

Sl. No. :

FAAVS

Register  
Number

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

2018

**ANIMAL HUSBANDRY AND VETERINARY SCIENCE  
(Degree Standard)**

Time Allowed : 3 Hours]

[Maximum Marks : 300

Read the following instructions carefully before you begin to answer the questions.

**IMPORTANT INSTRUCTIONS**

1. The applicant will be supplied with Question Booklet 15 minutes before commencement of the examination.
2. This Question Booklet contains 200 questions. Prior to attempting to answer the candidates are requested to check whether all the questions are there in series and ensure there are no blank pages in the question booklet. **In case any defect in the Question Paper is noticed it shall be reported to the Invigilator within first 10 minutes and get it replaced with a complete Question Booklet. If any defect is noticed in the Question Booklet after the commencement of examination it will not be replaced.**
3. Answer all questions. All questions carry equal marks.
4. You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.
5. An answer sheet will be supplied to you, separately by the Room Invigilator to mark the answers.
6. You will also encode your Question Booklet Number with Blue or Black ink Ball point pen in the space provided on the side 2 of the Answer Sheet. If you do not encode properly or fail to encode the above information, action will be taken as per commission's notification.
7. Each question comprises *four* responses (A), (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.
8. In the Answer Sheet there are **four** circles (A), (B), (C) and (D) against each question. To answer the questions you are to mark with Blue or Black ink Ball point pen ONLY ONE circle of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. *e.g.* If for any item, (B) is the correct answer, you have to mark as follows :  

(A) ● (C) (D)
9. You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the time of examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.
10. The sheet before the last page of the Question Booklet can be used for Rough Work.
11. Do not tick-mark or mark the answers in the Question Booklet.
12. Applicants have to write and shade the total number of answer fields left blank on the boxes provided at side 2 of OMR Answer Sheet. An extra time of 5 minutes will be given to specify the number of answer fields left blank.
13. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

SEAL

1. The major challenges faced by livestock sector is
- |                                 |                          |
|---------------------------------|--------------------------|
| (1) Shortage of feed and fodder | (2) Low productivity     |
| (3) Livestock Health            | (4) Financial Assistance |
- (A) (1) (2) (3)                      (B) (2) (3) (4)  
(C) (3) (4) (1)                      (D) (1) (4) (2)
2. AFDP Stands for
- (A) Accelerated fodder development programme  
(B) Advanced feed development programme  
(C) Additive feed development programme  
(D) Acute fodder development programme
3. The average space required for cattle weighing 300-400 kg in a railway wagon on road vehicle is
- |   |                   |
|---|-------------------|
| <input checked="" type="checkbox"/> (A) 1.4 sq. meter | (B) 2 sq. meter   |
| (C) 2.5 sq. meter                                     | (D) 1.8 sq. meter |
4. ABC program stands for
- |  |                                 |
|--|---------------------------------|
| (A) Animal breeding control                                  | (B) Artificial breeding control |
| <input checked="" type="checkbox"/> (C) Animal Birth control | (D) Aquatic breeding control    |
5. Carabeef constitute \_\_\_\_\_ percent of the total meat production in India.
- |          |   |
|----------|---|
| (A) 14.5 | <input checked="" type="checkbox"/> (B) 19.80 |
| (C) 45.0 | (D) 36.5                                      |
6. Frozen semen production bull stations in TamilNadu government farms are located at
- (A) Eachenkottai, Erode and Hosur  
(B) Hosur, Udhagamandalam and Coimbatore  
(C) Eachenkottai, Chettinadu and Thirupur  
 (D) Eachenkottai, Hosur and Udhagamandalam





14. What is the milk yield range of Kangeyam cow?  
(A) 400-500 kg  
(C) 800-900 kg  
 (B) 600-700 kg  
(D) 1000-1100 kg
15. Double spiny penis is present in  
(A) Lizards  
(C) Truths  
 (B) Tortoises  
(D) Snakes
16. The highest point of roof is  
(A) Cave  
(C) Overhang  
 (B) Ridge  
(D) Span
17. Backing the horse is done to  
(A) Turn the horse  
(C) Lead the horse  
 (B) Train the horse for riding  
(D) Find out defects in the Loin
18. Selective feeding can be avoided in  
(A) Challenge feeding  
(C) Steaming up  
 (B) Complete feeding  
(D) Split feeding
19. The elephant has a  
(A) Double stomach  
 (C) Simple stomach  
(B) Big pleural space  
(D) Complex stomach
20. In Poultry Farm, Light is Essential For  
(A) Growth  
(C) Warmth  
 (B) Egg Production  
(D) Disease prevention

21. In India, the quality control of animal feed is regulated by the legislation laid down by
- (A) Veterinary Council of India
  - (B) Indian Council of Agricultural Research
  - (C) Indian Council of Medical Research
  - (D) Bureau of Indian Standards
22. The fat content in the highest in milk of
- (A) Goat
  - (B) Cow
  - (C) Buffalo
  - (D) Dog
23. The amino acid which has a primary role in the prevention of muscular dystrophy in chicks is
- (A) Cysteine
  - (B) Glycine
  - (C) Histidine
  - (D) Phenylalamine
24. In feed processing, the particle size is reduced by the following :
- (a) Cutting
  - (b) Grating
  - (c) Shearing
  - (d) Impact grinding
- (A) only (a) and (b) are true
  - (B) only (c) and (d) are true
  - (C) (a) and (b) are true, (c) and (d) are false
  - (D) all (a), (b), (c), (d) are true
25. The only limiting amino acid in soybean meal is
- (A) lysine
  - (B) methionine
  - (C) leucine
  - (D) arginine

26. The enzyme which does not have copper as integral part of it is  
(A) Cytochrome oxidase (B) Monoamine oxidase  
(C) Tyrosinase  (D) Xanthine oxidase
27. Which of the following is most important in inhibiting the digestibility of paddy straw?  
(A) Silica  (B) Lignin  
(C) Hemicellulose (D) Oxalate
28. The safe upper limit for salts in drinking water to laying hens is  
 (A) <3000 ppm (B) <500 ppm  
(C) <1000 ppm (D) <1500 ppm
29. The uric acid formed from nucleic acids, oxidation is oxidised in tissues of ruminants and excreted through urine in the form of  
 (A) Allantoin (B) Hippuric acid  
(C) Creatinine (D) Phenaceturic acid
30. Urea-molasses-mineral blocks popularly called 'Buffalo chocolates' has been prepared by  
 (A) NDDB, Anand (B) NDRI, Karnal  
(C) ICAR (D) TANUVAS
31. In India, feeding standards for cattle was developed from  
(A) Haecker's Feeding Standard  (B) Morrison Feeding Standard  
(C) Savage Feeding Standard (D) Wolff's Feeding Standard
32. For digestion of crude fibre in the rumen, an optimum rumen pH should not be less than  
(A) 4.0  (B) 6.2  
(C) 7.0 (D) 7.4



33. Recombinant human protein used as a drug in Cancer condition  
(A) Interferons ( $\alpha, \beta, \gamma$ )  (B) Interleukins  
(C) Insulin (D)  $\alpha_1$  antitrypsin
34. Inheritance pattern in ABO blood group system in Humans  
(A) Hierarchical dominance  (B) Hierarchical co-dominance  
(C) Dominance (D) Recessive
35. The term "Gene" was coined by  
(A) Mendel, 1865 (B) Boveri and Sutton, 1902  
 (C) Johannsen, 1909 (D) Bateson, 1905
36. Chromosome number in Turner syndrome  
(A) 46, XX  (B) 45, XO  
(C) 46, XY (D) 47, XXX
37. Garole sheep breed belongs to  
(A) Orissa (B) Assam  
 (C) West Bengal (D) Telungana
38. In India, Artificial Insemination was started first at  
 (A) Mysore (B) Izatnagar  
(C) Karnal (D) Chennai
39. Tarai breed belonging to Uttar Pradesh is a  
(A) Cattle breed  (B) Buffalo breed  
(C) Sheep breed (D) Goat breed

40. Dominance of a trait is due to  
 (A) Inter allelic interaction  
 (C) Epistasis  
 (B) Intra allelic interaction  
 (D) Blending inheritance
41. Important economic traits in cattle  
 (A) Milk yield and calving interval  
 (C) Milk yield and weaning weight  
 (B) Milk yield and tugging percentage  
 (D) Milk yield and coat colour
42. Genotypic frequency in Dihybrid cross is  
 (A) 9 : 3 : 3 : 1  
 (C) 1 : 1 : 2 : 6 : 2 : 3 : 1  
 (B) 1 : 2 : 1 : 2 : 4 : 2 : 1 : 2 : 1  
 (D) 1 : 1 : 1 : 1
43. Dwarf cattle breed of Kerala  
 (A) Malanad Gidda  
 (C) Vechur  
 (B) Punganur  
 (D) Pulikulam
44. Which one of the following hormones have their receptor in the nucleus of target cell?  
 (A) Growth hormone  
 (C) Growth factors  
 (B) Glucagon  
 (D) Thyroid hormones
45. Find out the correct reason for changing of low digestible feed to high digestible feed in ruminants should take place gradually.  
 (A) Rumen papillary size depends on the diet  
 (B) UFA production makes papillary growth  
 (C) Butyrate and propionate favour papillae growth  
 (D) All of the above are true



46. Which of the following is considered as counter current exchangers in the kidneys?
- (A) Peritubular network                      (B) Loop of Henle  
 (C) Vasa recta                                      (D) Efferent arterioles
47. The normal range of ejection fraction for resting dogs are
- (A) 40 – 50 %                                       (B) 50 – 65 %  
(C) 65 – 80 %                                      (D) > 80 %
48. The importance of hexose monophosphate pathway is because it generates
- (A) NADPH    (B) Ribose – 5 - Phosphate  
 (C) Pyruvate    (D) Both (A) and (B)
49. The important features of avian lungs is gas exchanges is
- (A) gas flows during inspiration and expiration  
(B) only during inspiration  
(C) only during expiration  
(D) gas does not flow through lungs
50. Microbial proteins can be synthesized in the rumen by using one of the following
- (A) Dietary carbohydrates  
 (B) Non – protein nitrogen sources  
(C) Volatile fatty acids  
(D) Microbial destruction
51. The Bovine uterus is attached to the lateral wall of pelvic cavity by
- (A) Dorsal Intercoroneal Ligament  
(B) Suspensory Ligament  
 (C) Broad Ligament  
(D) Ventral Intercoroneal ligament

52. Assertion (A) : The large and small colon of horse is sacculated  
Reason (B) : Muscular bands or taeniae are present in the horse colon

- (A) Both (A) and (B) are false  
 (B) Both (A) and (B) are true. (B) is the reason for A  
(C) (A) is true but (B) is false  
(D) (A) and (B) are true but (B) is not the reason for A

53. Match the following:

- |                    |                     |
|--------------------|---------------------|
| (a) Saccus caecus  | 1. Pig              |
| (b) Tons pyloricus | 2. Muscular stomach |
| (c) Coprodeum      | 3. Stomach of horse |
| (d) Gizzard        | 4. Cloaca of fowl   |

- |   | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| <input checked="" type="checkbox"/> (A) | 3   | 1   | 4   | 2   |
| (B)                                     | 2   | 4   | 1   | 3   |
| (C)                                     | 4   | 2   | 3   | 1   |
| (D)                                     | 3   | 4   | 1   | 2   |

54. Identify the true statement?

- (1) Tongue is prehensile in Horse  
(2) Fungiform, foliate and vallate papillae of tongue carries taste buds  
(3) Torus linguae is absent in tongue of Ox

- (A) All three statements are true  
 (B) Only 2 is true  
(C) 1 and 2 are true, 3 is false  
(D) 2 and 3 are true, 1 is false

55. Cerebellomedullary cistern is penetrated for the collection of CSF in the following space
- (A) Sacro – caudal space
  - (B) Atlanto – occipital space
  - (C) Lumbosacral space
  - (D) Sacrocandal and lumbosacrel space
56. Which of the muscles belong to the hamstring group?
- (A) Biceps femoris, semi tendinosus, semin membranosas
  - (B) Obturator internus, gluteus medius, quadratus femoris
  - (C) Flexor carpi ulneris, superficial digital flexor deep digital flexor
  - (D) Gracilis, pectineus, adductor
57. The virulence factor for streptococous pneumoniae is
- (A) C-reactive protein
  - (B) Bacitracin
  - (C) Endotoxic lipopolysaccharide
  - (D) Capsular polysaccharide
58. Foot hill abortion in cattle is due to the infection wilt
- (A) Chlamydia psittaci
  - (B) Chlamydia pneumoniae
  - (C) Chlamydia trachomatis
  - (D) Camphylobacter foetus
59. Which of the following substances is not released during an anaphylactic reaction?
- (A) Histamine
  - (B) Kirins
  - (C) C3a anaphylatoxin
  - (D) Serotorin



60. Cold enrichment procedure is required for the growth of
- (A) *Mycobacterium bovis*
  - (B) *Corynebacterium pyogenes*
  - (C) *Listeria monocytogenes*
  - (D) *Clostridium perfringens*
61. Concerning antimicrobial which antibiotics binds DNA and inhibits replication and transcription is
- (A) Actinomycin D
  - (B) Chloramphenicol
  - (C) Polymyxins
  - (D) Penicillin
62. Pathogenic Staphylococci responsible for mastitis in dairy animal is
- (A) *Staphylococcus aureus* subsp *anaerobius*
  - (B) *Staphylococcus intermedius*
  - (C) *Staphylococcus aureus*
  - (D) *Staphylococcus hyicus*
63. The following trigger germination of spores except
- (A) Glucose
  - (B) Lipids
  - (C) Alanine
  - (D) Adenosine
64. Chloramphenicol is destroyed by
- (A) Acetyl transferase
  - (B) Beta lactamase
  - (C) Phospho transferase
  - (D) Nucleotide transferase

65. Blue tongue virus belongs to the genus
- (A) Rhinovirus (B) Rotavirus  
 (C) Orbivirus (D) Orltoreovirus
66. Feline ringworm is usually caused by
- (A) Microsporium audocinii  (B) Microsporium canis  
(C) Microsporium felis (D) Trichophyton felis
67. Detergents are
- (A) Low level germicides (B) Excellent antiseptics  
 (C) Excellent disinfectant  (D) High level germicides
68. Haemorrhagic septicaemia is, an acute, highly fatal disease of cattle is caused by
- (A) Pasteurella maltocida serotype A : 3  
(B) Pasteurella maltocida serotype D : 2  
 (C) Pasteurella maltocida serotype B : 2 and E : 2  
(D) Pasteurella maltocida serotype F : 4
69. Superoxide ion is toxic to strict anaerobes because they lack
- (A) catalase  (B) dismutases  
(C) peroxidases (D) oxidases
70. Johne's disease is caused by
- (A) Mycobacterium avium ssp. avium  
 (B) Mycobacterium avium ssp paratuberculosis  
(C) Mycobacterium simiae  
(D) Mycobacterium xenopi

71. Remnants of nuclear material appear as single or double spherical brush bodies in RBC are known as
- (A) Heinz bodies (B) Inclusion bodies  
 (C) Howell-jolly bodies (D) Lichy bodies
72. Curled toe paralysis in chicks is due to
- (A) Vitamin C deficiency  
 (B) Thiamine deficiency  
 (C) Choline deficiency  
 (D) Riboflavin deficiency
73. Type of Giant cell seen in tuberculosis
- (A) Reed-Stenberg cells (B) Touton giant cell  
 (C) Langhan's giant cell (D) Tumor giant cell
74. In necrosis, fragmentation of the nucleus is called as
- (A) pyknosis (B) karyolysis  
 (C) karyorrhexis (D) chromatolysis
75. Pomegranate seed shaped granules seen in eosinophil of
- (A) cattle (B) pig  
 (C) cat  (D) horse
76. In Avian psittacosis, the renal epithelium contains
- (A) Bollinger bodies  (B) LCL bodies  
 (C) Barr bodies (D) Nigri bodies



77. Torsion of the uterus is most common in
- (A) Horse (B) Dog  
(C) Sheep ~~(D) Cow~~
78. Inflammation of caecum is known as
- ~~(A) Typhlitis~~ (B) Proctitis  
(C) Colitis (D) Peritonitis
79. Tape worm causing macrocytic hypo chromic anaemia by competing with the host for Vitamin B<sub>12</sub> is
- (A) Dipylidium caninum  
(B) Meso cestoides lineatus  
(C) Taenia saginata  
~~(D) Diphylobotharium latum~~
80. Basophilic stippling is a hematological change seen in
- (A) Arsenic poisoning (B) Nitrite poisoning  
~~(C) Lead poisoning~~ (D) Mercuric poisoning
81. In Trypanosomiasis, the main biochemical alteration in the blood is
- (A) Hyperglycemia ~~(B) Hypoglycemia~~  
(C) Hypoproteinemia (D) Hypo calcemia
82. Cysts of Giardia lamblia can be concentrated by using
- ~~(A) Zinc sulphate solution~~  
(B) Saturated salt solution  
(C) Sodium nitrate solution  
(D) Normal saline solution

83. Peroneal tenotomy is done in Horse to treat
- (A) Hamstring (B) Haltstring  
 (C) String Halt (D) Both (A) and (B)
84. Post operatively, Animal should not be kept in this recumbency
- (A) Ventral (B) Right lateral  
 (C) Left lateral  (D) Dorsal
85. Radio opaque cystic calculi are made of
- (A) Calcium oxalate (B) Silica  
 (C) Cystine  (D) Both (A) and (B)
86. Color assigned by ultra sound machine to aorta & vena cava is related to
- (A) Color of blood  
 (B) Velocity of blood flow  
 (C) Direction of blood flow  
 (D) Both (B) and (C)
87. Foetal well being is monitored by assessing
- (A) Amniotic creatine  
 (B) Allantoic creatine  
 (C) Yolk sac creatine  
 (D) Chorionic creatine
88. "Hooded" cervix is a problem in A.I. of
- (A) Horse (B) Cattle  
 (C) Dog  (D) Sheep and goat





93. ISO electric point of casein at is pH  
 (A) 5.3  (B) 4.7   
 (C) 6.2  (D) 5.8
94. \_\_\_\_\_ is used for demineralization of bones during gelatine production.  
 (A) Hydrochloric acid  (B) Sulfuric acid   
 (C) Acetic acid  (D) Nitric acid
95. Electrical stimulation of the carcass \_\_\_\_\_ the time for the onset of rigor mortis.  
 (A) Stops  (B) Shortens   
 (C) Maintains  (D) Extends
96. \_\_\_\_\_ is not included in poultry giblets.  
 (A) heart  (B) liver   
 (C) lung  (D) gizzard
97. High risk animal waste must be heated to a core temperature of atleast  
 (A) 133°C for 20 min  (B) 95°C for 10 min   
 (C) 150°C for 15 min  (D) 100°C for 7 min
98. Pale, soft and exudative condition is observed in  
 (A) frozen meat  (B) fresh meat   
 (C) cured meat  (D) fermented meat
99. Growth of penicillium spp on egg shell or just inside it causes  
 (A) Yellow rot  (B) Pin spot   
 (C) Red rot  (D) Black rot

100. In which year the Government of India constituted the Indian Board for Wild life for wild life conservation?
- (A) 1952 (B) 1955  
(C) 1958 (D) 1960
101. In which scheme the provision for animal insurance compound is available
- (A) Livestock Health and Disease control scheme  
(B) Rashtriya Gokul Mission  
 (C) National Livestock Mission  
(D) National Dairy plan
102. The breed evolved out of crossbreeding between Tharparkar and Holstein – Friesian is
- (A) Karan Fries (B) Thar Fries  
(C) Karan Swiss (D) Holstein – Parkar
103. Non-cash cost is otherwise known as
- (A) Fixed cost  (B) Implicit cost  
(C) Opportunity cost (D) Variable cost
104. Poultry Venture Capital fund scheme of Government of India is implemented through
- (A) Indian Bank  
 (B) National Bank for agriculture and rural Development  
(C) State Bank of India  
(D) Union Bank of India

105. The contribution of livestock sector to total GDP at current prices (2015-16) is  
(A) 3.5 %  (B) 4.5%  
(C) 6.2% (D) 8.4%
106. Which one of the following is not the native cattle breed of TamilNadu is  
(A) Alambadi (B) Bargur  
 (C) Jersey (D) Pulikulam
107. Central Cattle Breeding Farm is located at \_\_\_\_\_ in TamilNadu.  
 (A) Alamudhi (B) Bargur  
(C) Sivagangai (D) Korkai
108. Producing output at the minimum possible cost is called as  
(A) V-efficiency  (B) X- efficiency  
(C) Y - efficiency (D) Z- efficiency
109. \_\_\_\_\_ is the process of introducing air or any substance into the female organ of cow to get more milk.  
(A) Bishoping  (B) Phooka  
(C) Bestiality (D) Mischief
110. National Dairy Development Board (NDDB) was established in  
(A) 1955  (B) 1965  
(C) 1975 (D) 1985
111. Bestiality is punishable under the section \_\_\_\_\_ IPC.  
(A) 272 (B) 273  
 (C) 377 (D) 420

112. What should be the replacement rate of dairy cattle and buffalo for maintaining efficiency of production?
- (A) 5 (B) 10  
(C) 15  (D) 20
113. What is the floor space requirement for cow?
- (A) 3.0 m<sup>2</sup>  (B) 3.5 m<sup>2</sup>  
(C) 4.0 m<sup>2</sup> (D) 4.5 m<sup>2</sup>
114. The heritability of the body weight of an animal is
- (A) Highly (B) Moderately  
(C) Poor (D) Not
115. Among the following poultry species, which is least susceptible to Aflatoxicosis?
- (A) Duck (B) Chicken  
 (C) Guinea Fowl (D) Turkey
116. Which is the home tract of Bargur cattle?
- (A) Erode (B) Krishnagiri  
(C) Dharmapuri (D) Salem
117. Which is the goat breed of Jersey?
- (A) Sannen  (B) Anglo Nubian  
(C) Togenberg (D) Angora
118. Ectoparasiticides can be applied to pregnant and breeding rams by
- (A) Swim bath  (B) Hand bath  
(C) Spraying (D) Dusting



119. In temporary dentition \_\_\_\_\_ is absent.

(A) Premolar teeth

(B) Canine teeth

(C) Molar teeth

(D) Incisors

120. Consider the following statements :

Assertion 1 : Diets high in meat may induce osteoporosis in tigers.

Reason 2 : Meat is imbalanced with calcium and phosphorus.

(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

121. The iron requirement of baby pig is increased because of

1. Its rapid growth rate

2. High rate of hemoglobin synthesis

3. Low placental transfer of iron

4. Low transfer of iron into cow milk

(A) 1, 2, 3 and 4

(B) 1 and 3 only

(C) 1, 2 and 4 only

(D) 1, 3 and 4 only

122. The practise of increasing the nutrient intake of ewes prior to and during breeding is called

(A) Flushing

(B) Creep feeding

(C) Ship-a-day feeding

(D) Restricted feeding

123. Average feed consumption of an adult indigenous pig is

(A) 5 kg/day

(B) 2 kg/day

(C) 3 kg/day

(D) 1 kg/day

124. DCP percentage is highest in  
 (A) Lucerne hay (B) Paddy straw  
(C) Oat hay (D) Sorghum
125. Which of the following is common to Salseed, Sorghum and Jowar?  
(A) Mowrin  (B) Tankins  
(C) Lignin (D) Glucosinolate
126. The general ratio between roughage and concentrate in dairy cattle ration is  
 (A) 60 : 40 (B) 40 : 60  
(C) 30 : 70 (D) 25 : 75
127. Pica is due to deficiency of  
(A) Calcium  (B) Phosphorus  
(C) Magnesium (D) Selenium
128. Fore milk is low in \_\_\_\_\_ content than hind milk.  
 (A) Fat (B) Lactose  
(C) Protein (D) Vitamin D
129. How much kilogram of fodder can be stored in one cubic metre of silo pit space?  
(A) 100 kg (B) 200 kg  
(C) 300 kg  (D) 400 kg
130. Cats are very sensitive to deficiency of an amino acid  
(A) Arginine (B) Lysine  
(C) Methionine  (D) Taurine

131. The daily DCP and TDN requirement for growing Indian sheep weighing 10 kg body weight with average daily gain of 100 g/day as per the ICAR recommendation is
- (A) 36 g DCP and 199 g TDN      ✓ (B) 56 g DCP and 299 g TDN  
(C) 76 g DCP and 399 g TDN      (D) 100 g DCP and 500 g TDN
132. Roughages are bulky feeds containing of
- ✓ (A) ">" 18% crude fibre and "<" 60% TDN  
(B) ">" 18% crude fibre and ">" 60% TDN  
(C) "<" 18% crude fibre and "<" 60% TDN  
(D) "<" 18% crude fibre and ">" 60% TDN
133. Dideoxy chain termination method of DNA sequencing is developed by
- (A) Maxam and Gilbert      ✓ (B) Sanger  
(C) Kary Mullis      (D) Watson and Crick
134. The point mutations that change a condon for an amino acid into a terminator condon is called as
- (A) Missense mutation      ✓ (B) Nonsense mutation  
(C) Frame shift mutation      (D) Silent mutation
135. Organisms that lack a defined nucleus
- (A) Plant cells      (B) Mammalian cells  
✓ (C) Prokaryotes      (D) Eukaryotes
136. Proto-Oncogenes in normal cell codes for
- (A) Initiate apoptosis      ✓ (B) Stimulation of cell division  
(C) Supress cell cycle      (D) Causes DNA damage



137. In Kerala Sunandini breed was evolved by crossing

- (A) Brown Swiss with Non descript cattle
- (B) Jersey with Non descript cattle
- (C) Holstein with Non descript cattle
- (D) Brown Swiss with Vechur Cattle

138. Repeatability (r) is defined as

- (A)  $r = \frac{\text{Total Phenotic variance} + \text{Genetic variance}}{\text{Environmental variance}}$
- (B)  $r = \frac{\text{Genetic variance} + \text{General Environmental variance}}{\text{Total Phenotypic variance}}$
- (C)  $r = \frac{\text{Total Phenotypic variance}}{\text{Genetic Variance} + \text{Environmental Variance}}$
- (D)  $r = \frac{\text{Additive variance} + \text{Environmental variance}}{\text{Total Phenotypic variance}}$

139. Heritability is measured by the formula

- (A)  $h^2 = \sigma^2 A + \sigma^2 P$
- (B)  $h^2 = \frac{\sigma^2 A}{\sigma^2 P}$
- (C)  $h^2 = \frac{\sigma^2 P}{\sigma^2 A}$
- (D)  $h^2 = \sigma^2 P - \sigma^2 A$

140. Chromosomes are found in a cell during

- (A) Interphase stage of cell division
- (B) Metaphase stage of cell division
- (C) All the stages of cell division
- (D) Cytokinensis

141. Barred condition in poultry is due to

- (A) Autosomal inheritance
- (B) Sex influenced gene
- (C) Sex linked gene
- (D) Sex limited gene



142. The heat stressed ruminants are more susceptible to rumen acidosis. Find out from the list which cannot contribute the acidosis in rumen
- (A) Reduced feed intake
  - (B) Reduced saliva production
  - (C) Less absorption of VFA from rumen
  - (D) Less gas formation in the rumen
143. The total number of ATP produced through complete oxidation of one molecule of glucose
- (A) 36
  - (B) 34
  - (C) 40
  - (D) 32
144. Following are the important features of secondary rumen contractions except
- (A) Removal of CO<sub>2</sub>
  - (B) Removal of CH<sub>4</sub>
  - (C) Prevention of distension of rumen
  - (D) Moving gases away from cardia
145. The mean pulmonary artery pressure for large animals (ranges)
- (A) 20 – 30 mm Hg
  - (B) 10 – 20 mm Hg
  - (C) 40 – 50 mm Hg
  - (D) 80 – 100 mm Hg
146. Of all domestic animals, which pair of the following are able to withstand extremes of hot temperature
- (A) Dog and Cat
  - (B) Pig and Goat
  - (C) Cattle and Sheep
  - (D) Pigs and Cat
147. Addition of cows to hormone injections for prolonged rise is a characteristic nature observed in administration of
- (A) Growth hormone
  - (B) Insulin
  - (C) Vitamin D<sub>3</sub>
  - (D) Oxytocin

148. Match the following :

- |                          |  |
|--------------------------|--|
| (a) Lignoid flexure      | 1. Glans peris of stallion             |
| (b) Colliculus seminalis | 2. Failure to descent to scrotum       |
| (c) Phallus              | 3. Penis of bull                       |
| (d) Cryptorchid testis   | 4. Analogue of mammalian peris in fowl |
| (e) Corona glandis       | 5. Pelvi urethra                       |

|   | (a) | (b) | (c) | (d) | (e) |
|---|-----|-----|-----|-----|-----|
| <input checked="" type="checkbox"/> (A) | 3   | 5   | 4   | 2   | 1   |
| (B)                                     | 5   | 4   | 3   | 1   | 2   |
| (C)                                     | 4   | 3   | 1   | 5   | 2   |
| (D)                                     | 1   | 2   | 3   | 4   | 5   |

149. Among the abdominal viscera, the following organ \_\_\_\_\_ is retro peritoneal in position.

- (A) Stomach
- (B) Kidney
- (C) Intestines
- (D) Liver

150. Thoracocentesis in Ruminants is best performed in the standing animal by puncture of \_\_\_\_\_ dorsal to the costochondral junction

- (A) 6<sup>th</sup> or 7<sup>th</sup> intercostal space
- (B) 3<sup>rd</sup> or 4<sup>th</sup> intercostal space
- (C) 11<sup>th</sup> or 12<sup>th</sup> intercostal space
- (D) 4<sup>th</sup> or 5<sup>th</sup> intercostal space

151. Assertion (A) : In panting dogs, circulation of blood through many arteriovenous anastomoses within the tongue promotes evaporation of saliva

Reasons (B) : Arteriovenous anastomoses are also concerned in thermo regulation / temperature regulation

(A) (A) is true but (B) is false

(B) Both (A) and (B) are true. (B) is the reason for (A)

(C) Both (A) and (B) are false

(D) (A) and (B) are true but (B) is not the reason for (A)

152. Fibrous strands that connect the papillary muscle to the valvular cusps of heart in termed as?

(A) Trabecular carneae

(B) Chordae tendiae

(C) Crista terminalis

(D) Stria terminalis

153. Ascertain (A) : Stifle joint function as a Hinge joint

Reason (B) : Free movement in the joint is restricted to flexion and extension

(A) Both (A) and (B) are false

(B) (A) is true and (B) is false

(C) Both (A) and (B) are true and (B) is the reason for (A)

(D) Both (A) and (B) are true and (B) is not the reason for (A)

154. The nerve that may be compressed during difficult parturition in cow is

(A) Sciatic nerve

(B) Gluteal nerve

(C) Peroneal nerve

(D) Obturator nerve

155. *Moraxella bovis* causes
- (A) Kerato conjunctivitis in cattle
  - (B) Dermatitis in horses
  - (C) Pustular oedema in sheep
  - (D) Sangene in pigs
156. Fungi which do not have sexual life cycle belong to the class of
- (A) Ascomycetes
  - (B) Basidiomycetes
  - (C) Deuteromycetes
  - (D) Phycomycetes
157. Bluish pigment formation is unique to the culture of
- (A) *Pseudomonas pseudomallei*
  - (B) *Pseudomonas mallei*
  - (C) *Pseudomonas aeruginosa*
  - (D) *Serratia marcescens*
158. Brucellergin test / abortion test indicative of
- (A) Carrier state
  - (B) Infection
  - (C) Immunity
  - (D) Susceptibility
159. Young neonates are highly susceptible to *E. coli* infection because
- (A) They have receptors for K88
  - (B) K antigens are active
  - (C) Qualitative deficiency of immunity
  - (D) Environment
160. Lancefield classification of streptococci is based on
- (A) M and T antigens
  - (B) M, T, R antigens
  - (C) C substances / antigens
  - (D) M antigen



161. Effective transmission of a microbial agent occurs by

- I. Ingestion
- II. Inhalation
- III. Mucosal, cutaneous or wound contamination

- (A) I
- (B) III
- (C) II
- (D) I and II

162. Kennel cough in dogs is caused by

- (A) Actinobacillus pleuropneumoniae
- (B) Klebsiella pneumoniae
- (C) Bordetella bronchiseptica
- (D) Pasteurella haemolytica

163. After natural infection with a type/subtype of FMD virus, the immunity produced against that type/subtype is

- (A) Lifelong
- (B) About 5 years
- (C) Not more than 2 years
- (D) Not more than 12 months

164. Prozone phenomenon is encountered with

- (A) Complement fixation test
- (B) Agglutination reaction
- (C) Immuno electrophoresis
- (D) ELISA

165. Arthropod vector of blue tongue disease is

- (A) Culicoides
- (B) Biting flies
- (C) Mosquitoes
- (D) Ticks

166. Air sac mite of fowls is

- (A) *Acarus farinae*
- (B) *Cytodites midus*
- (C) *Caparinia tripilis*
- (D) *Glyciphagus domesticus*

167. Elephant hide condition in cattle is caused by

- (A) *Sarcocystes bovitelis*
- (C) *Besnoitia besnoiti*
- (B) *Isospora rivolta*
- (D) *Hammondia hammondi*

168. Tumbu fly or skin maggot fly is

- (A) *Cordylobia anthropophaga*
- (B) *Callitroga hominivorax*
- (C) *Auchmeromyia cuteola*
- (D) *Sarcophaga haemorrhoidalis*

169. Bubonic plague is transmitted by

- (A) *Ctenocephalides felis*
- (C) *Xenopsylla cheopis*
- (B) *Pulex irritans*
- (D) *Echidnophaga gallinacea*

170. Milk spot or white sport in liver of pig is caused by

- (A) *Fasciolopsis buski*
- (C) *Strongyloides ransomi*
- (B) *Stephanurus dentatus*
- (D) *Ascaris suum*

171. Rat faecal appearance in horses is caused by

- (A) *Oxyuris equi*
- (B) *Strongylus vulgaris*
- (C) *Habronema majus*
- (D) *Strongyloides papillosus*



177. Koch's blue bodies contain

(A) Piroplasms

(B) Macro Schizonts

(C) Sporonts

(D) Gamonts

178. Spinose ear tick is

(A) Argas reflexus

(B) Otobius megnini

(C) Ornitho doros moubata

(D) Ornitho doros savignyi

179. DMSO – a protective agent for freezing of Embryo is

(A) Dimethyl Sulfoxide

(B) Dimethane Selenium

(C) Dimethyl Strontium

(D) Dulbeccos Methyl Sulphuric Oxalate

180. Wild Life (Protection) act was formulated in the year

(A) 1971

(B) 1972

(C) 1970

(D) 1973

181. Vetero legal post mortem can be carried out on the written order of

(A) Superintendent of Police

(B) District Magistrate

(C) Coroner

(D) Either (A) or (B) or (C)

182. In cow nerve block for caesarian section is

(A) Paravertebral

(B) Lumber epidural

(C) (A) or (B)

(D) Both (A) and (B)



183. A.I. was practised first in fourteenth century in

- (A) Indian cattle
- (B) England cattle
- (C) American mare
- (D) Arabian mare

184. CL can be destroyed by

- (A) Murder (inducing uterine interlysine)
- (B) Starvation death (removal of tropic stimuli)
- (C) Oldage death
- (D) (A), (B) and (C) – it is end of finite life span

185. Prepubic desmorrhaxis of pregnancy is

- (A) Rupture of prepubic tendon common in mare
- (B) Common in cow
- (C) Common in ewe
- (D) Common in dog

186. Fetal maceration has been observed in cow at

- (A) early stage of gestation
- (B) later stage of gestation
- (C) middle stage of gestation
- (D) any stage of gestation

187. Monesterous animals are those having estrous cycle

- (A) One per season – eg – Wild animal
- (B) One per month – eg – Elephant
- (C) One per life time – eg – Lion
- (D) One per year – eg – Wild animals

188. Mono sodium glutamate is used to enhance  
 (A) flavour (B) colour  
(C) texture (D) tenderness
189. High proportion of high melting point fats leads to \_\_\_\_\_ butter.  
(A) crumbly (B) greasy  
 (C) gummy (D) leaky
190. The maximum solubility index should be \_\_\_\_\_ for spray-dried milk.  
 (A) 2% (B) 15%  
(C) 5% (D) 10%
191. Milk is an \_\_\_\_\_ emulsion.  
 (A) oil in water (B) oil in oil  
(C) water in oil (D) protein in oil
192. Post mortem inspection is done at \_\_\_\_\_ points.  
(A) Blood and Viscera (B) Head and Viscera  
 (C) Head, Viscera and Carcass (D) Blood, Head and Carcass
193. Animal with \_\_\_\_\_ should be slaughtered under emergency slaughter.  
(A) High fever (B) Bruises  
(C) Jaundice  (D) Lumbar Fracture
194. Biological value of beef muscle is \_\_\_\_\_%  
 (A) 92 (B) 84  
(C) 75 (D) 100

195. In most of the healthy animals, the serum mg (magnesium) concentration will be
- (A) 1.09 – 2 mg/dl (B) 1.2 – 3.1 mg/dl  
 (C) 1.7 – 3.0 mg/dl (D) 1.5 – 2.5 mg/dl
196. Differential diagnosis of recumbency in parturient adult cattle – a viral disease is
- (A) MOP (B) Grass tetany  
 (C) Ephemeral fever (D) Downer syndrome
197. Inosine monophosphate and hypoxanthine contribute \_\_\_\_\_ of meat.
- (A) Colour  (B) Flavour  
(C) Texture (D) Odour
198. A \_\_\_\_\_ is a can in which one end is bulged but can be forced back into normal position, whereupon the opposite end bulges.
- (A) Flipper  (B) Springer  
(C) Hydrogen swell (D) Leaker
199. Major constituent of poultry egg shell is
- (A) Magnesium (B) Copper  
 (C) Phosphorus (D) Calcium
200. Biochemical Oxygen Demand (BOD) is a measure of the amount of oxygen required by the microbes to assimilate available nutrients in a liquid system into microbial cell in
- (A) 7 days at 30°C  (B) 5 days at 20°C  
(C) 5 days at 40°C (D) 4 days at 30°C