

Post of Forest Apprentice in Tamil Nadu Forest Subordinate Service (Group-VI Services)

1. Conversion of T_4 to T_3 occurs in the cytosol by Iodothyronine deiodinases. For activation the above enzyme, Which one of the following is required?
(A) CAMP (B) Selenium
(C) Vitamin E (D) Calcium
(E) Answer not known
2. The young neutrophil without segmented nucleus is termed as one of the following
(A) Immature cell
(B) Band cell
(C) Plasma cell
(D) Reticulocyte
(E) Answer not known
3. The major regulatory brain centers for respiration are
(A) Medulla and Pons
(B) Pons and Brainstem
(C) Medulla and Red nucleus
(D) Medulla, Pons and Brainstem
(E) Answer not known
4. The term thermoneutral zone indicates the State of animal where animal has to _____ to maintain body temperature.
(A) increase metabolism (B) decrease metabolism
(C) need to gain heat (D) no need to alter metabolism
(E) Answer not known

5. Following heat stress, immuno suppression by higher secretory rate of hormones of the following affects immune status of animals except
- (A) glucocorticoids
 - (B) growth hormone
 - (C) endorphins
 - (D) epinephrine
 - (E) Answer not known
6. For every cycle, the sodium potassium pump moves how many sodium ions out of the cell and potassium inside the cell
- (A) 3 Na⁺ and 2 k⁺ (out-in)
 - (B) 2 Na⁺ and 3 k⁺ (out-in)
 - (C) 3 k⁺ and 2 Na⁺ (out-in)
 - (D) 3 Na⁺ and 3 k⁺ (out-in)
 - (E) Answer not known
7. All the following components are involved in transport of iron in body except
- (A) Ferritia
 - (B) Hemosiderin
 - (C) Transferrin
 - (D) Biliverdin
 - (E) Answer not known
8. All the following methods are used to measure cardiac output except
- (A) Echo cardiography
 - (B) Indicator dilution technique
 - (C) Fick principle
 - (D) Electro cardiography
 - (E) Answer not known

9. The following special features are essential for prolonged smooth muscle contraction except
- (A) Calmodulin
 - (B) Myosin phosphatase
 - (C) Less energy for sustained contraction
 - (D) Well developed T-tubules system
 - (E) Answer not known
10. The following are the functions of Angiotensin-II except
- (A) Constrict afferent arterioles of nephron
 - (B) Release of aldosterone
 - (C) Second most potent vasoconstrictor in the body
 - (D) Reduces the ECF volume
 - (E) Answer not known
11. The mean blood pressure is the lowest in which of the following segment of blood vessels
- (A) Arterioles
 - (B) Capillaries
 - (C) Venules
 - (D) Venae Cavae
 - (E) Answer not known
12. A hypo proteinemia usually leads to edema which is mainly due to
- (A) low intake of protein
 - (B) increased capillary permeability
 - (C) liver disorders
 - (D) increased blood pressure
 - (E) Answer not known

21. Livestock production systems are changing mainly with the following attributes of
- (A) ✓ Demographics, economic development, climate change and available technologies.
 - (B) Economic development and climate change
 - (C) Demographics and available technologies
 - (D) Climate change and available technologies
 - (E) Answer not known
22. Per capita availability of egg in India during 2016 -17 is
- (A) 59
 - (B) 65
 - (C) ✓ 69
 - (D) 75
 - (E) Answer not known
23. FIAPO stands for
- (A) ✓ Federation of Indian Animal Protection Organisation
 - (B) Federation of Indian Animal Prevention Organisation
 - (C) Foundation of Indian Animal Prevention Organisation
 - (D) Foundation of Indian Animal Cruelty Prevention Organisation
 - (E) Answer not known
24. The State with highest buffalo population is
- (A) Andhra Pradesh
 - (B) Madhya Pradesh
 - (C) ✓ Uttar Pradesh
 - (D) Karnataka
 - (E) Answer not known

25. Concerning sheep, Vembur breed belongs to which district of Tamilnadu
(A) Coimbatore district (B) Thanjavur district
(C) The Nilgiris district (D) Thoothukudi district
(E) Answer not known
26. The native cattle breed reared in western parts of Tamilnadu is
(A) Bargur (B) Kangeyam
(C) Pulikulam (D) Umbala eheri
(E) Answer not known
27. National Livestock Mission has _____ submissions.
(A) 2 (B) 3
(C) 4 (D) 5
(E) Answer not known
28. Animal husbandry is an integral component of agriculture, supporting livelihoods of more than _____ of the rural population in Tamil Nadu.
(A) Two-thirds (B) One-third
(C) One-fourth (D) One-fifth
(E) Answer not known
29. The e-market portal for trading high quality bovine germplasm is
(A) E-pashu haat (B) E-choupal
(C) E-bay (D) OLX
(E) Answer not known

30. NCDC which was set up in India in the year 1963 under the act of Parliament for promoting and supporting rural economy cooperative principles stands for
- (A) National cattle development corporation
 - (B) National cattle development council
 - (C) Native cattle development council
 - (D) National cooperative development council
 - (E) Answer not known
31. Mischief including killing, poisoning and maiming of animals are punishable under Section _____ IPC.
- (A) 428 and 429
 - (B) 420 and 432
 - (C) 272 and 273
 - (D) 377 and 398
 - (E) Answer not known
32. Chicken alone account for about _____ percent of the total poultry population in India.
- (A) 30
 - (B) 50
 - (C) 70
 - (D) 90
 - (E) Answer not known
33. _____ was established by FAO and WHO as the reference point for developments associated with food standards.
- (A) TBT agreement
 - (B) OIE
 - (C) Codex Alimentarius Commission
 - (D) TRIMs agreement
 - (E) Answer not known

34. Cost of feed is almost _____ percent of the total cost of maintenance of cattle and buffaloes.
- (A) 20 (B) 40
(C) ✓60 (D) 80
(E) Answer not known
35. India, Cattle and Buffalo contribute nearly _____ percent of the gross national income.
- (A) 10 (B) ✓15
(C) 20 (D) 25
(E) Answer not known
36. All the procedures for analysis of nutrients should be followed by book protocols published by
- (A) NDDB (B) ICAR
(C) ✓AOAC (D) NDRI
(E) Answer not known
37. The first step in applying HACCP system to a food manufacturing operation is
- (A) to correct the hazard
(B) to identify and correct the food
(C) ✓to identify and quantify the hazard
(D) to evaluate the food
(E) Answer not known
38. _____ is an environmental management standard.
- (A) ✓ISO 14000 (B) ISO 22000
(C) ISO 9000 (D) ISO 9004-3
(E) Answer not known

39. _____ are also known as Whey proteins.
- (A) α -lactalbumin (B) κ -casein
(C) α -casein (D) β -casein
(E) Answer not known
40. Bones constitute about _____% of live weight of cattle.
- (A) 8% (B) 20-30%
(C) 4% (D) 50%
(E) Answer not known
41. As per Indian Standard specifications, infant milk foods should have minimum _____% proteins.
- (A) 7 (B) 15
(C) 20 (D) 25
(E) Answer not known
42. Malty flavour in milk is due to
- (A) fat oxidation
(B) growth of streptococcus lactis
(C) over heating
(D) absorption of foreign smelling substances
(E) Answer not known
43. Spleen of Pig is
- (A) elongated tongue shaped (B) oyster shaped
(C) flat and oval shaped (D) elongated oval shaped
(E) Answer not known

44. Halothane test is done to assess the stress susceptibility in
(A) Cattle (B) Poultry
(C) Sheep (D) Pigs
(E) Answer not known
45. As per PFA rules (1976) table buffer should contain not less than _____ percent fat.
(A) 60 (B) 70
(C) 80 (D) 90
(E) Answer not known
46. _____ is an alkali dairy detergent.
(A) Pyrophosphate (B) Citric acid
(C) Teepol (D) Sodium bicarbonate
(E) Answer not known
47. Fat liquoring increases the _____ of the leather.
(A) tensile strength (B) heat resistance
(C) colour (D) shining
(E) Answer not known
48. Water activity (a_w) of fresh meat is
(A) 0.99 (B) 0.89
(C) 0.80 (D) 0.60
(E) Answer not known

49. _____ can cause serious illness and death in people through consumption of milk products prepared from milk of infected animals.
- (A) *Salmonella typhimurium*
 - (B) *Listeria monocytogenes*
 - (C) *Mycobacterium porotuberculosis*
 - (D) *Bacillus anthracis*
 - (E) Answer not known
50. During anaerobic digestion of effluents, volatile fatty acids are utilized by bacteria to yield _____ gas.
- (A) oxygen
 - (B) methane
 - (C) carbon monoxide
 - (D) nitrogen
 - (E) Answer not known
51. Bleeding time of sheep carcass should last for _____ min.
- (A) 2 min
 - (C) 5 min
 - (B) 3 min
 - (D) 10 min
 - (E) Answer not known
52. Slime on the meat surface is caused by the growth of
- (A) *Penicillium*
 - (B) *Alcoligens*
 - (C) *Thamnidium*
 - (D) *Chromo bacterium lividum*
 - (E) Answer not known
53. Green rot in egg is caused by
- (A) *Pseudomonas fluorescens*
 - (B) *Acinetobacter*
 - (C) *Serratia spp*
 - (D) *Proteus melenovogenes*
 - (E) Answer not known

54. _____ specifies requirements for a food safety management system.
- (A) ISO 14000 (B) ISO 22000:2005
(C) ISO 9000 (D) ISO 9001
(E) Answer not known
55. _____ is the semi-soft blue mould cheese originated in Norway.
- (A) Sapsago cheese (B) Gammelost cheese
(C) Quarg cheese (D) Baker's cheese
(E) Answer not known
56. Vertical scalding of pigs uses a temperature of _____ for 7 minutes.
- (A) 61°C (B) 71°C
(C) 55°C (D) 75°C
(E) Answer not known
57. Carbon dioxide gas is used for group stunning of
- (A) Cattle (B) Pigs
(C) Sheep (D) Goat
(E) Answer not known
58. Dead animal arriving at flanguta house should be first checked for
- (A) Anthrax (B) Rabies
(C) Congestion (D) Tuberculosis
(E) Answer not known

59. Cholesterol (mg/100g) content of brain is
(A) 79 (B) 270
(C) 2200 (D) 410
(E) Answer not known
60. Protein content of buffalo milk is
(A) about 3.9% (B) about 1.9%
(C) about 3.0% (D) about 5.0%
(E) Answer not known
61. Soft scalding of poultry is done at
(A) 60°C (B) 55°C
(C) 40 – 45°C (D) 50 – 51°C
(E) Answer not known
62. National research centre on yak is located in the State of
(A) Arunachal Pradesh (B) Mizoram
(C) West Bengal (D) Tiripura
(E) Answer not known
63. The gestation period of Indian Elephant is
(A) 615 – 650 days (B) 600 – 610 days
(C) 610 – 614 days (D) 590 – 600 days
(E) Answer not known

64. The prevention of cruelty to animals act says that for drawing vehicle or carrying any load
- (A) any animal cannot be used in a day for more than nine hours
 (B) any animal cannot be used for more 5 hours without break
 (C) both (A) and (B)
 (D) where the temperature exceeds 102°F in afternoon
 (E) Answer not known
65. Electro thermo cautery is very useful if the arterties are
- (A) large (B) medium sized
 (C) very very small (D) small
 (E) Answer not known
66. At Viborg's triangle, this pouch is opened
- (A) Pharyngeal pouch (B) Laryngeal pouch
 (C) Guttural pouch (D) Urethral pouch
 (E) Answer not known
67. (1) Diathermy is painful on application
 (2) Cryo surgery is not painful
 (3) Little scarring in cryosurgery
- (A) 2 is preferred as 3 is true (B) 1 is right but 2 is wrong
 (C) 3 is wrong (D) 1 is wrong
 (E) Answer not known
68. The common site of Hematoma in Horse is spur vein which is in
- (A) Thoracic region (B) Abdominal region
 (C) Lumbar region (D) Pelvic region
 (E) Answer not known

73. Productive ovulatory cyst is
(A) Follicular cyst (B) Luteal cyst
(C) Cystic corpus luteum (D) Both (A) and (B)
(E) Answer not known
74. In late pregnancy of cow vaginal prolapse is common due to the
(A) Increased intra abdominal pressure
(B) Loosely attached vagina
(C) Uterine inertia
(D) Both (A) and (B)
(E) Answer not known
75. True extra uterine pregnancy is rare in
(A) Human (B) Domestic animals
(C) Wild animals (D) (B) and (C)
(E) Answer not known
76. Ovulation occurs in cow normally
(A) After the end of Estrum
(B) After the onset of Estrum
(C) 10 – 15 hrs after the end of Estrum
(D) One day after end of Estrum
(E) Answer not known
77. Most widely used natural hormone in veterinary reproductive medicine is
(A) Androgen (B) Estrogen
(C) Estradiol (D) Stilbestrol
(E) Answer not known

78. In Nutritional diseases primary deficiency means
(A) Dietary deficiency (B) Deficiency in Animal Health
(C) Digestive abnormality (D) Absorption abnormality
(E) Answer not known
79. Primary cobalt deficiency in Tamilnadu will not be found in grazing animals
(A) Tamilnadu soil is not deficient in cobalt
(B) Farmers feed more cobalt in diet
(C) Cobalt is not essential for grazing animals
(D) Cobalt is non essential trace element
(E) Answer not known
80. Production disease is termed also as
(A) Gynaecological disease
(B) Metabolic disease
(C) Deficiency disease
(D) Reproductive disease
(E) Answer not known
81. Clinically acetonemia of cattle is different from pregnancy toxemia of sheep but same in this aspect
(A) Biochemical (B) Anatomical
(C) Epidemiological (D) Gynaecological
(E) Answer not known

82. A major factor regulating forage intake in ruminants is
- (A) Acid insoluble ash (B) Acid detergent fibre
(C) Lignin (D) Neutral detergent fibre
(E) Answer not known
83. Identify the false statement:
- (A) Hammer mill and Roller mill are not used for grinding the grains.
(B) Soaking and flaking are wet processing methods of grain.
(C) Popping of grains ruptures the endosperm.
(D) Baling is a dry processing method for roughage.
(E) Answer not known
84. The pH range of very good silage is
- (A) 4.2 to 4.5 (B) 3.5 to 4.2
(C) 4.8 to 5.4 (D) 1.5 to 2.5
(E) Answer not known
85. Identify which is not correctly paired?
- (A) Starch, Amylase, Saliva
(B) Protein, Pepsin, Stomach
(C) Fat, Lipase, Pancreas
(D) Fibre, VFA, Simple stomach animals, dog
(E) Answer not known
86. The DCP content of paddy straw is
- (A) 5% (B) 10%
(C) 0% (zero) (D) 15%
(E) Answer not known

87. Match the following energy supplements:

- | | |
|----------------|----------------------|
| (a) Root tuber | 1. Cereal by product |
| (b) Rape seed | 2. Horse gram |
| (c) Maize bran | 3. Casava |
| (d) Legume | 4. Oil cake |

- | | (a) | (b) | (c) | (d) |
|--------------------------------------|------------------|-----|-----|-----|
| (A) | 4 | 2 | 3 | 1 |
| <input checked="" type="radio"/> (B) | 3 | 4 | 1 | 2 |
| (C) | 1 | 3 | 2 | 4 |
| (D) | 2 | 1 | 4 | 3 |
| (E) | Answer not known | | | |

88. Which segment of the digestive tube is the major site of sodium absorption?

- | | |
|--|---------------------|
| (A) Stomach | (B) Small Intestine |
| <input checked="" type="radio"/> (C) Large Intestine | (D) Rectum |
| (E) | Answer not known |

89. In dairy cattle during the last two months of gestation the general recommended additional allowance of DCP and TDN is

- | | |
|------------------------|---|
| (A) 0.7 kg and 0.14 kg | <input checked="" type="radio"/> (B) 0.14 kg and 0.7 kg |
| (C) 0.5 kg and 1 kg | (D) 0.75 kg and 1.5 kg |
| (E) | Answer not known |

90. Goose stepping gait is manifested in which animal species due to deficiency of what nutrient?

- | | |
|-----------------------|---|
| (A) Calves and Copper | <input checked="" type="radio"/> (B) Swine and Copper |
| (C) Swine and Zinc | (D) Swine and Calcium |
| (E) | Answer not known |

91. What is the name of the Anti nutritional factor present in cotton seed cake?
- (A) Sinigrin (B) Gassy pol
(C) Mimosine (D) Dhurrin
(E) Answer not known
92. Which is the organ producing the active form of vitamin D?
- (A) Liver (B) Kidney
(C) Skin (D) Lungs
(E) Answer not known
93. 'Curled toe paralysis' is caused by the deficiency of
- (A) Vitamin B1 (B) Vitamin B2
(C) Vitamin B6 (D) Vitamin B12
(E) Answer not known
94. The major precursor of milk fat contains
- (A) Propionic acid (B) Butyric acid
(C) Acetic acid (D) Valeric acid
(E) Answer not known

95. Match the following:

- | | |
|---------------------|-------------------------------|
| (a) Calcium soaps | 1. UDP |
| (b) PUFA | 2. By-pass Fat |
| (c) By-pass protein | 3. Feed additive |
| (d) Lecithin | 4. Polyunsaturated fatty acid |

- | | (a) | (b) | (c) | (d) |
|-------|------------------|-----|-----|-----|
| (A) ✓ | 2 | 4 | 1 | 3 |
| (B) | 4 | 2 | 3 | 1 |
| (C) | 1 | 2 | 3 | 4 |
| (D) | 3 | 1 | 2 | 4 |
| (E) | Answer not known | | | |

96. Match the following:

- | | |
|-------------------|------------------|
| (a) Tree leaves | 1. Lucerne |
| (b) Legume fodder | 2. Grasses |
| (c) Jowar | 3. Subabul |
| (d) Napier | 4. Cereal fodder |

- | | (a) | (b) | (c) | (d) |
|-------|------------------|-----|-----|-----|
| (A) | 2 | 4 | 3 | 1 |
| (B) | 1 | 2 | 4 | 3 |
| (C) ✓ | 4 | 1 | 2 | 3 |
| (D) | 3 | 1 | 4 | 2 |
| (E) | Answer not known | | | |

97. Consider the following statements:

Assertion (1): Chickens have a high glycine requirement

Reason (2): Glycine is an integral part of uric acid

- (A) Both 1 and 2 are true and 2 is the reason for 1
(B) Both 1 and 2 are true, 2 is not the correct reason for 1
(C) 1 is true but 2 is false
(D) Both 1 and 2 are false
(E) Answer not known

98. For efficient utilization of urea by cattle the following ratio of nitrogen: sulphur is recommended in the feedstuff.

- (A) 5 : 5 (B) 1 : 10
(C) 10 : 1 (D) 1 : 1
(E) Answer not known

99. As per BIS (2007), Crude Protein (%) content of broiler pre-starter, starter and finisher feeds respectively is

- (A) 20%, 22% and 23% (B) 22%, 23% and 20%
(C) 23%, 20% and 22% (D) 23%, 22% and 20%
(E) Answer not known

100. 'Chewing the cud' is the characteristic feature of

- (A) Dog (B) Horse
(C) Ruminants (D) Birds
(E) Answer not known

101. The protein and energy requirement of Bullock which is used for ploughing the land 6 hours in a day is
- (A) 420 g DCP and 3.8 kg TDN (B) 450 g DCP and 4.2 kg TDN
(C) 570 g DCP and 4.8 kg TDN (D) 630 g DCP and 5.6 kg TDN
(E) Answer not known
102. Which one of the following conditions is necessary for effective diagnosis of anaerobic infections (bacterial)?
- (A) Streaking on eosin-methylene blue agar
(B) Rapid transport of culture to the laboratory
(C) Assay for super oxide dismutase
(D) Sputum sampling
(E) Answer not known
103. Which of the following statement concerning viral transcription is correct?
- (A) It occurs in a specific temporal pattern for most RNA and DNA viruses.
(B) It involves virion transcriptase for negative-sense, enveloped RNA viruses.
(C) It occurs in the nucleus for proviruses.
(D) It may be inhibited by amantadine hydrochloride.
(E) Answer not known
104. Vent disease in rabbits is caused by
- (A) Serpulina spp (B) Leptospira spp
(C) Salmonella spp (D) Escherichia coli
(E) Answer not known

105. The source of psittacosis in man is
(A) Chickens (B) Ducks
(C) ✓ Parakeets (D) Sparrows
(E) Answer not known
106. Humans will not develop undulant fever when infected with
(A) Brucella abortus (B) Brucella Scris
(C) ✓ Brucella ovis (D) Brucella neotomae
(E) Answer not known
107. Canned food is responsible for food poisoning due to
(A) ✓ Clostridium botulinum toxins (B) Clostridium welchii toxins
(C) Salmonella toxins (D) Staphylococcal entero toxins
(E) Answer not known
108. Bubonic plague in man is caused by
(A) ✓ Yersinia pestis (B) Yersinia pseudo tuberculosis
(C) Salmonella typhi (D) Mycobacterium tuberculosis
(E) Answer not known
109. DNA synthesis enzyme required is
(A) ✓ DNA polymerase (B) Ligase
(C) Proteinase (D) RNA Polymerase
(E) Answer not known
110. Sporing rods of this gives a typical 'Drum - Stick' appearance
(A) ✓ Clostridium tetani (B) Clostridium chauvoei
(C) Clostridium botulinum (D) Clostridium novyi
(E) Answer not known

111. Pure culture of bacterial isolation by dilution method was first used by
(A) R.Koch (B) Lister
(C) F.Hesse (D) Schroeter
(E) Answer not known
112. Mycobactin dependency in primary cultures is seen in
(A) Mycobacterium bovis
(B) Mycobacterium avium
(C) Mycobacterium tuberculosis
(D) Mycobacterium paratuberculosis
(E) Answer not known
113. Sterilization in steam under pressure is done at
(A) 105°C for 20 minutes (B) 115°C for 15 minutes
(C) 121°C for 15 minutes (D) 124°C for 30 minutes
(E) Answer not known
114. Chinese letter pattern in stained smear indicates the presence
(A) Coryne bacterium diphtheria (B) Pasteurella multocida
(C) Bacillus anthracis (D) Camphylobacter foetus
(E) Answer not known
115. Cellular phagocytic theory of immunity was proposed by
(A) Bordet (B) Metchnikoff
(C) L.Pasteur (D) Pfeiffer
(E) Answer not known

116. Nagler reaction is a neutralization test to demonstrate
- (A) Clostridium perfringens type A
 - (B) Clostridium perfringens type D
 - (C) Bacillus sphaericus
 - (D) Clostridium baratti
 - (E) Answer not known
117. If 125 of 2000 cows were test-positive for enzootic bovine leukosis, the estimate of the prevalence of reactors in the population would be
- (A) 0.63%
 - (B) 3.60%
 - (C) 6.30%
 - (D) 63%
 - (E) Answer not known
118. Growth of most of the pathogenic bacteria is supported by
- (A) Brilliant green agar
 - (B) Mac Conkey agar
 - (C) Edward medium
 - (D) Blood agar
 - (E) Answer not known
119. The symmetric protein shell of the viruses which encloses bird nucleic acids is known as
- (A) Capsid
 - (B) Capsomer
 - (C) Envelope
 - (D) Nucleocapsid
 - (E) Answer not known
120. Sclenite broth is a selective liquid media for the growth of
- (A) Escherichia coli
 - (B) Salmonella spp
 - (C) Staphylococcus aureus
 - (D) Staphylococcus intermedius
 - (E) Answer not known

121. Electron microscope was introduced by
(A) Antony Van Leeuwenhoek (B) Elford
(C) L.Pasteur (D) Ruska
(E) Answer not known
122. Which of these is a not a general pattern of viral morphology?
(A) Enveloped helical (B) Complex helical
(C) Enveloped Icosahedral (D) Naked Icosahedral
(E) Answer not known
123. Traditional media for primary isolation of fungi is
(A) Mac Conkeys agar (B) MRS agar
(C) Nutrient agar (D) Sabourand dextrose agar
(E) Answer not known
124. Viral infections are difficult to treat because
(A) there is no drug available
(B) drugs that affect virus replication cause side effects
(C) there is no vehicle for delivery of drugs into cell
(D) drug receptors are not found in viruses
(E) Answer not known
125. Bacteria can acquire exogenous resistance genes via
(A) Conjunction (B) Transduction
(C) Transformation (D) Transposition
(E) Answer not known

126. A microbe that has potential in bioremediation of radioactive waste is
- (A) Bacillus Subtilis (B) Deinococcus radioduram
 (C) Enterococcus faecalis (D) Toxophiles
 (E) Answer not known

127. Assertion (A): Dogs are good sniffers having a keen sense of smell.
 Reason (R): Ethmoidal conclave are well developed and larger than nasal conclave.
- (A) Both (A) and (R) are false.
 (B) (A) is true but (R) is false.
 (C) Both (A) and (R) are true but (R) is not the reason for (A).
 (D) Both (A) and (R) are true, (R) is the reason for (A).
 (E) Answer not known

128. Match the following:

- | | |
|----------------------------|---------------|
| (a) Os rostri | 1. Fowl |
| (b) Complete tracheal ring | 2. Syrinx |
| (c) Fervestrated pleura | 3. Right lung |
| (d) Voicebox of fowl | 4. Pig |
| (e) Medientinal lobe | 5. Horse |

- | | (a) | (b) | (c) | (d) | (e) |
|---|------------------|-----|-----|-----|-----|
| (A) | 1 | 2 | 3 | 4 | 5 |
| (B) | 2 | 4 | 1 | 3 | 5 |
| (C) <input checked="" type="checkbox"/> | 4 | 1 | 5 | 2 | 3 |
| (D) | 3 | 5 | 1 | 2 | 4 |
| (E) | Answer not known | | | | |

129. Stenson's duct of parotid salivary gland opens in the oral cavity at the level of upper fifth cheek tooth in a papilla called
- (A) Papilla incisive (B) Papilla linguae
(C) ✓ Papilla salivaris (D) Sublingual caruncle or barb
(E) Answer not known
130. Identify which is not properly paired?
- (A) Margo plicatus, stomach of horse
(B) Paired caeca, fowl
(C) Oyster shell shape, spleen of goat
(D) ✓ Comma shaped caecum, ox
(E) Answer not known
131. The Principle organ of prehension in cattle is
- (A) Lips and tongue (B) Lips
(C) ✓ Tongue (D) Tongue and Teeth
(E) Answer not known
132. Sinuatrial Node (SA node) is the pacemaker of the heart for generation of electrical impulses located in the
- (A) Inter-atrial septum (B) Inter-ventricular septum
(C) ✓ Right atrial wall (D) Right ventricular wall
(E) Answer not known

133. The bony prominence which forms the point of elbow in the forelimb of dog is
- (A) ✓ Olecranon process of Ulna
 - (B) Acromioclavicular process of Scapula
 - (C) Deltoid tuberosity of Humerus
 - (D) Styloid process of Radius
 - (E) Answer not known
134. The fastest four beat gait encountered in animals with a step length of 4.35 to 8 meters is referred to as
- (A) Trot
 - (B) Pace
 - (C) ✓ Gallop
 - (D) Walk
 - (E) Answer not known
135. Menisci is an intra articular cartilage interposed between the articulating bones in _____ joint.
- (A) knee joint
 - (B) ✓ stifle joint
 - (C) atlantoaxial joint
 - (D) hock joint
 - (E) Answer not known
136. Which are the bones that are excavated to contain air spaces?
- (A) Splanchnic bones
 - (B) ✓ Pneumatic bones
 - (C) Sesamoids
 - (D) Spongy bones
 - (E) Answer not known
137. Pear shaped organism lie in pairs forming an acute angle in RBCs is
- (A) Babesia Sibi
 - (B) Theileria Annulata
 - (C) Anaplasma Marginate
 - (D) ✓ Babesia Bigemina
 - (E) Answer not known

138. Rectal coccidiosis in poultry is caused by
(A) *Eimeria tenella* (B) *Eimeria brunetti*
(C) *Eimeria necatrix* (D) *Eimeria acerucetina*
(E) Answer not known
139. Primary amoebic mening encephalitis in man is caused by
(A) *Giardia canis* (B) *Naegleria fowleri*
(C) *Entamoeba histolytica* (D) *Entamoeba coli*
(E) Answer not known
140. Blue tongue virus of sheep is transmitted by
(A) Black fly (B) No-see-UMS
(C) *Aedes mosquito* (D) House fly
(E) Answer not known
141. The fungi pilobolus is involved in the translation of larvae of
(A) *Fetaroides osteri* (B) *Dirofilaria repens*
(C) *Wuchereria bancrofti* (D) *Dictyo caulus viviparus*
(E) Answer not known
142. Cutaneous larva migrans is caused by
(A) *Toxocara lanis* (B) *Toxocara leonina*
(C) *Ancylostoma caninum* (D) *Diphylobothrium latum*
(E) Answer not known
143. The colour taken by fat upon osmic acid staining is
(A) Red (B) Black
(C) Yellow (D) Pink
(E) Answer not known

144. Accumulation of stone dust in the lung is known as
(A) Anthracosis (B) Siderosis
() Silicosis (D) Chalicosis
(E) Answer not known
145. The track that connects two epithelial surfaces
(A) Boil (B) Fistula
(C) Sinus (D) Pustule
(E) Answer not known
146. In Gout, which of the crystals deposited in tissues
(A) Oxalate (B) Urate
(C) Phosphate (D) Nitrate
(E) Answer not known
147. An increased serum ALT actively indicates liver damage in
(A) Cow (B) Pig
() Dog (D) Horse
(E) Answer not known
148. A hall mark of regenerative anaemia in dog is the presence of
(A) Increase in reticulocyte count (B) Nucleated RBCs
(C) Anisocytosis (D) Howell folly bodies
(E) Answer not known
149. Brucellosis in cone causes abortion during
(A) 2-3rd month of gestation (B) 4th-5th month of gestation
(C) 5th-6th month of gestation (D) 7th-8th month of gestation
(E) Answer not known

150. In Fowl Pox, the intra cytoplasmic inclusion body is called as
(A) Guarnieri body (B) Nigri body
(C) Bollinger body (D) Henz body
(E) Answer not known
151. Highly contagious immuno suppressive disease of young chicken
(A) Fowl typhoid (B) New castle disease
(C) Chronic respiratory disease (D) Infections bursal disease
(E) Answer not known
152. The streaks of haemorrhage on the folds of mucosa of rectum resembles Zebra marking in
(A) FMD (B) Hog cholera
(C) Rinder pest (D) Bovine viral diarrhoea
(E) Answer not known
153. The mortality in Entero toxemia in sheep caused by clostridium pelfringens type D is
(A) 20% (B) 50%
(C) 70% (D) 100%
(E) Answer not known
154. Abnormal curvature and dorsal prominence of spine is known as
(A) Lordosis (B) Scoliosis
(C) Kyphosis (D) Torticollis
(E) Answer not known

155. Proliferation of epithelial cells results in epithelial crescents seen in
(A) sub acute glomerulo nephritis (B) acute glomerulo nephritis
(C) chronic glomerulo nephritis (D) pyelo nephritis
(E) Answer not known
156. Ruptured immature neutrophils are called as
(A) Smudge cells (B) Ghost cells
(C) Basket cells (D) Dohce's bodies
(E) Answer not known
157. Flukes causing pendulus abdomen yellowish white cloacae discharge and laying of eggs without shell is
(A) Prosthagonimus ovatus (B) Chonorchis sinensis
(C) Heterophyes heliophyes (D) Echinostoma revolutum
(E) Answer not known
158. For routine haematology test, the most suitable anti coagulant vial is
(A) Heparin Vial (B) EDTA Vial
(C) Oxalate Vial (D) Fluride Vial
(E) Answer not known
159. Hypo static congestion which occurs after death is known as
(A) Agonal congestion (B) Anti mortem congestion
(C) Post mortem congestion (D) Post gonal congestion
(E) Answer not known

160. Mega colon and mega oesophagus is caused by
(A) Trypanosoma cruzi (B) Trypanosoma sambiense
(C) Trypanosoma brucei (D) Trypanosoma Rhodesians
(E) Answer not known
161. Chemical mule sing is done by using
(A) 10% NaOH (B) 20% ethyl alcohol
(C) 40% phenol (D) 10% KMnO₄
(E) Answer not known
162. Amplification of DNA by PCR requires
(A) Probes (B) Primers
(C) Histones (D) Phosphate
(E) Answer not known
163. In Eukaryote chromosome, identical daughter chromatid with centromere placed at centre is called
(A) Metacentric (B) Sub metacentric
(C) Telocentric (D) Acrocentric
(E) Answer not known
164. Eukaryotic ribosomes are having
(A) 80s, 60s and 40s (B) 70s, 50s and 30s
(C) 23s, 16s and 5s (D) 28s, 18s and 5s
(E) Answer not known

165. What are the repeating units of nucleic acids?
(A) Phosphate molecules (B) Bases
(C) Nucleotides (D) Sugar molecules
(E) Answer not known
166. Mitotic cell division occurs in
(A) Ova (B) Spermatozoa
(C) Somatic cells (D) Germ cells
(E) Answer not known
167. Normal Dihybrid phenotypic ratio in F₂ is
(A) 1:2:1:2:4:2:1:2:1 (B) 3:1
(C) 9:3:3:1 (D) 9:6:1
(E) Answer not known
168. Normal test cross phenotypic ratio in Dihybrid condition is
(A) 1:1 (B) 1:1:1:1
(C) 1:2:1 (D) 3:1
(E) Answer not known
169. DNA structure was first deduced during
(A) 1943 (B) 1953
(C) 1968 (D) 1973
(E) Answer not known
170. Black coloured meat found in
(A) Aseel (B) Bursa
(C) Kalamasi (D) Tellicherry
(E) Answer not known

171. Progeny testing is used for selections of

- (A) Bulls (B) Cows
(C) Calves (D) Heifers
(E) Answer not known

172. The co-efficient of inbreeding is measured by a formula

- (A) $F_{xy} = \sum \frac{1}{2} n_1 + n_2 + xy$ (B) $F_x = \sum \frac{1}{2} n_1 + n_2 + 1(1 + FA)$
(C) $F_y = \sum \frac{1}{2} n_1 + n_2 + 1(1 + FB)$ (D) $F_x = \sum \frac{1}{2} n_1 + n_2 + FA(1 + FA)$
(E) Answer not known

173. Jamaica Hope, a synthetic cattle breed developed in Jamaica by crossing

- (A) Jersey/Redsindhi/Holstein
(B) Jersey/Sahiwal/Holstein
(C) Jersey/Brahman/Angus
(D) Jersey/Tharparkar/Local cattle of Jamaica
(E) Answer not known

174. Heritability value of milk yield in cattle

- (A) 0-10% (B) 30-40%
(C) 50-80% (D) 20-25%
(E) Answer not known

175. In poultry, females are

- (A) Homogametic (B) Heterogametic
(C) Hemizygous (D) Polygametic
(E) Answer not known

176. Economic traits in farm animals are due to
(A) single gene (B) poly gene
(C) additive gene (D) epistatic gene
(E) Answer not known
177. Inbreeding co-efficient of an offspring of a full brother and sister mating is
(A) 12.5% (B) 25%
(C) 50% (D) 62.5%
(E) Answer not known
178. Co-efficient of relationship between two dizygotic twins
(A) 100% (B) 50%
(C) 25% (D) 75%
(E) Answer not known
179. Synthetic sheep breed developed by TANUVAS
(A) Nilgiri (B) Madras Red
(C) Mecheri (D) Sandyno
(E) Answer not known
180. Sheep breed with black coat colour
(A) Salem black (B) Trichy black
(C) Coimbatore (D) Vembur
(E) Answer not known

181. The decision by the farmer to apply an innovation/technology and continue to use it is called
- (A) Innovation (B) Rejection
(C) Adoption (D) Persuasion
(E) Answer not known
182. Blood meal is rich in the amino acid
- (A) tryptophan (B) isoleucine
(C) lysine (D) cystine
(E) Answer not known
183. Nomenclature for adult female duck is
- (A) Gader (B) Tom
(C) Drake (D) Cock
(E) Answer not known
184. Which farming system contribute 50% or more receipts from a single source?
- (A) Mixed farming (B) Specialised farming
(C) Diversified farming (D) Arable farming
(E) Answer not known
185. What is the moisture content of built up litter material in deep litter housing?
- (A) 10-15% (B) 15-20%
(C) 20-25% (D) 25-30%
(E) Answer not known

186. What is the average lifespan of goat?
- (A) 10 yrs (B) 11 yrs
(C) ✓ 12 yrs (D) 14 yrs
(E) Answer not known
187. Sexual dimorphism with female weighing heavier than male is observed in
- (A) Turkey (B) Guinea fowl
(C) Duck (D) ✓ Japanese quail
(E) Answer not known
188. End product of protein metabolism in poultry is
- (A) Nitrogen (B) Urea
(C) ✓ Uric acid (D) Ammonia
(E) Answer not known
189. Physiological zero temperature for hatching egg is
- (A) 20°C (B) 15°C
(C) ✓ 24°C (D) 18°C
(E) Answer not known
190. Birth of hairless piglet is due to the deficiency of
- (A) copper (B) sodium
(C) zinc (D) ✓ iodine
(E) Answer not known

191. The process of decomposing organic waste is termed as
(A) super compost (B) close packing
(C) turning over (D) composting
(E) Answer not known
192. The method of feeding followed in high yielding dairy cows to produce the maximum
(A) complete feeding (B) challenge feeding
(C) flushing (D) creep feeding
(E) Answer not known
193. Water containing ammonia and nitrite indicates
(A) Sewage contamination (B) Faecal contamination
(C) Inorganic contamination (D) Organic contamination
(E) Answer not known
194. A ram castrated after service is called
(A) Gimmer (B) Seggy
(C) Crone (D) Barren
(E) Answer not known
195. New born Piglet mortality is mainly due to
(A) Piglet anaemia (B) Crushing by mother
(C) Cannibalism (D) Enteritis
(E) Answer not known

196. The rams are allowed to stay with the ewes only during night hours and fed separately during daytime in
- (A) flock mating (B) hand mating
(C) pen mating (D) pasture mating
(E) Answer not known
197. Breeding age of Pigs/Gilts is
- (A) 8-9 months (B) 9-10 months
(C) 10-11 months (D) 11-12 months
(E) Answer not known
198. Time of ovulation in cattle is
- (A) 12-16 hours before the end of estrus
(B) 12-16 hours after end of estrus
(C) 12-16 hours after the onset of estrus
(D) At standing heat
(E) Answer not known
199. First animal to be inseminated is the one which is
- (A) Mounting
(B) Allowing other animals to mount
(C) Bellowing
(D) Restless animal
(E) Answer not known
200. Female cattle over one year, just attain maturity
- (A) Heifer (B) Calf
(C) Buller (D) Yearling
(E) Answer not known
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