



# ZOOLOGY

ENTHUSIAST | LEADER | ACHIEVER



# **EXERCISE**

Strategies for enhancement in food production (Animal Husbandry)

ENGLISH MEDIUM



#### Build Up Your Understanding EXERCISE-I (Conceptual Questions) Honey is collected by: 1. The young chickens raised specially for 9. meat are called -(1) Wasp (2) Housefly (1) Hen (2) Broilers (3) Butterfly (4) Bee (3) Cockereals (4) Pullets **DA0009** DA0001 10. Ranikhet disease is associated with: 2. In which the parthenogenesis is observed? (2) Hens (1) Honey Bee (1) Honey bee (2) Silk worm (3) Fishes (4) Pigs (3) Earth worm (4) House fly **DA0010 DA0002** 11. Rearing of bees is: 3. Fish used in biological control of mosquito (1) Horticulture (2) Apiary is -(3) Apiculture (4) Poultry (1) Gambusia (2) Hilsa DA0011 (3) Scalophagus (4) Gold Fish Which of the following is not a plant 12. **DA0003** product: 4. Silk is produced by -(2) Silk (1) Hemp (1) Larva (2) Cocoon (3) Cotton (4) Flax (3) Larva & adult moth (4) Adult moth DA0012 **DA0004 13**. Maximum lac is produced in: 5. Largest silk producing state of India is -(1) Assam (2) Jharkhand (1) Karnataka (2) Bihar (3) Gujarat (4) Kerala (3) Bengal (4) Assam **DA0013** DA0005 14. Larva of Bombyx mori is: Queen is specified for -6. (1) Caterpillar (1) Administration (2) Trochophore (2) Making hive (3) Nymph (3) Egg laying (4) Cocoon (4) Collection of food DA0014 **DA0006 15.** The alba insect thrives on Morus 7. Which among the following is real product (Mulberry) is of Honey Bee? (1) Lac insect (2) Pollen (1) Honey (2) Cochineal insect (4) Propolis (3) Bee wax (3) Honey bee **DA0007** (4) Silk moth 8. Worker Bees are: **DA0017** (1) Fertile males **16.** Which among the following is secondary (2) Fertile females product of Honey Bee? (3) Sterile females (2) Pollen (1) Honey (4) Sterile males (3) Bee wax (4) Propolis **DA0008**



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- **17.** Fish introduced in India by foreigners is :
  - (1) Labeo rohita
  - (2) Mystus singhala
  - (3) Pomfret
  - (4) Clarius batrachus

# **DA0020**

- **18.** Hormone analogue used for inducing lactation in sterile cows is :
  - (1) Estrogen
- (2) Progesterone
- (3) Relaxin
- (4) Stilbestrol

#### DA0022

- **19.** Fishes reared in culture fishery in India are :
  - (1) Salmon and Rohu
  - (2) Salmon and Catla
  - (3) Catla and Hilsa
  - (4) Rohu and Catla

**DA0024** 

- 20. Life span of worker honey bee:
  - (1) 30 days
- (2) 15 days
- (3) 45 days
- (4) 10 dyas

**DA0025** 

- **21.** Exotic breeds of poultry are:
  - (1) White Leghorn and Rhode Island Red
  - (2) Rhode Island Red and Aseel
  - (3) Plymoth and Aseel
  - (4) White Leghorn and Aseel

**DA0026** 

- 22. Lac glands of lac insect is a modified :-
  - (1) Sweat gland
- (2) Salivary gland
- (3) Endocrine gland
- (4) Dermal gland

DA0027

- **23.** MOET (Multiple Ovulation Embryo Transfer) is method of :
  - (1) Fish cultivation
  - (2) Hybridisation of cattle
  - (3) Birth control
  - (4) Cloning of sheep

**DA0028** 

- **24.** Who is the father of white revolution in India?
  - (1) Banda Vasudev Rao
  - (2) Verghese Kurien
  - (3) M. S. Swaminathan
  - (4) Norman E. Borlaug

**DA0029** 

- **25.** Wax is obtained from:
  - (1) Apiculture
- (2) Sericulture
- (3) Lac culture
- (4) Aquaculture

ANSWER KEY

ı	EXERCISE-I (Conceptual Questions)													
	Que.	1	2	3	4	5	6	7	8	9	10			
	-			_		_	_	_	_	_	_			

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	2	1	1	1	1	3	3	3	4	2	3	2	2	1	4
Que.	16	17	18	19	20	21	22	23	24	25					
Ans.	1	3	4	4	3	1	4	2	2	1					



# **EXERCISE-II** (Previous Year Questions)

# AIPMT/NEET

# **AIPMT 2003**

- 1. Which endangered animal is the source of the world's finest, lightest, warmest and most expensive wool–the shahtoosh?
  - (1) Nilgai
- (2) Cheetal
- (3) Kashmiri goat
- (4) Chiru

#### DA0031

#### **AIPMT 2005**

- **2.** The world's highly prized wool yielding 'Pashmina' breed is
  - (1) Kashmir sheep-Afghan sheep cross
  - (2) Goat
  - (3) Sheep
  - (4) Goat-sheep cross

#### **DA0032**

# **AIPMT 2007**

- **3.** Which one of the following pair is *mismatched*?
  - (1) Bombyx mori Silk
  - (2) Pila globosa Pearl
  - (3) Apis indica Honey
  - (4) Kenia lacca Lac

#### **DA0033**

- **4.** Which one of the following is a viral disease of poultry?
  - (1) Pasteurellosis
  - (2) Salmonellosis
  - (3) Coryza
  - (4) New Castle disease

# **DA0034**

# Re-AIPMT 2015

- **5.** Which of the following diseases is caused by a protozoan?
  - (1) Blastomycosis
  - (2) Syphilis
  - (3) Influenza
  - (4) Babesiosis

- **6.** Outbreeding is an important strategy of animal husbandry because it :
  - (1) exposes harmful recessive genes that are eliminated by selection
  - (2) helps in accumulation of superior genes.
  - (3) is useful in producing purelines of animals.
  - (4) is useful in overcoming inbreeding depression

#### DA0037

#### **NEET-I 2016**

- **7.** Which is the National Aquatic Animal of India?
  - (1) Gangetic shark
  - (2) River dolphin
  - (3) Blue whale
  - (4) Sea-horse

#### **DA0039**

#### **NEET-II 2016**

- **8.** Among the following edible fishes, which one is a marine fish having rich source of omega-3 fatty acids?
  - (1) Mrigala
  - (2) Mackerel
  - (3) Mystus
  - (4) Mangur

#### **DA0040**

- **9.** Interspecific hybridization is the mating of:-
  - (1) Superior males and females of different breeds
  - (2) More closely related individuals within same breed for 4-6 generations
  - (3) Animals within same breed without having common ancestors
  - (4) Two different related species

**DA0041** 



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# **NEET(UG) 2017**

- **10.** Homozygous purelines in cattle can be obtained by:
  - (1) mating of unrelated individuals of same breed.
  - (2) mating of individuals of different breed.
  - (3) mating of individuals of different species.
  - (4) mating of related individuals of same breed.

**DA0042** 

# **NEET(UG) 2019**

- 11. Select the incorrect statement :-
  - (1) Inbreeding increases homozygosity
  - (2) Inbreeding is essential to evolve purelines in any animal
  - (3) Inbreeding selects harmful recessive genes that reduce fertility and productivity
  - (4) Inbreeding helps in accumulation of superior genes and elimination of undesirable genes

DA0081

# NEET(UG) 2019 (Odisha)

- **12.** Select the **incorrect** statement regarding inbreeding
  - (1) Inbreeding helps in elimination of deleterious alleles from the population
  - (2) Inbreeding is necessary to evolve a pureline in any animal
  - (3) Continued inbreeding reduces fertility and leads to inbreeding depression
  - (4) Inbreeding depression can not be overcome by out-crossing

DA0082

# **NEET(UG) 2020**

- **13.** By which method was a new breed 'Hisardale' of sheep formed by using Bikaneri ewes and Marino rams?
  - (1) Inbreeding
  - (2) Out crossing
  - (3) Mutational breeding
  - (4) Cross breeding

**DA0083** 

# **NEET(UG) 2020 (COVID-19)**

- 14. Inbreeding depression is -
  - (1) Reduced motility and immunity due to close inbreeding
  - (2) Decreased productivity due to mating of superior male and inferior female
  - (3) Decrease in body mass of progeny due to continued close inbreeding
  - (4) Reduced fertility and productivity due to continued close inbreeding

**DA0084** 

# **NEET(UG) 2021**

- **15.** Which of the following is **not** a step in Multiple Ovulation Embryo Transfer Technology (MOET)?
  - (1) Cow is administered hormone having LH like activity for super ovulation
  - (2) Cow yields about 6-8 eggs at a time
  - (3) Cow is fertilized by artificial insemination
  - (4) Fertilized eggs are transferred to surrogate mothers at 8-32 cell stage

DA0085

# **NEET(UG) 2021 (Paper-2)**

- **16.** Inbreeding is an important strategy of animal breeding because it
  - (1) is necessary to evolve a pure line in any animal
  - (2) helps in accumulation of superior genes
  - (3) helps in elimination of less desirable genes
  - (4) All of the above

**DA0086** 

# **NEET(UG) 2022 (OVERSEAS)**

- 17. The term 'blue Revolution' is related with:
  - (1) Development of water reservoirs
  - (2) Honey and its by products
  - (3) Fishery industry
  - (4) Various crop plants and their by products



**18.** Bee-keeping helps to improve the yield of following crops EXCEPT \_\_\_\_\_\_.

(1) Sunflower

(2) Apple

(3) Mustard

(4) Jowar

**DA0088** 

# Re-NEET(UG) 2022

- **19.** Select the **incorrect** statement with respect to inbreeding of animals.
  - (1) It is used for evolving pure lines in cattle.
  - (2) It helps in accumulation of superior genes and elimination of less desirable genes.
  - (3) It decreases homozygosity.
  - (4) It exposes harmful recessive genes that are eliminated by selection.

**DA0089** 

**EXERCISE-II** (Previous Year Questions)

ANSWER KEY

Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	2	2	4	4	4	2	2	4	4	3	4	4	4	1
Que.	16	17	18	19											
Ans.	4	3	4	3											



# **EXERCISE-III**

# **EXERCISE-III(A) (NCERT BASED QUESTIONS)**

- **1.** Which amongst the following is used in raising super-milk cows?
  - (1) Artificial insemination with pedigree bull
  - (2) Embryo transplantation
  - (3) Superovulation of high yielding cow
  - (4) All the above

#### **DA0043**

- **2.** A new breed of sheep developed in India by cross-breeding, called "Hisardale". It is a cross.
  - (1) Bikaneri ewes and Marino rams
  - (2) Marino ewes and Bikaneri rams
  - (3) Malavari ewes and Bikaneri rams
  - (4) Bikaneri ewes and Malavari rams

#### **DA0044**

- 3. In MOET, the animal is either mated with an elite bull or artificially inseminated. The fertilized eggs are collected to transfer to surrogate mothers. Which among these statements is correct.
  - (1) Fertilized egg is collected at 8-32 cells stage and no need of surgery.
  - (2) Fertilized egg is collected at 8-32 cells stage and surgery is done for it.
  - (3) Fertilized egg is collected at only 4 cells stage and it is done by surgery.
  - (4) Fertilized egg is collected at 64 cells stage and surgery is done for it.

#### **DA0045**

- **4.** To remove the inbreeding depression, the selected animals of the breeding population should be mated with:
  - (1) Related superior animals of the same breed
  - (2) Unrelated superior animals of the same breed
  - (3) Superior animals of the different breeds
  - (4) Superior animals of the different species

# **DA0046**

# Master Your Understanding

- 5. The best breeding method for animals that are below average in productivity in milk production and growth rate in beef cattle:
  - (1) Inbreeding
  - (2) Interspecific hybridization
  - (3) Out crossing
  - (4) Cross breeding

# **DA0047**

- **6.** The efforts for the development and flourishing of the fishery industry are collectively termed as:
  - (1) Pink revolution
  - (2) White revolution
  - (3) Blue revolution
  - (4) Green revolution

#### **DA0048**

- 7. A group of animals related by descent and similar in most characters like general appearance, features, size, configuration, etc., are said to belong to a:
  - (1) Breed
- (2) Species
- (3) Genus
- (4) Family

#### DA0049

- **8.** Which is not true for MOET in animals?
  - (1) The female animal is administered with hormones having FSH like activity
  - (2) More than one ova are matured during a single cycle
  - (3) The embryo is transplanted in 8-32 cells stage
  - (4) Eggs are recovered surgically from genetic mother

# DA0050

- **9.** 'Hisardale' is a/an:
  - (1) Hybrid breed of sheep
  - (2) Indigenous breed of sheep
  - (3) Australian breed of sheep
  - (4) Indian breed of cattle

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- **10.** An exotic breed of chicken:
  - (1) Jersey
- (2) Marino
- (3) Leghorn
- (4) Bikaneri

DA0052

- **11.** Mule is a result of:
  - (1) Inbreeding
  - (2) Interspecific hybridization
  - (3) Cross breeding
  - (4) Intergeneric hybridization

**DA0053** 

- **12.** Which type of breeding is suitable for combining the characters of two different breeds?
  - (1) Inbreeding
  - (2) Cross breeding
  - (3) Out crossing
  - (4) Interspecific hybridization

**DA0054** 

- **13.** Identify the incorrect match:
  - (1) Bombyx Silk
- (2) Laccifer Lac
- (3) Apis Honey
- (4) Musca Wax

DA0055

- **14.** Select the incorrect statement for apiculture:
  - (1) It is the maintenance of hives of honeybees for the production of honey.
  - (2) It is not labour intensive.
  - (3) Most common species of honey bee in India is *Apis indica*.
  - (4) Beeswax is a food of high nutritive value which is used in preparation of cosmetics.

**DA0056** 

- 15. Sometimes normal mating is not possible between two individuals due to their different behavior and habitats. Which technique is generally used to overcome such type of problems:
  - (1) Interspecific hybridization
  - (2) Artificial insemination
  - (3) Multiple ovulation embryo transfer
  - (4) Out crossing

**DA0057** 

- **16.** Which statement is not true about honey bees or honey bee keeping?
  - (1) Bees are harmful insects for crops.
  - (2) Honey is a food of high nutritive value.
  - (3) Beewax can be used in cosmetics items.
  - (4) Bee keeping is not labour intensive.

DA0058

- 17. Which is not true for inbreeding?
  - (1) It increases homozygosity
  - (2) It is done between the animals of same breed
  - (3) Continuous inbreeding leads to inbreeding depression
  - (4) It can't be used to obtain pure lines in animals

DA0059

- **18.** Which type of breeding is used to remove the problem of inbreeding depression in animals?
  - (1) Inbreeding
  - (2) Cross Breeding
  - (3) Out crossing
  - (4) Inter specific Hybridization

DA0060

- **19.** Which technique is generally used to obtain a large herd size in short time?
  - (1) Artificial insemination
  - (2) Induced breeding
  - (3) Multiple ovulation embryo transfer
  - (4) Hybridisation

DA0061

- **20.** Which kind of animal breeding is not correctly matched with its utility?
  - (1) To combine characters of two different species Interspecific hybridization
  - (2) To combine characters of two different breeds Cross breeding
  - (3) To remove inbreeding depression Out crossing
  - (4) To obtain pure lines Out breeding



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# **EXERCISE-III(B) (ANALYTICAL QUESTIONS)**

- **21.** Honey bee after discovering the new source of nectar / honey can convey this information but
  - (1) Cannot convey the direction
  - (2) Can convey the direction by round or tail waving dance
  - (3) Can convey the direction by round dance only
  - (4) Can convey the direction by tail waving dance only

#### **DA0063**

- 22. A queen Honey Bee lays eggs of :
  - (1) One type from which all castes develop
  - (2) Two types, one forming queen and workers and second forming drones
  - (3) Three types forming queen, drone and workers
  - (4) Unfertilized eggs die while fertilised ones form all castes.

# **DA0064**

- 23. In Silkworm, if juvenile hormone is absent at the time of larval moulting, the worm will:
  - (1) Die
  - (2) Moult into larval stage
  - (3) Moult into pupa
  - (4) Moult into adult

**DA0067** 

- **24.** Which statement is correct?
  - (1) Apis indica is largest wild honey bee
  - (2) Wax is waste material of honey bee
  - (3) V. Frish discovered the transmission methods in honey bee
  - (4) Drone of honey bee is diploid

**DA0068** 

- **25.** Commercial silk is obtained from :
  - (1) Cocoon
  - (2) Caterpillar
  - (3) Adult moth
  - (4) Both egg and adult moth

#### **DA0069**

- **26**. Primary and secondary product of apiculture are:-
  - (1) Wax is primary product but Honey is secondary product
  - (2) Honey is primary product but wax is secondary product
  - (3) Both wax and Honey are considered as secondary product as some nutritive substances are also obtained from Honey bee which are primary product.
  - (4) No criteria is set to differentiate primary and secondary product in apiculture.

#### DA0070

- 27. If a honey bee is conveying an information, by round dance then the distance of source will be about
  - (1) 1000 mtrs
- (2) 50 mtrs
- (3) 2000 mtrs
- (4) 150 mtrs

DA0071

- 28. Commercial lac is produced from
  - (1) The nest of a type of bird
  - (2) The exudation of a type of insect
  - (3) The scale of a type of a fish
  - (4) The root of a plant

EXI	EXERCISE-III ANSWER KEY														
Que.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	1	1	1	2	વ	3	1	1	1	3	2	2	1	1	2
Alis.	-			L	3	J	1	4	1	3	L	L	-	4	
Que.	16	17	18	19	20	21	22	23	24	25	26	27	28		