A. availability of desirable gene in the crop and its wild relatives
- B. infrastructure
- C. trained manpower
- D. transfer of genes from unrelated sources.

**Answer: A**



**Watch Video Solution**

**127.** Lysine and tryptophan are

- A. proteins
- B. non-essential amino acids
- C. essential amino acids
- D. aromatic amino acids

**Answer: C**



**Watch Video Solution**

**128.** Micropropagation is

- A. propagation of microbes in vitro
- B. propagation of plants in vitro
- C. propagation of cells in vitro

D. growing plants on smaller scale.

**Answer: B**



**Watch Video Solution**

**129.** Protoplast is

- A. another name for protoplasm
- B. an animal cell
- C. a plant cell without a cell wall
- D. a plant cell

**Answer: C**



**Watch Video Solution**

**130.** To isolate protoplast, one needs

- A. pectinase
- B. cellulase
- C. both pectinase and cellulase
- D. chitinase

**Answer: C**



**Watch Video Solution**

**131. Which one of the following is a marine fish ?**

- A. Rohu
- B. Hilsa
- C. Catla
- D. Common carp

**Answer: B**



**Watch Video Solution**



**132.** Which one of the following products of apiculture is used in cosmetics and polishes?

- A. Honey
- B. Oil
- C. Wax
- D. Royal jelly

**Answer: C**



**Watch Video Solution**

**133.** More than 70 per cent of livestock population is in

- A. Denmark
- B. India
- C. China

D. India and China

**Answer: D**



**Watch Video Solution**

**134.** The agriculture sector of India employs about

- A. 50 percent of the population
- B. 70 percent of the population
- C. 30 percent of the population
- D. 60 percent of the population

**Answer: D**



**Watch Video Solution**

**135.** 33 percent of India's (Gross Domestic Product) comes from

- A. industry
- B. agriculture
- C. export
- D. small-scale cottage industries.

**Answer: B**



**Watch Video Solution**

**136.** A collection of all the alleles of all the genes of a crop plant is called

- A. germplasm collection
- B. protoplasm collection
- C. herbarium
- D. somaclonal collection

**Answer: A**



**Watch Video Solution**

**137.** Assertion: Breeding weeding, feeding and heeding are essential methods for livestock production.

Reason : Livestock management deals with processes and systems that increase yield and improve quality of products.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true bur reason is false.
- D. if both assertion and reason are false.

**Answer: B**



**Watch Video Solution**

**138.** Assertion : Light is essential in poultry farm management.

Reason : 14-16 hours of light including day light is required for optimum production of eggs.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**139.** Assertion : Loss of vigour called inbreeding depression occurs when inbreeding is continued for many generations.

Reason : Quarantine can be done to overcome the harmful effects of inbreeding depression.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true bur reason is false.
- D. if both assertion and reason are false.

**Answer: C**



**Watch Video Solution**

**140.** Assertion : A single outcross often helps to overcome inbreeding depression.

Reason : Out-crossing is best breeding method for increasing milk productivity.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true bur reason is false.
- D. if both assertion and reason are false.

**Answer: B**



**Watch Video Solution**

**141.** Assertion : Hisardale is cross breed of sheep.

Reason : Hisardale is developed by crossing Bikaneri ewe and Marino ram.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.

- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**142.** Assertion : Artificial insemination is very economical method.

Reason : Fewer sperms are required in artificial insemination.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.



D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**143.** Assertion : In MOET, hormones with progesterone-like activity are given to the cow for inducing super-ovulation.

Reason : After mating the embryos at 4-6 celled stage are recovered and transferred to surrogate mother.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true bur reason is false.

D. if both assertion and reason are false.

**Answer: D**



**Watch Video Solution**

**144.** Assertion : Beehives are kept in crop field during flowering period.

Reason : Bees are pollinating agents.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**145.** Assertion : Phenotypic superiority of hybrid over either of its parents in one or more traits is termed hybrid vigour.

Reason : Suppression of expression of recessive harmful genes occurs in heterozygotes.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**146.** Assertion : Emasculation is removal of male parts.

Reason : Bagging is not required for emasculated flowers.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: C**



**Watch Video Solution**

**147. Assertions :** Breeding and development of cultivars resistance to diseases enhances food production.

**Reason :** Cultivar resistance to disease reduces the dependence on use of fungicides and bacteriocides.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.

- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**148.** Assertion : Wild varieties of crop plants must be conserved.

Reason : Genome of wild plants serve as important resources for selection of desired genes like genes for pest resistance.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.

D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**149.** Assertion : Biofortifications is the most practical aspect to improve health of the people.

Reason : Biofortifications is breeding crops with higher levels of vitamins or minerals or higher proteins and healthier fats.

A. If both assertion and reason are true and reason is the correct explanation of assertion.

B. If both assertion and reason are true but reason is not the correct explanation of assertion

C. If assertion is true bur reason is false.

D. if both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**150.** Assertion : Single cell proteins can help to meet increasing demands of growing population.

Reason : SCP now can be produced in high amount commercially, using low cost substrates.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

**Answer: A**



**Watch Video Solution**

**151.** Assertion : In tissue culture, whole plant can be produced from plant cell.

Reason : The capacity to generate a whole plant from any cell/explant is called totipotency.

- A. If both assertion and reason are true and reason is the correct explanation of assertion.
- B. If both assertion and reason are true but reason is not the correct explanation of assertion
- C. If assertion is true bur reason is false.
- D. if both assertion and reason are false.

**Answer: B**



**Watch Video Solution**