

CUET PG 2024 Animal Science Question Paper with Solutions

Time Allowed :1 Hour 45 Mins

Maximum Marks :300

Total Questions :75

General Instructions

Read the following instructions very carefully and strictly follow them:

1. The examination duration is 105 minutes. Manage your time effectively to attempt all questions within this period.
2. The total marks for this examination are 300. Aim to maximize your score by strategically answering each question.
3. There are 75 mandatory questions to be attempted in the Animal Science paper. Ensure that all questions are answered.
4. Questions may appear in a shuffled order. Do not assume a fixed sequence and focus on each question as you proceed.
5. The marking of answers will be displayed as you answer. Use this feature to monitor your performance and adjust your strategy as needed.
6. You may mark questions for review and edit your answers later. Make sure to allocate time for reviewing marked questions before final submission.
7. Be aware of the detailed section and sub-section guidelines provided in the exam. Understanding these will aid in effectively navigating the exam.

1. 'King' is the breed of which species?

- (A) Duck
- (B) Chicken
- (C) Guinea fowl
- (D) Pigeon

Correct Answer: (D) Pigeon

Solution: The 'King' breed belongs to the pigeon species. It is widely known for its large size and excellent meat quality. Pigeons and Chicken of this breed are often raised for food and whereas Duck for showcase exhibitions.

💡 Quick Tip

The 'King' breed of pigeons is highly prized in the poultry industry for its dual purpose: producing high-quality meat and being an ornamental breed.

2. Which protein of egg binds biotin molecule?

- (A) Conalbumin
- (B) Avidin
- (C) Flavoprotein
- (D) Ovomucoid

Correct Answer: (B) Avidin

Solution: Avidin is a protein found in egg whites that strongly binds to biotin, making it biologically unavailable. This binding property is often utilized in biochemical assays. The other protein of egg does not bind biotin molecule specifically.

Quick Tip

Avidin's strong affinity for biotin is a unique property. It helps reducing its biotin-binding capability, making biotin more bioavailable for nutrition.

3. What is per capita availability of egg per annum per person in India?

- (A) 65 eggs
- (B) 75 eggs
- (C) 85 eggs
- (D) 95 eggs

Correct Answer: (D) 95 eggs

Solution: The per capita availability of eggs in India is approximately 95 eggs per annum. This figure reflects the growing poultry industry and increased dietary inclusion of eggs in daily lives.

Quick Tip

Per capita egg availability in India highlights the expanding poultry sector and increasing awareness of eggs' nutritional value.

4. Crude fiber content of roughage is:

- (A) More than 18%
- (B) Less than 18%
- (C) More than 14%
- (D) Less than 14%

Correct Answer: (A) More than 18%

Solution: Roughages are high-fiber feed materials that contain more than 18% crude fiber. They are essential for maintaining digestive health in livestock. The other quantities are not considered to be right.

 Quick Tip

Roughages, with over 18 percentage crude fiber, are vital for promoting healthy digestion and preventing metabolic disorders in livestock.

5. In general, what should be the bleeding time allowed after slaughter of chicken?

- (A) 1.5 to 2.0 minutes
- (B) 0.5 to 1.0 minutes
- (C) 3.0 to 4.0 minutes
- (D) 8.0 to 9.0 minutes

Correct Answer: (A) 1.5 to 2.0 minutes

Solution:

After the slaughter of a chicken, the ideal bleeding time is crucial for ensuring proper draining of blood to maintain meat quality. A bleeding time of 1.5 to 2.0 minutes is generally recommended in poultry practices for optimal results.

 Quick Tip

Maintain a bleeding time of 1.5 to 2.0 minutes during poultry slaughter to ensure optimal meat quality and hygiene.

6. What should be the scalding water tank temperature & time at Broiler & Young birds slaughter house?

- (A) 55°C for 1.5 minutes
- (B) 60°C for 2 minutes
- (C) 72°C for 1.5 minutes
- (D) 65°C for 2 minutes

Correct Answer: (D) 65°C for 2 minutes

Solution:

Scalding water temperature and timing are critical to loosen feathers efficiently without damaging the skin. For broilers and young birds, 65°C for 2 minutes is optimal to ensure smooth feather removal and maintain carcass quality.

 Quick Tip

Scald broilers at 65°C for 2 minutes to loosen feathers effectively while preserving skin quality.

7. What is the % of chicken blood level as poultry dressing plant waste on live weight basis?

- (A) 3.5%
- (B) 1.5%
- (C) 7.5%
- (D) 9.5%

Correct Answer: (A) 3.5%

Solution:

Blood accounts for approximately 3.5% of live body weight in poultry and constitutes a significant portion of waste during processing in dressing plants.

 Quick Tip

Proper blood management in poultry processing minimizes waste and enhances environmental sustainability.

8. Which protein of egg binds metals, especially iron?

- (A) Conalbumin
- (B) Avidin
- (C) Flavoprotein
- (D) Ovalbumin

Correct Answer: (A) Conalbumin

Solution:

Conalbumin is a glycoprotein in egg whites known for its ability to chelate and bind metals like iron, which prevents bacterial growth by reducing the availability of free iron.

 Quick Tip

Conalbumin helps in natural preservation by its antimicrobial properties.

9. What is the poultry population of India as per the 2019 census?

- (A) 851.81 million
- (B) 751.81 million
- (C) 951.81 million
- (D) 651.81 million

Correct Answer: (C) 951.81 million

Solution: According to the 2019 census data, India's poultry population reached 951.81 million. This growth reflects the rising demand for poultry products in the country due to dietary preferences and increasing population.

 Quick Tip

India's poultry population of 951.81 million highlights the growing demand for affordable protein sources like eggs and chicken.

10. What is the causative agent of Inclusion Body Hepatitis?

- (A) Reo virus
- (B) Herpes virus
- (C) Pox virus
- (D) Adeno virus

Correct Answer: (D) Adeno virus

Solution: Inclusion Body Hepatitis in poultry is caused by Adeno virus. It primarily affects broiler chickens, leading to anemia and growth retardation, and is recognized by the presence of inclusion bodies in the liver cells.

 Quick Tip

Understanding the causative agents of poultry diseases aids in effective prevention and treatment.

11. Helmet body part is found in which species of poultry?

- (A) Turkey
- (B) Goose
- (C) Guinea fowl
- (D) Pigeon

Correct Answer: (C) Guinea fowl

Solution: Guinea fowls are known for their distinctive helmet-like structure on their heads, which is a bony protrusion used for identification and mating displays.

 Quick Tip

Familiarizing with physical features of poultry species helps in their identification and management.

12: Beard is found in which species of poultry?

- (A) Guinea fowl
- (B) Turkey
- (C) Goose
- (D) Quail

Correct Answer: (B) Turkey

Solution: The beard is a distinct feature of turkeys, comprising bristle-like feathers found on the chest. It is more prominent in males and is associated with their reproductive fitness.

 Quick Tip

Physical features like beards in turkeys are used for determining gender and breeding quality.

13. Foam gland is found in which species of poultry?

- (A) Turkey
- (B) Goose
- (C) Guinea fowl
- (D) Quail

Correct Answer: (D) Quail

Solution: Foam glands are unique to quails and are associated with their reproductive system, specifically to assist in sperm transfer.

 Quick Tip

Foam glands are specialized features primarily found in quails and play a role in reproduction.

14. What is the age of puberty for buffaloes?

- (A) 12–18 months
- (B) 18–24 months
- (C) 24–30 months
- (D) 30–36 months

Correct Answer: (B) 18–24 months

Solution: Buffaloes generally reach puberty at 18–24 months of age, depending on nutrition, breed, and environmental factors.

 Quick Tip

Good nutrition accelerates puberty, while poor nutrition delays it.

15. World Egg Day is celebrated on

- (A) 14 October
- (B) 10 October
- (C) 2nd Friday of October
- (D) 13 October

Correct Answer: (C) 2nd Friday of October

Solution: World Egg Day is celebrated on the second Friday of October every year to promote the nutritional benefits of eggs.

 Quick Tip

Remember that World Egg Day is observed annually to raise awareness of the nutritional value of eggs.

16: Krishi Vigyan Kendra (KVK) program of ICAR was started in the year:

- (A) 1965
- (B) 1972
- (C) 1974
- (D) 1979

Correct Answer: (C) 1974

Solution: The KVK program is designed to train farmers and rural people, allowing them to improve their agricultural practices and productivity. This initiative was started in 1974, marking an important step towards agricultural development in India.

 Quick Tip

The Krishi Vigyan Kendra (KVK) program was launched to provide training to farmers and enhance agricultural productivity.

17: What should be the maximum moisture in poultry feed as per BIS 2007?

- A. 0.9%
- B. 1.1%
- C. 1.3%
- D. 2.1%

Correct Answer: (B) 1.1%

Solution: Poultry feed should maintain moisture levels that are optimal for both storage and nutritional quality. The maximum moisture content, as recommended by BIS 2007, is 1.1% to avoid spoilage and ensure feed quality.

 Quick Tip

Moisture content in poultry feed is important for preserving feed quality and preventing mold growth.

18: What should be the minimum crude protein in pre-starter broiler ration as per BIS 2007?

- A. 19%
- B. 22%
- C. 23%
- D. 24%

Correct Answer: (B) 22%

Solution: Crude protein levels in broiler feed are crucial for their early development. BIS 2007 specifies that pre-starter broiler rations should contain at least 22% crude protein to ensure proper growth and weight gain.

 Quick Tip

Crude protein is essential for growth and development in broilers, especially in the early stages of their life.

19: What is the maximum acceptable aflatoxin B1 level in broiler and layer ration as per BIS 2007?

- A. 20 ppb
- B. 25 ppb
- C. 30 ppb
- D. 35 ppb

Correct Answer: (A) 20 ppb

Solution: Aflatoxins are harmful toxins produced by fungi and can contaminate animal feed. BIS 2007 sets the maximum allowable aflatoxin B1 level at 20 ppb for broiler and layer rations to ensure the safety of poultry and the food chain.

 Quick Tip

Aflatoxin B1 is a toxic compound produced by fungi, and controlling its level in animal feed is crucial for safety.

20: What should be the minimum level of lysine in starter ration of broiler as per BIS 2007?

- (A) 1.2%
- (B) 1.3%
- (C) 1.0%
- (D) 0.7%

Correct Answer: (A) 1.2%

Solution: Lysine is an important amino acid that aids in protein synthesis, influencing growth and overall health in broilers. BIS 2007 recommends a minimum level of 1.2% lysine in broiler starter rations.

 Quick Tip

Lysine is an essential amino acid required for protein synthesis in broiler chickens, influencing growth and productivity.

21: A good quality silage has pH between.

1. (A) 4.5 - 4.8
2. (B) 3.5 - 4.2
3. (C) 4.8 - 5.2

4. (D) 5.2 - 5.4

Correct Answer: (B) 3.5 - 4.2

Solution: A good quality silage typically has a pH range between 3.5 and 4.2. This range ensures proper fermentation and preservation of the silage, while minimizing the growth of harmful microorganisms.

 Quick Tip

Silage with a pH between 3.5 and 4.2 is ideal for maintaining quality and preventing spoilage.

22: What is the First Limiting Amino Acid for Meat and Bone?

- (A) Methionine
- (B) Isoleucine
- (C) Tryptophan
- (D) Threonine

Correct Answer: (A) Methionine

Solution: Methionine is the first limiting amino acid for meat and bone. It is essential for protein synthesis and plays a crucial role in the growth and development of animals.

 Quick Tip

Methionine is often the first limiting amino acid in animal nutrition, especially for the growth of meat and bone.

23: What is the energy content level of Maize?

- (A) 3400 kcal
- (B) 2900 kcal
- (C) 3600 kcal
- (D) 1800 kcal

Correct Answer: (A) 3400 kcal

Solution: Maize is a highly energetic crop, and its energy content is approximately 3400 kcal per kilogram. This makes it an essential source of calories, especially in poultry and livestock feed. Additionally, it serves as a staple food in many regions of the world.

 Quick Tip

The energy content of maize is around 3400 kcal per kilogram, making it a high-energy crop commonly used in animal feed and human consumption.

24. In which part of the digestive system does the digestion of carbohydrates start first?

- (a) Mouth
- (b) Crop
- (c) Proventriculus
- (d) Gizzard

Correct Answer: (a) Mouth.

Solution: The digestion of carbohydrates begins in the mouth. Saliva contains the enzyme amylase (ptyalin), which breaks down starch into maltose, a simpler sugar. The process is initiated in the mouth before food moves further down the digestive system.

💡 Quick Tip

Salivary amylase functions optimally at a slightly alkaline pH and starts breaking down complex carbohydrates during chewing.

25. What is the origin state of the Ankaleshwar breed of chicken?

- (a) Uttar Pradesh
- (b) Gujarat
- (c) Maharashtra
- (d) Haryana

Correct Answer: (b) Gujarat.

Solution: The Ankaleshwar breed of chicken originates from the state of Gujarat, India. It is known for its adaptability to local climatic conditions and is primarily reared for egg and meat production. The breed is popular in rural areas due to its resilience and productivity.

💡 Quick Tip

Knowing the origin of indigenous breeds helps in promoting their conservation and sustainable use in poultry farming.

26. Which is the origin country of Muscovy duck?

- (a) England
- (b) Canada
- (c) South America
- (d) France

Correct Answer: (c) South America.

Solution: The Muscovy duck originates from South America. It is a domesticated duck species known for its meat quality and adaptability to various environments. This breed is commonly found in regions of Mexico, Central, and South America. Unlike other duck species, Muscovy ducks are more independent and have a unique appearance with red facial markings.

 Quick Tip

Muscovy ducks are widely known for their lean meat and are often used in sustainable farming systems.

27. What is the comb type of the Cornish breed of chicken?

- (a) Single
- (b) Rose
- (c) Pea
- (d) Walnut Single

Correct Answer: (c) Pea.

Solution: The Cornish breed of chicken has a pea comb, which is a small, low comb with three distinct ridges. This comb type helps the breed adapt to colder climates by minimizing the risk of frostbite. The Cornish chicken is primarily raised for its meat and is known for its broad breast and muscular build, making it a popular choice in broiler production.

 Quick Tip

Understanding comb types is essential in identifying breeds and their adaptability to specific climatic conditions.

28. What is the egg colour of the Araucana breed of chicken?

- (a) White
- (b) Brown
- (c) Blue
- (d) Black

Correct Answer: (c) Blue.

Solution: The Araucana breed of chicken is famous for laying blue eggs, a unique characteristic that distinguishes it from other chicken breeds. This trait is due to the presence of the Oocyanin pigment, which is deposited throughout the shell, giving it a blue color both inside and outside. The Araucana is a hardy breed known for its good egg production and distinctive

tufted appearance.

 Quick Tip

Araucana chickens are often chosen by poultry enthusiasts for their unique eggs and ornamental value.

29. Which breed of chicken has black-colored skin?

- (a) Aseel
- (b) Kadaknath
- (c) Langshan
- (d) Cochin

Correct Answer: (b) Kadaknath.

Solution: The Kadaknath breed of chicken is known for its black-colored skin, flesh, and even bones due to the presence of high melanin content. This indigenous breed originates from Madhya Pradesh, India, and is prized for its unique appearance and nutritional value, with high protein and low fat content. Kadaknath is popular for its adaptability to harsh environments and its medicinal properties in traditional medicine.

 Quick Tip

Kadaknath chicken is highly sought after for its nutritional benefits and is often referred to as the “black gold” of poultry.

30. What is the water content level in egg yolk of a chicken?

- (a) 33%
- (b) 75%
- (c) 88%
- (d) 48%

Correct Answer: (b) 75%.

Solution: The water content in the egg yolk of a chicken is approximately 75%, which is lower compared to the egg white that has about 88% water content. The yolk is rich in lipids, proteins, and other nutrients, making it an essential part of the egg’s nutritional profile. The lower water content compared to the egg white is due to the higher concentration of fats and proteins in the yolk.

 Quick Tip

Egg yolks are a rich source of vitamins, essential fatty acids, and cholesterol, contributing to their nutritional importance.

31. Bovine spongiform encephalopathy (BSE) disease is also known as:

- (a) Herpes
- (b) Mad Cow Disease
- (c) IBR
- (d) Scabies

Correct Answer: (b) Mad Cow Disease.

Solution: Bovine Spongiform Encephalopathy (BSE), commonly referred to as Mad Cow Disease, is a progressive neurological disorder of cattle caused by prions. The disease is characterized by spongy degeneration in the brain and spinal cord, leading to severe symptoms such as altered behavior, difficulty in movement, and eventual death.

 Quick Tip

BSE is a zoonotic disease and can be transmitted to humans as variant Creutzfeldt-Jakob disease (vCJD) through the consumption of infected cattle products.

32. Which hormone is responsible for oviposition of egg?

- (a) Luteinizing Hormone (LH)
- (b) Follicle Stimulating Hormone (FSH)
- (c) Oxytocin
- (d) Oestrogen

Correct Answer: (c) Oxytocin.

Solution: Oxytocin is the hormone responsible for oviposition (egg-laying) in chickens. It stimulates the contraction of the oviduct muscles, which facilitates the movement of the egg out of the hen's reproductive tract. While Luteinizing Hormone (LH) is involved in ovulation, oxytocin specifically triggers oviposition.

 Quick Tip

Oxytocin plays a crucial role not only in oviposition but also in milk ejection during lactation in mammals.

33. Best time for artificial insemination in cattle is:

- (a) 12-18 hrs before onset of estrus.
- (b) 18-24 hrs before onset of estrus.
- (c) 18-24 hrs after the end of estrus.
- (d) 12-18 hrs after onset of estrus.

Correct Answer: (d) 12-18 hrs after onset of estrus.

Solution: The optimal time for artificial insemination in cattle is 12-18 hours after the onset of estrus, as this corresponds to the release of the egg from the ovary (ovulation). Sperm viability and egg fertility are highest during this period, maximizing the chances of successful fertilization.

 Quick Tip

Monitoring estrus signs like mucus discharge, mounting behavior, and restlessness helps determine the ideal time for insemination.

34. The World Trade Organization (WTO) was created in the year:

- (a) 1992
- (b) 1995
- (c) 1990
- (d) 1998

Correct Answer: (b) 1995.

Solution: The World Trade Organization (WTO) was established on 1 January 1995 as a replacement for the General Agreement on Tariffs and Trade (GATT). The WTO oversees international trade agreements, facilitates trade negotiations, and resolves trade disputes between member nations.

 Quick Tip

The WTO plays a critical role in ensuring fair trade practices and reducing trade barriers worldwide.

35. Colostrum is secreted up to _____ hours of parturition and may be fed to the calf as much as it can take voluntarily:

- (a) 48
- (b) 72
- (c) 24
- (d) 36

Correct Answer: (a) 48.

Solution: Colostrum, the first milk produced by mammals after parturition, is secreted for up to 48 hours. It is rich in antibodies, nutrients, and growth factors that are essential for the immunity and development of newborn calves. Feeding colostrum during this period ensures passive transfer of immunity to the calf.

 Quick Tip

Ensure calves receive adequate colostrum within the first 6-12 hours of birth to maximize absorption of antibodies.

36. Vitamin D deficiency in young animals results in which disease?

- (a) Rickets
- (b) Osteomalacia
- (c) Osteodystrophia Fibrosa
- (d) All of the above

Correct Answer: (d) All of the above.

Solution: Vitamin D deficiency in young animals can result in: - Rickets: A condition characterized by weak and deformed bones due to impaired mineralization. - Osteomalacia: Softening of bones in adults, often due to prolonged Vitamin D deficiency. - Osteodystrophia Fibrosa: A metabolic bone disease associated with calcium and phosphorus imbalances. These conditions highlight the importance of Vitamin D in maintaining bone health and proper calcium-phosphorus metabolism.

 Quick Tip

Ensure young animals have adequate exposure to sunlight and a diet rich in Vitamin D to prevent these deficiencies.

37. Which breed of chicken lays white-colored eggs (shells)?

- (A) Andalusian
- (B) Ancona
- (C) Minorca
- (D) Orpington

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).

4. (B), (C), and (D) only.

Correct Answer: 1. (A), (B), and (C) only.

Solution: The breeds Andalusian, Ancona, and Minorca are known to lay white-colored eggs. The Orpington breed, however, lays brown-colored eggs. White egg layers are typically lighter in body weight and highly productive.

 Quick Tip

Egg color is determined by the breed of chicken and is not an indicator of nutritional content.

38. Which breed of chicken has shank feathers?

- (A) Brahma
- (B) Cochin
- (C) Ancona
- (D) Langshan

Choose the correct answer from the options given below:

- 1. (A), (B), and (C) only.
- 2. (A), (B), and (D) only.
- 3. (A), (B), (C), and (D).
- 4. (B), (C), and (D) only.

Correct Answer: 2. (A), (B), and (D) only.

Solution: The breeds Brahma, Cochin, and Langshan are characterized by having feathers on their shanks, a unique feature often associated with their ornamental value. Ancona does not have shank feathers.

 Quick Tip

Shank feathers are more common in heavy breeds and ornamental chickens.

39. Fat-soluble vitamins in animal feeds are:

- (A) Vit C
- (B) Vit D
- (C) Vit E
- (D) Vit A

Choose the correct answer from the options given below:

- 1. (A), (B), and (C) only.

2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 4. (B), (C), and (D) only.

Solution: The fat-soluble vitamins include Vitamin A, Vitamin D, and Vitamin E, as they are soluble in fats and stored in the body's fatty tissues. Vitamin C is water-soluble and is not included in this category.

 Quick Tip

Fat-soluble vitamins play essential roles in vision, bone health, and antioxidant protection.

40. Which breed of chicken has skin of white color?

- (A) Australorp
- (B) Langshan
- (C) Dorking
- (D) Sussex

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 4. (B), (C), and (D) only.

Solution: The breeds Langshan, Dorking, and Sussex are known for having white-colored skin. Australorp, on the other hand, typically has black skin. White skin is often preferred in meat breeds due to consumer preferences in certain markets.

 Quick Tip

Skin color in chickens varies with breeds and is influenced by genetic traits.

41. Which breed of chicken has yellow-colored shank?

- (A) Plymouth Rock
- (B) Brahma
- (C) Cornish
- (D) Sussex

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 3. (A), (B), (C), and (D).

Solution: The breeds Plymouth Rock, Brahma, Cornish, and Sussex are all known to have yellow-colored shanks. Yellow shanks are a distinguishing feature in several meat and dual-purpose chicken breeds.

 Quick Tip

Shank color in chickens is often used as a breed-specific trait for identification.

42. Which breed of chicken has only a single comb?

- (A) Plymouth Rock
- (B) Cochin
- (C) Australorp
- (D) Sussex

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 3. (A), (B), (C), and (D).

Solution: The breeds Plymouth Rock, Cochin, Australorp, and Sussex all have single combs. The single comb is a common feature in many chicken breeds, characterized by its straight and upright shape.

 Quick Tip

Single combs are more prone to frostbite in cold climates, so care is necessary during winters.

43. Which breed of duck comes under the category of meat-type duck?

- (A) Pekin
- (B) Indian Runner
- (C) Rouen

(D) Aylesbury

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (A), (C), and (D) only.

Correct Answer: 4. (A), (C), and (D) only.

Solution: The breeds Pekin, Rouen, and Aylesbury are categorized as meat-type ducks, known for their large size and excellent meat quality. Indian Runner is primarily an egg-laying breed.

 Quick Tip

Meat-type ducks are often raised for commercial meat production due to their rapid growth and efficient feed conversion.

44. Which of the following are indigenous breeds of chicken of India?

- (A) Tellichery
- (B) Miri
- (C) Ghagus
- (D) Daothigir

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 3. (A), (B), (C), and (D).

Solution: The breeds Tellichery, Miri, Ghagus, and Daothigir are indigenous to India. These breeds are hardy and well-adapted to local environmental conditions, making them valuable for rural poultry farming.

 Quick Tip

Indigenous breeds are known for their disease resistance and adaptability, contributing to sustainable poultry farming in India.

45. Which of the following are parts of an egg?

- (A) Cuticle
- (B) Stigma
- (C) Blastodisk
- (D) Chalaza

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (C), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 2. (A), (C), and (D) only.

Solution: The parts of an egg include Cuticle, Blastodisk, and Chalaza. The Stigma is a part of the ovary and not of the egg. The cuticle is a protective layer, the blastodisk is the fertilized part, and the chalaza keeps the yolk suspended in the egg.

 Quick Tip

Understanding the structure of an egg is crucial for poultry science and egg quality assessment.

46. What are the advantages of the deep litter system?

- (A) Vitamin B₁₂ and B₂ are made available
- (B) Welfare of birds is maintained
- (C) No incidence of coccidia
- (D) Lesser nuisance from flies

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 2. (A), (B), and (D) only.

Solution: The deep litter system provides several benefits, including the production of Vitamin B₁₂ and B₂, maintaining the welfare of birds, and reducing the nuisance from flies. However, it does not eliminate coccidia entirely.

 Quick Tip

The deep litter system is economical and eco-friendly, promoting better waste management in poultry farming.

47. Which of the following are mites for poultry?

- (A) Dermanyssus gallinae
- (B) Cytodites nudus
- (C) Ornithonyssus bursa
- (D) Argas persicus

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 3. (A), (B), (C), and (D).

Solution: The species Dermanyssus gallinae, Cytodites nudus, Ornithonyssus bursa, and Argas persicus are all mites that affect poultry, causing irritation, anemia, and disease transmission in birds.

 Quick Tip

Regular monitoring and preventive measures can effectively control mites in poultry farms.

48. Which of the following are bacterial diseases of poultry?

- (A) Fowl cholera
- (B) Ulcerative enteritis
- (C) Pullorum disease
- (D) Chronic respiratory disease

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 3. (A), (B), (C), and (D).

Solution: The diseases Fowl cholera, Ulcerative enteritis, Pullorum disease, and Chronic respiratory disease are all bacterial infections affecting poultry. Proper vaccination and biosecurity measures are necessary to prevent these diseases.

 Quick Tip

Routine health checks and good sanitation practices are essential to minimize bacterial infections in poultry.

49. Which of the following are economic traits of broiler?

- (A) Body weight at market age
- (B) Feed efficiency
- (C) Starting age of laying eggs
- (D) Mortality

Choose the correct answer from the options given below:

1. (A), (B), and (C) only.
2. (A), (B), and (D) only.
3. (A), (B), (C), and (D).
4. (B), (C), and (D) only.

Correct Answer: 2. (A), (B), and (D) only.

Solution: The economic traits of broilers include body weight at market age, feed efficiency, and mortality. The starting age of laying eggs is relevant for layers, not broilers. These traits are important for optimizing productivity and profitability in broiler production.

 Quick Tip

Economic traits like feed efficiency and body weight significantly impact the profitability of broiler farming.

50. Find the correct sequence of the topmost countries (Higher to Lower) in poultry population:

- (A) The United States of America
- (B) China
- (C) Brazil
- (D) India

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).
4. (C), (B), (D), (A).

Correct Answer: 3. (B), (A), (D), (C).

Solution: The correct sequence is China, followed by The United States of America, India, and Brazil in terms of poultry population. China leads globally with its large poultry farming operations, followed by significant production in the U.S. and India.

 Quick Tip

Poultry population rankings are influenced by factors such as farming practices, market demand, and export capabilities.

51. Find the correct sequence of the topmost egg-producing countries (Higher to Lower):

- (A) The United States of America
- (B) China
- (C) India
- (D) Indonesia

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (C), (D).
4. (C), (B), (D), (A).

Correct Answer: 3. (B), (A), (C), (D).

Solution: China leads as the top egg-producing country, followed by the United States, India, and Indonesia. China's large-scale poultry farming and domestic consumption drive its top position.

 Quick Tip

Egg production rankings reflect population size, poultry farming technology, and dietary preferences in each country.

52. Find the correct sequence of species of poultry from higher egg weight to lower egg weight:

- (A) Duck
- (B) Goose
- (C) Turkey
- (D) Guinea fowl

Choose the correct answer from the options given below:

1. (A), (B), (D), (C).

2. (A), (B), (C), (D).
3. (B), (C), (A), (D).
4. (C), (B), (D), (A).

Correct Answer: 2. (A), (B), (C), (D).

Solution: Egg weights in descending order are Duck, Goose, Turkey, and Guinea fowl. Ducks lay heavier eggs compared to other species, making them a preferred choice for certain egg markets.

 Quick Tip

Egg weight varies significantly between poultry species and is a key trait for determining market value.

53. Find the correct sequence of species of birds on the basis of age of sexual maturity (Higher to Lower):

- (A) Quail
- (B) Chicken
- (C) Duck
- (D) Turkey

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).
4. (D), (C), (B), (A).

Correct Answer: 1. (A), (B), (C), (D).

Solution: The correct sequence for sexual maturity age from higher to lower is Quail, Chicken, Duck, and Turkey. Quail matures the fastest, while turkey takes the longest time to reach sexual maturity.

 Quick Tip

Age of sexual maturity impacts egg production cycles and overall productivity in poultry farming.

54. Find the correct sequence of species of birds on the basis of its incubation period (Higher to Lower):

- (A) Quail

- (B) White Pekin
- (C) Bob White Quail
- (D) Muscovy Duck

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (D), (B), (C), (A).
3. (B), (A), (D), (C).
4. (C), (B), (D), (A).

Correct Answer: 2. (D), (B), (C), (A).

Solution: The correct sequence based on incubation period is Muscovy Duck, White Pekin, Bob White Quail, and Quail. Incubation periods vary significantly among species, with Muscovy ducks having the longest incubation period.

 Quick Tip

Incubation periods depend on the species and environmental factors like temperature and humidity.

55. Find the correct sequence of feed supplements having protein content from low to high:

- (A) Fish Meal
- (B) Meat Meal
- (C) Bone Meat Meal
- (D) Sunflower Cake

Choose the correct answer from the options given below:

1. (D), (C), (B), (A).
2. (D), (A), (C), (B).
3. (D), (B), (C), (A).
4. (D), (A), (B), (C).

Correct Answer: 4. (D), (A), (B), (C).

Solution: The correct order based on increasing protein content is Sunflower Cake, Fish Meal, Meat Meal, and Bone Meat Meal. Protein content in feed supplements is a key factor in poultry nutrition and growth.

 Quick Tip

High-protein supplements are essential for faster growth and improved productivity in poultry.

56. Find the correct sequence of species on the basis of ejaculation volume of semen (ml) from higher to lower:

- (A) Cock
- (B) Bull
- (C) Turkey
- (D) Boar

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (D), (B), (A), (C).
4. (C), (B), (D), (A).

Correct Answer: 3. (D), (B), (A), (C).

Solution: The correct sequence based on ejaculation volume is Boar, Bull, Cock, and Turkey. Ejaculation volume differs between species based on reproductive anatomy and breeding requirements.

 Quick Tip

Understanding semen volume and quality is critical for efficient artificial insemination practices.

57. Find the correct sequence of organs of oviduct on the basis of egg stay time while formation of egg (Higher stay time to Lower stay time):

- (A) Isthmus
- (B) Magnum
- (C) Shell Gland
- (D) Infundibulum

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).
4. (C), (B), (A), (D).

Correct Answer: 4. (C), (B), (A), (D).

Solution: The correct sequence based on egg stay time is Shell Gland, Magnum, Isthmus, and Infundibulum. The shell gland is where the egg spends the longest time as the shell forms. Formation of eggs depends upon the organs.

 Quick Tip

Egg formation duration varies across the oviduct, with the shell gland playing a significant role.

58. Find the correct sequence of parts of an egg from outer side to inner side:

- (A) Albumen
- (B) Shell
- (C) Blastodisc
- (D) Cuticle

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).
4. (D), (B), (A), (C).

Correct Answer: 4. (D), (B), (A), (C).

Solution: The correct sequence from outer to inner is Cuticle, Shell, Albumen, and Blastodisc. The cuticle is the protective outer layer, followed by the shell, the albumen, and the blastodisc where fertilization occurs.

 Quick Tip

Egg anatomy is essential for understanding its protective and functional layers.

59. Find the correct sequence of organs of the digestive system of chicken from mouth to cloaca:

- (A) Caeca
- (B) Gizzard
- (C) Proventriculus
- (D) Crop

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).

4. (D), (C), (B), (A).

Correct Answer: 4. (D), (C), (B), (A).

Solution: The digestive tract of chickens follows the sequence Crop, Proventriculus, Gizzard, and Caeca. Each organ plays a specific role in digestion, from storing food to grinding and nutrient absorption.

 Quick Tip

Understanding the sequence aids in diagnosing digestive health issues in poultry.

60. Find the correct sequence (Higher to Lower) of breed of chicken according to heart rate (Beats/Minute):

- (A) Chicken
- (B) Quail
- (C) Turkey
- (D) Goose

Choose the correct answer from the options given below:

- 1. (A), (B), (C), (D).
- 2. (A), (B), (D), (C).
- 3. (B), (A), (C), (D).
- 4. (C), (B), (D), (A).

Correct Answer: 3. (B), (A), (C), (D).

Solution: The correct order based on heart rate is Quail, Chicken, Turkey, and Goose. Smaller birds, such as quails, have faster heart rates compared to larger species like geese. Depending on the breed of chicken the rate varies.

 Quick Tip

Heart rate in birds is inversely proportional to their size and metabolic rate.

61. Find the correct sequence of breed of chicken on basis of body weight (Higher male body weight to Lower male body weight):

- (A) Leghorn
- (B) Jersey Black Giant
- (C) Cornish
- (D) New Hampshire

Choose the correct answer from the options given below:

1. (A), (B), (C), (D).
2. (A), (B), (D), (C).
3. (B), (A), (D), (C).
4. (B), (C), (D), (A).

Correct Answer: 4. (B), (C), (D), (A).

Solution: The sequence is Jersey Black Giant, Cornish, New Hampshire, and Leghorn. Jersey Black Giant is a heavy breed, while Leghorn is a lighter breed typically used for egg production. Depending on the breed of chicken the body we varies.

 Quick Tip

The body weight of chickens depends on their breed and primary purpose (meat or eggs).

62. Five key principles of Participatory Rural Appraisal (PRA) are:

- (A) Participation Flexibility
- (B) Team work, optimal ignorance systemic approach
- (C) Rigidity Non-ignorance
- (D) Team work/Flexibility/Systemic approach

Choose the correct answer from the options given below:

1. (B) and (C) are correct
2. (A) and (D) are correct
3. (A) and (B) are correct
4. (B) and (D) are correct

Correct Answer: 2. (A) and (D) are correct.

Solution: PRA requires adaptability to the unique dynamics of each community. Rigid frameworks or methodologies fail to capture the nuanced realities of rural areas and limit the effectiveness of the approach. By being flexible, PRA ensures inclusivity and relevance, making development initiatives more sustainable and impactful.

 Quick Tip

PRA encourages community involvement and adaptability in development practices.

63. Match List I with List II:

List I (Breed of sheep)	List II (Native Country)
(A) Merino	(I) England
(B) Ram Bouillet	(II) New Zealand
(C) Lincoln	(III) France
(D) Corridale	(IV) Spain

Choose the correct answer from the options given below:

1. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (IV), (B) - (III), (C) - (I), (D) - (II)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Correct Answer: 3. (A) - (IV), (B) - (III), (C) - (I), (D) - (II).

Solution: Merino is native to Spain, Ram Bouillet to France, Lincoln to England, and Corridale to New Zealand. These breeds are renowned for their specific wool and adaptability. The breed of sheep varies according to region variation.

💡 Quick Tip

Sheep breeds are often named after their native regions, reflecting their origin and breeding history.

64. Match List I with List II:

List I (Act of Parturition)	List II (Livestock)
(A) Foaling	(I) Mare
(B) Calving	(II) Buffalo
(C) Lambing	(III) Ewe
(D) Kidding	(IV) Goat

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
4. (A) - (II), (B) - (IV), (C) - (I), (D) - (III)

Correct Answer: 1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV).

Solution: Foaling occurs in Mares, Calving in Buffalo, Lambing in Ewes, and Kidding in Goats. These terms are specific to the species during birthing and are essential for communication among veterinarians, farmers, and animal health professionals. Using the correct term not only conveys precise information but also highlights the unique needs and characteristics of each species during birthing.

 Quick Tip

Recognizing species-specific terms for parturition is vital in livestock management.

65. Match List I with List II:

List I (Endocrine Gland)	List II (Hormone Secreted)
(A) Anterior Pituitary	(I) Inhibin
(B) Posterior Pituitary	(II) LH (Luteinizing Hormone)
(C) Ovary	(III) Relaxin
(D) Testis	(IV) Oxytocin

Choose the correct answer from the options given below:

1. (A) - (II), (B) - (IV), (C) - (III), (D) - (I)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (III), (B) - (II), (C) - (IV), (D) - (I)
4. (A) - (II), (B) - (IV), (C) - (I), (D) - (III)

Correct Answer: 1. (A) - (II), (B) - (IV), (C) - (III), (D) - (I).

Solution: In females, the anterior pituitary also secretes Follicle-Stimulating Hormone (FSH), which works alongside LH to regulate ovarian follicle development. Oxytocin from the posterior pituitary not only aids childbirth but also strengthens maternal bonding with the offspring. Relaxin from the ovaries increases joint flexibility during pregnancy, while Inhibin from the testes ensures sperm production is maintained at an optimal level without overstimulation by FSH.

 Quick Tip

Understanding hormone secretion is crucial for reproductive and endocrine system studies.

66. Match List I with List II:

List I (Parts of Digestive system of chicken)	List II (pH)
(A) Mouth	(I) 2.5
(B) Crop	(II) 6.0 - 6.8
(C) Stomach (Proventriculus and Gizzard)	(III) 7.0 - 7.5
(D) Duodenum	(IV) 4.5

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (III), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (II), (C) - (IV), (D) - (III)
3. (A) - (I), (B) - (III), (C) - (IV), (D) - (II)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Correct Answer: 2. (A) - (I), (B) - (II), (C) - (IV), (D) - (III).

Solution: The digestive parts have varying pH levels, with the mouth being acidic, the crop slightly acidic, the stomach highly acidic, and the duodenum neutral to slightly alkaline. Depending on the pH, learn the different parts of organisms.

 Quick Tip

Understanding pH in digestive organs aids in optimizing poultry nutrition and digestion.

67. Match List I with List II:

List I (Particular Features)	List II (Temperature)
(A) Brooding temperature	(I) 41°C
(B) Setter temperature in Incubator	(II) 39°C
(C) Chick body temperature	(III) 35°C
(D) Adult hen body temperature	(IV) 37.5°C

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (I), (B) - (III), (C) - (IV), (D) - (II)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Correct Answer: 1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV).

Solution: In females, the anterior pituitary also secretes Follicle-Stimulating Hormone (FSH), which works alongside LH to regulate ovarian follicle development. Oxytocin from the posterior pituitary not only aids childbirth but also strengthens maternal bonding with the offspring. Relaxin from the ovaries increases joint flexibility during pregnancy, while Inhibin from the testes ensures sperm production is maintained at an optimal level without overstimulation by FSH.

 Quick Tip

Temperature regulation is crucial for poultry growth, development, and survival.

68. Match List I with List II:

List I (Type of Arthropods)	List II (Name of Arthropods)
(A) Soft ticks	(I) Menopon gallinae
(B) Louse	(II) Tunga penetrans
(C) Fleas	(III) Cytodites nudus
(D) Mites	(IV) Argas persicus

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (III), (C) - (III), (D) - (IV)
2. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
3. (A) - (IV), (B) - (I), (C) - (II), (D) - (III)
4. (A) - (IV), (B) - (I), (C) - (III), (D) - (II)

Correct Answer: 3. (A) - (IV), (B) - (I), (C) - (II), (D) - (III).

Solution: Each arthropod species, such as mites, ticks, lice, and fleas, targets specific areas of poultry or livestock, leading to issues like skin irritation, blood loss, and disease transmission. Effective identification and timely control measures are crucial to minimize health risks and economic losses.

 Quick Tip

Proper identification of arthropods is key to effective pest control and health management.

69. Match List I with List II:

List I (Name of Disease)	List II (Causative Agent)
(A) Ranikhet Disease	(I) Corona virus
(B) Infectious Bursal Disease	(II) Herpes virus
(C) Infectious Bronchitis	(III) Paramyxovirus
(D) Infectious Laryngotracheitis	(IV) Birna virus

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
3. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
4. (A) - (IV), (B) - (I), (C) - (II), (D) - (III)

Correct Answer: 2. (A) - (III), (B) - (IV), (C) - (I), (D) - (II).

Solution: Diseases in poultry are caused by a range of pathogens, including viruses (e.g., Newcastle Disease Virus, Infectious Bursal Disease Virus), bacteria (e.g., Salmonella, Mycoplasma), fungi (e.g., Aspergillus), and parasites (e.g., Eimeria causing coccidiosis). Accurate identification of the causative agent is essential for implementing targeted interventions such as vaccinations, antibiotics, antifungals, or biosecurity measures. Early detection through clinical signs and diagnostic testing helps prevent the spread of disease, reduces mortality rates, and ensures optimal flock health and productivity.

 Quick Tip

Vaccination and biosecurity measures help prevent viral infections in poultry.

70. Match List I with List II:

List I (Name of Disease)	List II (Causative Agent)
(A) Brooder Pneumonia	(I) <i>Aspergillus flavus</i>
(B) Candidiosis	(II) <i>Aspergillus viridicatum</i>
(C) Aflatoxicosis	(III) <i>Aspergillus fumigatus</i>
(D) Ochratoxicosis	(IV) <i>Candida albicans</i>

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
3. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
4. (A) - (I), (B) - (IV), (C) - (II), (D) - (III)

Correct Answer: 3. (A) - (III), (B) - (IV), (C) - (I), (D) - (II).

Solution: Fungal diseases in poultry are caused by specific fungi such as *Aspergillus fumigatus* (causing Aspergillosis), *Candida albicans* (causing Candidiasis), and various molds producing mycotoxins (e.g., Aflatoxins, Ochratoxins). These diseases can lead to respiratory distress, reduced feed efficiency, and immunosuppression, significantly impacting poultry health and productivity. Contaminated feed, poor ventilation, and damp bedding often contribute to fungal growth. Understanding the lifecycle and environmental conditions promoting fungal infections is key to prevention, which includes ensuring dry storage of feed, regular cleaning of housing, and using antifungal additives in feed.

 Quick Tip

Mycotoxin management and fungal infection control are essential in poultry farming.

71. Match List I with List II:

List I (Name of Disease)	List II (Alternate Popular name of disease)
(A) Inclusion Body Hepatitis	(I) Bird flu
(B) New Castle Disease	(II) Gumboro Disease
(C) Infectious Bursal Disease	(III) Leechi Disease
(D) Avian Influenza	(IV) Ranikhet Disease

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (III), (C) - (II), (D) - (IV)
2. (A) - (I), (B) - (IV), (C) - (III), (D) - (II)

3. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Correct Answer: 3. (A) - (III), (B) - (IV), (C) - (II), (D) - (I).

Solution: This matching emphasizes the importance of knowing the alternate names of common poultry diseases, such as Newcastle Disease being referred to as Ranikhet Disease, or Infectious Bursal Disease commonly called Gumboro Disease. Recognizing these names is essential for effective communication among poultry farmers, veterinarians, and industry professionals. It helps ensure accurate diagnosis, facilitates proper treatment, and allows for the implementation of preventive measures like vaccinations. Moreover, awareness of these alternate terms aids in understanding regional terminology and enhances disease management strategies across different geographical areas.

 Quick Tip

The alternate disease names to ensure clarity in communication and better disease management practices in poultry farming.

72. Match List I with List II:

List I (Species)	List II (Chromosome No.)
(A) Cattle	(I) 38
(B) Sheep	(II) 50
(C) Buffalo	(III) 60
(D) Pig	(IV) 54

Choose the correct answer from the options given below:

1. (A) - (III), (B) - (II), (C) - (I), (D) - (IV)
2. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
3. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
4. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)

Correct Answer: 2. (A) - (I), (B) - (II), (C) - (III), (D) - (IV).

Solution: Chromosome numbers are unique to each species and play a crucial role in genetic identity, inheritance, and reproduction. For example, cattle have 60 chromosomes, while sheep have 54, and chickens possess 78. These variations influence traits like growth, productivity, and disease resistance. Understanding chromosome numbers is essential for selective breeding, hybridization, and identifying genetic abnormalities. It also helps in conservation efforts and ensures genetic diversity within populations. Advanced techniques like karyotyping and molecular genetics are used to study chromosomes, aiding in the development of improved breeds and better livestock management practices.

 Quick Tip

Genetics in animal breeding relies on chromosome number knowledge for crossbreeding.

73. Match List I with List II:

List I (Breed of Chicken)	List II (Origin Country)
(A) Plymouth Rock	(I) England
(B) Cochin	(II) Italy
(C) Leghorn	(III) China
(D) Cornish	(IV) America

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (II), (B) - (III), (C) - (IV), (D) - (I)
3. (A) - (IV), (B) - (III), (C) - (II), (D) - (I)
4. (A) - (IV), (B) - (III), (C) - (I), (D) - (II)

Correct Answer: 3. (A) - (IV), (B) - (III), (C) - (II), (D) - (I).

Solution: Understanding the origin of chicken breeds provides valuable insights into their specific traits, such as adaptability, productivity, and environmental requirements. For example, the Leghorn, originating from Italy, is known for its excellent egg-laying capacity, while the Cornish, from England, is favored for its meat quality. Similarly, breeds like Cochin, from China, are admired for their ornamental value and broodiness. Knowledge of a breed's origin helps farmers and poultry enthusiasts select breeds that align with their objectives, whether for commercial production, backyard farming, or aesthetic purposes. It also assists in preserving rare and heritage breeds, ensuring genetic diversity in poultry populations.

 Quick Tip

Depending on the regions, the breed of chicken varies and the climate affects the breeds.

74. Match List I with List II:

List I (Breed of Duck)	List II (Origin Country)
(A) Pekin	(I) England
(B) Aylesbury	(II) China
(C) Muscovy	(III) South America
(D) Rouen	(IV) France

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV)
2. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)
3. (A) - (IV), (B) - (III), (C) - (II), (D) - (I)

4. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)

Correct Answer: 1. (A) - (I), (B) - (II), (C) - (III), (D) - (IV).

Solution: Duck breeds originate from diverse regions, each adapted to specific climates and purposes, such as meat production, egg-laying, or ornamental display. For example, the Pekin, originating from China, is renowned for its rapid growth and high-quality meat, making it a favorite in commercial farming. The Rouen, from France, is a dual-purpose breed valued for both meat and ornamental qualities. The Muscovy, native to South America, is uniquely suited for tropical climates and known for its lean meat. Breeds like the Aylesbury, from England, excel in temperate regions with a focus on meat production. Understanding these origins allows farmers to select breeds best suited to their local environment, maximizing productivity while minimizing management challenges.

 Quick Tip

Choosing the duck breeds based on their origin and adaptability to local environmental conditions for optimal performance and sustainability.

75. Match List I with List II:

List I (Species of Poultry)	List II (Young One)
(A) Guinea Fowl	(I) Chick
(B) Turkey	(II) Duckling
(C) Chicken	(III) Keet
(D) Duck	(IV) Poult

Choose the correct answer from the options given below:

1. (A) - (I), (B) - (III), (C) - (IV), (D) - (II)
2. (A) - (III), (B) - (IV), (C) - (I), (D) - (II)
3. (A) - (IV), (B) - (II), (C) - (I), (D) - (III)
4. (A) - (III), (B) - (IV), (C) - (II), (D) - (I)

Correct Answer: 2. (A) - (III), (B) - (IV), (C) - (I), (D) - (II).

Solution: Identifying the young ones of poultry is crucial for effective farm management, as it enables farmers to provide species-specific care and nutrition tailored to each growth stage. For instance, a chick (young chicken) requires brooding with higher temperatures and specialized feed for rapid growth. Ducklings (young ducks) thrive in warm environments and benefit from water access early on. Keets (young guinea fowl) are more delicate and require careful handling to prevent stress. Poults (young turkeys) need nutrient-rich feed to support their larger size as they mature. Proper identification helps farmers monitor growth rates, detect early signs of health issues, and ensure optimal care for each species.

 Quick Tip

Recognizing poultry young ones like chicks, ducklings, keets, and poults aids in providing targeted care and tracking their development effectively.
