

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

**COMBINED COMPETITIVE (PRELIMINARY) EXAMINATION, 2012**

Serial No.

**ANIMAL HUSBANDRY AND  
VETERINARY SCIENCE**



**Code No. 02**

*Time Allowed : Two Hours*

*Maximum Marks : 300*

**INSTRUCTIONS**

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET DOES NOT HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. ENCODE CLEARLY THE TEST BOOKLET SERIES **A, B, C OR D** AS THE CASE MAY BE IN THE APPROPRIATE PLACE IN THE RESPONSE SHEET.
3. You have to enter your Roll Number on this Test Booklet in the Box provided alongside.  Your Roll No.  
*DO NOT write anything else on the Test Booklet.*
4. This Booklet contains 120 items (questions). Each item comprises *four* responses (answers). You will select *one* response which you want to mark on the Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. In case you find any discrepancy in this test booklet in any question(s) or the Responses, a written representation explaining the details of such alleged discrepancy, be submitted within three days, indicating the Question No(s) and the Test Booklet Series, in which the discrepancy is alleged. Representation not received within time shall not be entertained at all.
6. You have to mark all your responses **ONLY** on the separate Response Sheet provided. *See directions in the Response Sheet.*
7. All items carry equal marks. Attempt **ALL** items. Your total marks will depend only on the number of correct responses marked by you in the Response Sheet.
8. Before you proceed to mark in the Response Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Response Sheet as per instructions sent to you with your Admit Card and Instructions.
9. While writing Centre, Subject and Roll No. on the top of the Response Sheet in appropriate boxes use **“ONLY BALL POINT PEN”**.
10. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator only the Response Sheet. You are permitted to take away with you the Test Booklet.

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**ROUGH WORK**

1. The contribution of buffaloes to total milk production in India is :  
(A) 20% (B) 25%  
(C) 43% (D) 54%
2. The contribution of draught animals to farm power in India is :  
(A) 10% (B) 20%  
(C) 40% (D) 60%
3. In mixed farming, which of the following is done ?  
(A) Crop production (B) Animal production  
(C) Both of above (D) Mixed crop production
4. Which percent of world cattle population India has ?  
(A) 16% (B) 23%  
(C) 32% (D) 57%
5. If a farmer has one lakh white leghorn birds, then what would be the annual egg production ?  
(A) 160 lakhs (B) 240 lakhs  
(C) 300 lakhs (D) 340 lakhs
6. Four toe table bird breed is :  
(A) Sussex (B) R.I.R.  
(C) Minarca (D) Ancona
7. Aspiration pneumonia may occur as a result of :  
(A) Faulty drenching (B) Rupture of pharyngeal abscess  
(C) Pharyngeal paralysis (D) All of these
8. Which is Pashmina goat breed ?  
(A) Barbari (B) Changithangi  
(C) Jamunapari (D) Nubian
9. In sheep, *Clostridium perfringens* type C causes :  
(A) Black leg (B) Salmonellosis  
(C) Big head (D) Bacillary hemoglobinuria
10. *Pasteurella multocida* in poultry causes :  
(A) Fowl cholera (B) Chronic respiratory disease  
(C) Favus (D) Fowl typhoid

11. Diploid chromosome number in Indian buffalo is :  
(A) 48/50 (B) 60  
(C) 54 (D) 38
12. For improvement in milk production through selection of bulls on progeny test basis, which of the following correlation would determine the effectiveness of selection ?  
(i) Testing more bulls on fewer daughters.  
(ii) Testing few bulls on large number of daughters.  
(iii) Characteristics under selection be moderately heritable.  
(iv) Characteristics under selection be highly heritable.  
Select correct answer using the codes given below :  
**Codes :**  
(A) (i) and (iv) (B) (i) and (iii)  
(C) (ii) and (iv) (D) (ii) and (iii)
13. Which one of the following is responsible for derivation of Australian milking zebu ?  
(A) Friesian × Sahiwal (B) Jersey × Sahiwal  
(C) Jersey × Friesian (D) Brown Swiss × Red Sindhi
14. Which one of the following breeds of indigenous goats is most prolific giving birth to several kids at a time ?  
(A) Jamunapari (B) Barbari  
(C) Black Bengal (D) Beetal
15. Method of estimating breeding value/genetic value of an animal by the performance of its offspring is called as :  
(A) Sib test (B) Progeny test  
(C) Pedigree test (D) Individual selection
16. Consider the following statements using which the selection index can be formulated :  
(i) Economic importance of each trait.  
(ii) The phenotypic and genetic relation between the traits.  
(iii) The heritability of each trait.  
Of these statements,  
(A) (i) alone is correct (B) (i), (ii) and (iii) are correct  
(C) (i) and (iii) are correct (D) (ii) and (iii) are correct
17. Which of the following breeds of goat is said to be the pride of India and is famous for milk production ?  
(A) Barbari (B) Beetal  
(C) Sirohi (D) Jamunapari

18. Which one of the following Indian breeds of cattle gives the highest milk yield ?  
(A) Haryana (B) Ongole  
(C) Tharparker (D) Red Sindhi
19. In DNA, a nucleotide contains :  
(A) A nucleoside and ribose sugar  
(B) A phosphate group and ribose sugar  
(C) A ribose sugar, nucleoside and phosphate group  
(D) A nucleoside and phosphate group
20. Which of the following is an exotic breed of goats ?  
(A) Beetal (B) Black Bengal  
(C) Angora (D) Surti
21. Which of the following is the Danish breed of swine ?  
(A) Hereford (B) Landrace  
(C) Yorkshire (D) Berkshire
22. A normal dry period of cow should be :  
(A) 60-75 days (B) 90-100 days  
(C) 100-130 days (D) 130-160 days
23. The term 'Zebu' means :  
(A) Flock of sheep  
(B) European cattle  
(C) Indian cattle as known in Europe  
(D) Breed of buffalo in China
24. Dorset breed of sheep is native of :  
(A) America (B) England  
(C) France (D) Spain
25. Milk is a poor source of :  
(A) iron, iodine and vit. C (B) iodine, iron and riboflavin  
(C) vitamin C, iodine and riboflavin (D) riboflavin, iron and vit. C
26. The volume of one time semen ejaculate of boar is :  
(A) 100—200 ml (B) 200—500 ml  
(C) 50—100 ml (D) 5—10 ml

27. Normal average pH of bull semen varies from :  
(A) 6.6—6.7 (B) 6.7—6.9  
(C) 6.9—7.1 (D) 7.1—7.3
28. When abortion occurs in trichomoniasis in animals ?  
(A) In early pregnancy (B) In middle pregnancy  
(C) In late pregnancy (D) None of the above
29. The thawing time of frozen bull semen is :  
(A) 30 seconds (B) 30 minutes  
(C) 3 seconds (D) 1 minute
30. Knobbed defect of bull sperm is the defect of :  
(A) Mid piece (B) Tail  
(C) Acrosome (D) Head
31. Duration of heat in sheep is  
(A) 15—20 hours (B) 20—24 hours  
(C) 30 hours (D) None of the above
32. Ratio of semen and dilutor in horse is :  
(A) 1 : 1 (B) 1 : 2  
(C) 1 : 4 (D) 1 : 6
33. Length of artificial vagina for bull to collect semen is :  
(A) 20—30 cm (B) 30—40 cm  
(C) 40—50 cm (D) 50—60 cm
34. Milk is a good source of :  
(A) calcium and vitamin K  
(B) vitamin A and calcium  
(C) nicotinic acid, calcium and vitamin D  
(D) vitamin B<sub>2</sub>, vitamin D and nicotinic acid
35. Cyanoglycoside poisoning in sheep is due to :  
(A) abrin (B) digitalin  
(C) amygdalin (D) coumarin
36. The 'Dag defect' of spermatozoa is grouped under :  
(A) Primary abnormalities (B) Secondary abnormalities  
(C) Miscellaneous abnormalities (D) None of the above

37. The fertile life span of sperm and ova in mare's reproductive tract is :  
(A) 30—40 and 20—24 hours, respectively  
(B) 24—72 and 8—10 hours, respectively  
(C) 30—36 and 6—8 hours, respectively  
(D) 72—120 and 6—8 hours, respectively
38. The range of temperature in artificial vagina for bulls is :  
(A) 35—40°C (B) 42—46°C  
(C) 46—50°C (D) 50—54°C
39. During artificial insemination in cow the semen is deposited in :  
(A) Mid cervix uteri (B) Body of uterus  
(C) Uterine horn (D) Vagina
40. Minimum number of sperms used for artificial insemination in cow :  
(A) 01 million (B) 02 million  
(C) 05 million (D) 10 million
41. The cotton seed cake is not suitable for feeding calves as it contains :  
(A) Aflatoxin (B) Gossypal  
(C) Ricin (D) Hydrocyanic acid
42. Feeding extra concentrate to pregnant sheep is known as :  
(A) Flushing (B) Steaming up  
(C) Holding (D) Grazing
43. Maximum amount of Nitrogen is in :  
(A) Groundnut cake (B) Compost  
(C) Poultry manure (D) Mustard cake
44. Pusa giant Napier grass and paddy straw contain metal-binding substances called :  
(A) Phosphates (B) Sulphates  
(C) Oxalates (D) Carbonates
45. On dry matter basis, berseem leaf contains crude protein :  
(A) 23% (B) 15%  
(C) 10% (D) 5%
46. Moisture percent in good silage must be :  
(A) 30—40% (B) 50—60%  
(C) 40—50% (D) 60—70%

47. Roughages are those feeding stuffs which contain crude fibre on air dry basis :  
(A) more than 18% (B) less than 18%  
(C) less than 16% (D) less than 14%
48. What would be the crude protein content of a feed stuff containing 4% nitrogen ?  
(A) 16% (B) 25%  
(C) 36% (D) 49%
49. Heparin is secreted by :  
(A) Plasma cell (B) Mast cell  
(C) Chief cell (D) Parietal cell
50. The ration of a young bull must contain 60 percent TDN however DCP should be  
(A) 10—12% (B) 12—15%  
(C) 16—18% (D) 18—20%
51. One of these is not secreted by the Pancreas :  
(A) Calcitonin (B) Glucagon  
(C) Stomatostin (D) Insulin
52. If a mustard cake sample contains 5 percent nitrogen, its crude protein content would be :  
(A) 11.25% (B) 21.25%  
(C) 31.25% (D) 41.25%
53. “Mad cow disease” is caused by :  
(A) Rabies virus (B) Mycoplasma  
(C) Chlamydia (D) None of the above
54. What should be the maximum moisture percentage in the fodder stored as hay ?  
(A) 15% (B) 25%  
(C) 30% (D) 40%
55. Extra feeding to pregnant cow should be done after :  
(A) 6 months (B) 3 months  
(C) 1 month (D) 20 days
56. Maximum amount of crude fibre in layer ration should be :  
(A) 8 to 9% (B) 9 to 10%  
(C) 6 to 7% (D) 4 to 5%



57. Generally, the concentrate and roughage is fed to lactating cow in proportion of :  
(A) 40% concentrate + 60% roughage  
(B) 50% concentrate + 50% roughage  
(C) 60% concentrate + 40% roughage  
(D) 70% concentrate + 30% roughage
58. Net gain of ATP from one molecule of glucose is :  
(A) 36 mole  
(B) 38 mole  
(C) 40 mole  
(D) None of the above
59. In animal nutrition, total energy is expressed as :  
(A) ATP  
(B) K Cal.  
(C) AMP  
(D) Creatine phosphate
60. In daily dry matter requirement of cattle per 100 kg body weight is :  
(A) 5.0 to 7.0 kg  
(B) 3.5 to 4.5 kg  
(C) 2.0 to 2.5 kg  
(D) 1.0 to 1.5 kg
61. Age of castration of a bull is :  
(A) 1.0 year  
(B) 1.5 year  
(C) 2.0 year  
(D) 6 months
62. Goat meat is known as :  
(A) Veal  
(B) Chevon  
(C) Mutton  
(D) Pork
63. Castration in female calves is called :  
(A) Sterilization  
(B) Teasure  
(C) Vasectomization  
(D) Spaying
64. Purkinje cells are present in :  
(A) Sub-endocardium  
(B) Myocardium  
(C) Cerebellar cortex  
(D) Cerebral cortex
65. The optimum age for castration of a male goat (buck) is :  
(A) 2 months  
(B) 6 months  
(C) 9 months  
(D) 1 year
66. Area required in cage system for layer is :  
(A) 1.0 sq. ft.  
(B) 1.5 sq. ft.  
(C) 0.75 sq. ft.  
(D) 2.00 sq. ft.

67. A double row dairy byre ( $60 \times 10$  mt) can house animals :  
(A) 50 (B) 100  
(C) 200 (D) 300
68. How much water a cow requires for producing one litre milk ?  
(A) 2—4 litres (B) 4—5 litres  
(C) 5—10 litres (D) 10—12 litres
69. Hormone oxytocin is released from :  
(A) Anterior pituitary (B) Posterior pituitary  
(C) Adrenal medulla (D) Adrenal cortex
70. The precursor of a plasma cell is :  
(A) B cell (B) T cell  
(C) NK cell (D) Macrophage
71. Aldosterone is released from :  
(A) Kidney (B) Liver  
(C) Pancreas (D) Ovary
72. The bull shed should have covered an open area respectively :  
(A) 4 sq. m. and 8 sq. m. (B) 6 sq. m. and 12 sq. m.  
(C) 9 sq. m. and 50 sq. m. (D) 12 sq. m. and 120 sq. m.
73. The water requirement per day for 100 adult birds for drinking is about :  
(A) 10—15 litres (B) 20—25 litres  
(C) 30—35 litres (D) 40—45 litres
74. Age of a crossbreed heifer at first calving should be :  
(A) 20—24 months (B) 24—30 months  
(C) 36—40 months (D) 3—4 years
75. The optimum body weight of a crossbreed heifer at first mating should be :  
(A) 180 kg (B) 250 kg  
(C) 400 kg (D) 480 kg
76. The temperature of cow in milk fever is :  
(A)  $30^{\circ}\text{C}$  (B)  $38^{\circ}\text{C}$   
(C)  $42^{\circ}\text{C}$  (D)  $45^{\circ}\text{C}$
77. Select the medicine for curing ketosis :  
(A) Boric acid (B) Sodium chloride  
(C) Sodium propionate (D) Sodium carbonate

78. Mad cow disease is due to :  
(A) Virus (B) Bacteria  
(C) Prion (D) None of the above
79. Which one of the following poultry diseases is a self limiting disease ?  
(A) Fowl pox (B) Coccidiosis  
(C) Ascariasis (D) None of the above
80. In which of the following diseases of sheep intense pruritus along with nervous symptoms is seen ?  
(A) Scabies (B) Scrapie  
(C) Ringworm (D) Pseudorabies
81. Brittle bones are caused by :  
(A) Excess of iodine in water (B) Excess of chlorine in water  
(C) Excess of fluorine in water (D) None of the above
82. 'Q' fever is caused by :  
(A) Coxiella burnetti (B) Salmonella paratyphi  
(C) Pseudomonas aureginosa (D) Morexella bovis
83. Brucella abortus, the causative agent of brucellosis in cattle needs carbon dioxide for initial isolation at the rate of :  
(A) 5% (B) 10%  
(C) 20% (D) 40%
84. Field outbreak of Ranikhet disease in poultry in India is caused by :  
(A) Mesogenic strain of the virus  
(B) Lentogenic strain of the virus  
(C) Velogenic strain of the virus  
(D) Both mesogenic and lentogenic strains of the virus
85. Abortion in the last trimester of pregnancy in cows signifies infection with :  
(A) Campylobactor (B) Brucella abortus  
(C) Johne's disease (D) Anthrax
86. Blue tongue vaccination is most essential for :  
(A) Sheep (B) Swine  
(C) Cattle (D) Goat

87. Button ulcers observed near 'ileocecal valve' in pigs on post-mortem examination are indication of :
- (A) Hog cholera (B) African swine fever  
(C) Vitamin A deficiency (D) Rinderpest
88. Normal pulse rate (per minute) of pig is :
- (A) 40—50 (B) 50—70  
(C) 60—90 (D) 80—110
89. 'Ascolis Test' is used for diagnosis of the disease :
- (A) Anthrax (B) Brucellosis  
(C) Johne's disease (D) Leptospirosis
90. Barbone disease is called as :
- (A) Haemorrhagic septicaemia (B) Black quarter  
(C) Anthrax (D) Rabies
91. Black disease is caused by :
- (A) Bacillus anthracis (B) Clostridium novyi  
(C) Brucella abortus (D) Escherichia coli
92. Splenomegaly in cattle occurs in :
- (A) Foot and mouth disease (B) Haemorrhagic septicaemia  
(C) Anthrax (D) Brucellosis
93. Which one of the following is not a method of disease control ?
- (A) Hansa method (B) Ostertage method  
(C) Bang method (D) Lancini method
94. Rigor mortis is absent in the disease :
- (A) Anthrax (B) Brucellosis  
(C) Haemorrhagic septicaemia (D) Tetanus
95. Milk tetany occurs due to deficiency of :
- (A) Colostrum (B) Calcium  
(C) Magnesium (D) Sodium
96. Dagnala disease is caused by excess of which of the following elements ?
- (A) Sodium (B) Arsenic  
(C) Copper (D) Selenium

97. Deficiency of which element is the cause of post parturient Haemoglobinuria ?  
(A) Phosphorus (B) Iron  
(C) Copper (D) Sodium
98. Which of the following is not a metabolic disease ?  
(A) Ketosis (B) Filariasis  
(C) Post parturient paresis (D) Milk fever
99. Which kind of disease is limber neck ?  
(A) Metabolic disease (B) Deficiency disease  
(C) Toxicity (D) Infectious disease
100. Age for vaccination in cattle for Brucellosis is :  
(A) 6 days (B) 6 weeks  
(C) 6 months (D) 6 years
101. Cooked mouth appearance may be observed in :  
(A) Bovine farcy (B) Bovine viral diarrhoea  
(C) Foot and mouth disease (D) Colibacillosis
102. Which one of the following is a diagnostic test for brucellosis ?  
(A) Ascoli's test (B) Strauss reaction  
(C) Strip cup test (D) Card test
103. In which of the following disease, nasal vaccination may be performed ?  
(A) F.M.D. (B) H.S.  
(C) P.P.R. (D) I.B.R.
104. The most common cause of metabolic acidosis is :  
(A) Lactic acidosis (B) Keto-acidosis  
(C) Renal failure (D) All of the above
105. Which one is a parasite of anus ?  
(A) Thelazia (B) Setaria  
(C) Oxyuris (D) None of the above
106. Which one is an eye worm ?  
(A) Thelazia (B) Oxyuris  
(C) Setaria (D) Fasciola
107. Which one causes Bursattee disease ?  
(A) Oxyuris equi (B) Thelazia lachrymalis  
(C) Parafilaria bovicola (D) Habronema muscae

108. Which one is normal dose per kg body weight of piperazine ?  
(A) 10—20 mg (B) 20—50 mg  
(C) 55 mg (D) 110—120 mg
109. A common but effective disinfectant for water trough of cattle farm is :  
(A) Phenyle (B) Potassium permanganate  
(C) Lime (D) Washing soda
110. Which of the following is not a zoonotic disease ?  
(A) Brucellosis (B) Anthrax  
(C) Tuberculosis (D) Black quarter
111. Which one of the following is a zoonotic disease ?  
(A) Rinderpest (B) Haemorrhagic septicaemia  
(C) Swine fever (D) Leptospirosis
112. Rain water has solvent action on lead because of the presence of :  
(A) Free carbon-dioxide (B) Oxygen  
(C) Sulphur dioxide (D) None of the above
113. Treatment of hard water with slaked lime results in the removal of :  
(A) Temporary hardness due to calcium  
(B) Temporary hardness due to magnesium  
(C) Permanent hardness due to magnesium  
(D) All of the above
114. The endocrine cells of testis are :  
(A) Primary spermatogonium (B) Secondary spermatogonium  
(C) Sertoli cells (D) Leydig cells
115. Chemical Oxygen Demand (COD) test of water is done for estimation of the amount of :  
(A) Degradable organic matter (B) Non-degradable organic matter  
(C) Both of the above (D) None of the above
116. The presence of streptococcus faecalis in drinking water indicates :  
(A) Faecal contamination (B) Industrial waste contamination  
(C) Both of the above (D) None of the above



**ROUGH WORK**