1. Virchow's triad relates to
   a) Infarction b) Embolism c) Thrombosis d) None

2. Family is a
   a) Primary group b) Involuntary group c) Permanent group d) All

3. “Stepping syndrome” in pigs is due the deficiency of
   a) Fe b) Se c) Zn d) Mg

4. An exotic dual purpose sheep breed with “mousy grey face”
   a) Southdown b) Rambouillet c) Merino d) Cheviot

5. Process in which foreign DNA is introduced into another cell with the help of a viral vector
   a) Conjugation b) Transformation c) Both a&b d) Transduction

6. Time of ovulation in Cattle is
   a) 10-15 hr after end of oestrum
   b) 12-24 hr before end of oestrum
   c) 1-2 days before end of oestrum
   d) 1-2 days after the onset of true oestrum
7. Laying of leathery eggs in chicken is associated with
   a) Raillietina  b) Prosthogonimus  c) Heterakis  d) Davainea

8. Which is an imino acid?
   A) Proline  b) Tryptophan  c) Arginine  d) Glycine

9. The CP(\%) & ME (Kcal/Kg) on DMB for creep, grower and finisher diets for pigs as per BIS specification, 1986
   a) 23, 2800; 20, 2900; 20, 2600
   b) 22, 3500; 20, 3300; 18, 3100
   c) 20, 3370; 18, 3170; 16, 3170
   d) None of these

10. Which of the following is a spasmolytic agent
    a) Hyoscine  b) Vetrabutine  c) Dipydrocine  d) All

11. Recurring tympany is noticed in following condition
    a) TRP  b) Diaphragmatic hernia  c) Reticulo-omasal stenosis  d) All

12. The dose of Dinoprost for the treatment of open pyometra in the bitch
    a) 0.25-0.5mg/Kg  b) 0.5-1.0mg/Kg  c) 25-50mg/Kg  d) 50-100mg/Kg

13. A mating system designed to create a purebred population by mating successive generations of non-purebred females to purebred sires
    a) Top crossing  b) Incrosses  c) Incross breeding  d) Criss crossing

14. 'Toxovax' contains Tachyzoites of -------- strain of *Toxoplasma gondii*.
    a) P13  b) 1B  c) 014  d) S48
15. Spastic and flaccid paralysis of worms are caused by the following drugs respectively
   a) Phenothiazine & Amitraz b) Oxyclozanide & Livamizole c) Pyrantel & Piperazine
d) Pyrantel & Pyrantel

16. The incubation temperature of Yoghurt culture is
   a) 41-43°C b) 38-40°C c) 32-33°C d) Lower

17. A disinfectant of choice at FMD outbreak
   a) 2% NaOH b) 4% Na₂CO₃ c) Both d) None of these

18. Calf starter starts at---------of age
   a) 4th day b) 1-2 w c) 2-3w d) 3-4w

19. “Dog sitting position” of Mare and Cow is which presentation
   a) Oblique dorsovertical b) Dorsotransverse c) Ventrotransverse d) None

20. Which media can be used for the culture of *Tri/Tritrichomonas fetus*?
   a) Diamond’s medium b) Mannitol salt agar c) Skirrow’s agar d) All

21. “Varocay bodies” are characteristic of which tumour?
   a) Meningioma b) Glioma c) Neuroblastoma d) Schwannoma

22. ---------------- has the shortest gestation period of any of the common laboratory animals
   a) Rat b) Mice c) Hamster d) Guinea pig

23. (I 3/3 C 1/1 P 4/4 M 3/3) denotes the dental formula for
   a) Ox b) Horse c) Dog d) Pig

24. Insulin secretion is inhibited by
   a) Diazoxide b) Tolbutamide c) Streptozotocin d) Alloxan
25. The causative agent for Ring worm infection in cattle
   a) *Trichophyton verrucosum*  b) *Microsporum gallinae*  c) *Trichophyton mentagrophytes*
   d) Both a& c

26. A bulletin has------------------page/s
   a) >50  b) 2-12  c) 12-20  d) >20

27. Ivermectin is not effective against flukes and tapeworm infections because
   a) Fumurate reductase is not present in flukes and tapeworms
   b) Acetyl choline transmission is not present in flukes and tapeworms
   c) Mitochondrial phosphorylation is not present in flukes and tapeworms
   d) GABA transmission is not present in flukes and tapeworms

28. “Antinuclear factors” are observed in which immunological disorder
   a) Sjogren’s syndrome
   b) Rheumatoid arthritis
   c) Erosive polyarthritis
   d) Systemic Lupus Erythematosus

29. Median lethal dose value for ‘highly toxic’ poison is
   a) < 1 mg/Kg
   b) 1-50 mg/Kg
   c) 50-500 mg/Kg
   d) 0.5-5 g/Kg

30. Age at which testes descend into the scrotum/testicular descent in Cats is
   a) Midgestation
   b) Between last few days of gestation and first few days after birth
   c) Last few days of gestation
   d) 2-5 days after birth
31. The tissue adhesive property of Lysine coated slides are due to its -------- group present in the Lysine.
   a) Imidazole b) Epsilon c) Indole d) Guanidinium

32. Current jelly clot indicates
   a) Sudden death b) Slow death c) Cannot predict d) None

33. Purely ketogenic amino acid
   a) Leucine b) Lysine c) Both a&b d) Tyrosine&Tryptophan

34. Average energy value of 1 kg cow’s milk(Kcal)
   a) 670 b) 750 c) 1000 d) 500

35. As per BIS specification, floor space requirement for a farrowing sow in covered area
   a) 6-7 m² b) 7-9 m² c) 1m² d) 3.4m²

36. ‘Restrainer agent’ used in the developer solution for processing the radiograph
   a) Hydroquinone b) Sodium Sulfite c) Potassium Bromide d) Sodium carbonate

37. Which strain was developed by crossing Malpura sheep of Rajasthan with Rambouillet of France?
   a) Avikalin b) Gaddi Synthetic c) Hissardale d) Deccani Merino

38. Marthandam project was started in 1921 by
   a) S Hatch b) F L Brayne c) Albert Mayer d) M Gandhiji

39. Which of the following is wrong
   A. Suppurative meningoencephalitis- Listeriosis
   B. Oesinophilic meningoencephalitis- Rabies
   C. Lymphocytic meningoencephalomyelitis- Hog cholera
D. Acute fibrino endocarditis- BQ
  a) A b) B c) C d) Both C&D

40. Vitamin A should be present in the compound cattle feed at the rate of ------
     --IU/Kg as per BIS specification (1992)
  a) 5 b) 50 c) 500 d) 5000

41. Best example for Obligatory cyclozoonosis
  a) Hydatidosis b) Taeniasis c) Darling disease d) Both C&D

42. The people who adopt new innovations earlier than the average number of
     the society are known as
  a) Innovators b) laggards c) Early majority d) early adopters

43. Tetrathionate broth is an example for
  a) Enriched media b) Enrichment media c) Sugar media d) Indicator media

44. “Hepatitis cysticerca” in sheep is a condition associated with
  a) Cysticercus bovis b) Cysticercus cellulosae c) Cysticercus tenuicollis d) Cysticercus
     fasciolaris

45. The encapsulated dendritic endings associated with the “light touch”
     function is
  a) Meissner’s corpuscles b) Krause’s end bulbs c) Pacinian corpuscles d) Ruffini’s
     corpuscles

46. The maintenance requirement of ME in lactating Sow---------
     Kcal/KgW^{0.75}/day
  a) 133 b) 119 c) 105 d) 98

47. The bacterial strain used for the production of BCG vaccine in India
  a) Nakayama b) PM-1503-3M c) 17 D d) Danish 1331

48. The earliest time for the following methods of pregnancy diagnosis in Cow
     is given below. Identify the right pair.
**Method**               **Time**

- *Early pregnancy factor*    3 days
- *Real time ultrasound*      13 days
- *Pregnancy specific protein B* 24 days
- *Membrane slip*             33 days
- *Caruncles/cotyledons*      80 days
- *Fremitus*                  85 days

a) A&B b) C&D c) E&F d) All

49. ‘Amyloid like tubercles’ are seen in case of Tuberculosis in
   a) Bovines b) Horse c) Dogs d) Pig

50. The drug of choice for coccidiosis in poultry
   A) Sulphaguanidine b) Sulpphaquinoxaline c) Phthalyl sulpha thiazole d) Sulphamethyl phenazole

51. ‘Strauss test’ is used for the diagnosis of following diseases except
   a) Wooden tongue b) Lumpy jaw c) Glanders d) Brucellosis

52. The stain used for the demonstration of urate crystals
   a) Alcian blue b) Degalantha c) Congo Red d) Best carmine

53. Type of burns where Bullae/Vesicles is present
   a) Type I b) Type II c) Type III d) Type IV

54. Vitamin C is found in which part of the eggs
   a) Albumen b) Yolk c) Both d) Absent in eggs

55. Maize has the lowest concentration of
   a) Calcium b) Niacin c) Both d) None

56. The wounds of more than 6-8 hr duration are considered as----------wound
   a) Contaminated b) Infected c) Surgical d) None
57. Time of MRP(Maternal Recognition of Pregnancy) in Cow  
a) 12 days  b) 12-13 days  c) 16-17 days  d) 14-16 days  

58. Buttress foot(U shape to V shape conversion) is a sequel of which disease  
a) Bobba bone  b) Sore shin  c) Navicular disease  d) Pyramidal disease  

59. Ideally, how much quantity of faeces should be collected in 10% formalin for laboratory diagnosis of parasitic eggs  
A) 2g  b) 3g  c) 4g  d) 5g  

60. Rabies virus travels at speed of--------mm/hr through axoplasm in the nerve root from the site of bite  
a) 5  b) 10  c) 15  d) 20  

61. The steps in extension teaching could be better explained with  
a) AIDCAS  b) POSDCORB  c) MANAGE  d) AIETA  

62. Sexing of foetus can be most accurately done in bovines, ultrasonographically at ------------ days of gestation period  
a) 50-55  b) 60-80  c) 120-140  d) 100-120  

63. Derzy's disease/ Goose Plague, a highly contagious disease that affects goslings is caused by  
a) Birna virus  b) Corona virus  c) Orthomyxo virus  d) Parvo virus  

64. Buffalo grass/ Water grass is  
a) Panicum maximum  
b) Pennisetum pedicellatum  
c) Brachiaria mutica  
d) Cenchrus ciliaris  

65. BLUP is a method, used for the evaluation of  
a) Cross breeding efficiency  b) Exotic breed  c) Indigenous breed  d) Sire
66. The signal for apoptosis is coming from
   a) Plasma membrane b) Mitochondria c) Golgi complex d) Nucleus

67. A minimum of -----------members is essential to start milk producers cooperative society.
   a) 20-30 b) 30-40 c) 40-50 d) 10

68. Primary amyloidosis is seen in
   a) Chronic inflammatory condition b) Bronchiectasis c) Immunocyte dyscrasia d) All

69. The structure necessary for the viral attachment and also for inducing protective immune response in the host in case of rabies is
   a) Glycoprotein
   b) Ribonucleoprotein
   c) Matrix protein
   d) Lipoprotein

70. The symptoms that are likely to be noticed in a fracture are
   a) Abnormal mobility b) Crepitus & loss of function c) Deformity d) All

71. Latent infections of Trypanosomiosis in bovines is diagnosed by
   a) Mercuric chloridre test b) Formol gel test c) Thymol turbidity test d) Stilbamide test

72. Version is the mutational operation to correct -------------
   a) Presentation b) Position c) Posture d) All

73. Programme planning is a---------------------process
   a) Flexible b) Rigid c) Both a&b d) None of these

74. Female worm of which parasite is found within proventricular glands?
   a) Acuria hamulosa b) Capillaria annulata c) Tetramers mobeteda d) Acuria spiralis
75. The sequel of ‘Broken wind/ chronic alveolar emphysema’
   a) Hypertrophy of left auricle
   b) Hypertrophy of right auricle
   c) Hypertrophy of left ventricle
   d) Hypertrophy of right ventricle

76. For prevention of hypocalcemia, dietary cation anion difference of prepartal diets should be
   a) Positive b) Negative c) Equal d) None

77. Ram castrated after service is known as
   a) Steer b) Gimmer c) Seggy d) Wedder

78. ‘Laryngeal nerve paralysis' is observed in horses in which of the following condition
   a) Arsenic poisoning b) Lead poisoning c) Mercury poisoning d) Molybdenum poisoning

79. Wing louse of poultry
   a) Menopon gallinae
   b) Menacanthus stramineus
   c) Lipeurus caponis
   d) None of these

80. Examples for Class II anti-arrythmic agents
   a) Lidocaine & Quinidine
   b) Propanolol & Tenolol
   c) Bretylium & Amiodarone
   d) Diltiazem & Nifedipine
81. Cannibalism occurs in poultry when diet is
   a) Protein free b) Protein rich c) Fibre free d) Fibre rich

82. Drugs which reduce gastrointestinal motility / “Non-prokinetic agents” are
   a) Atropine & Hyoscyamine b) Atropine c) Diphenoxylate & Loperamide d) All

83. Which of the following Cheese is made from whey?
   a) Sapsago b) Mozarella c) Ricotta d) Cottage

84. Drug of choice for tapeworms in poultry
   a) Praziquantel b) Dibutyltin dilaurate c) Bunamidine d) Niclosamide & Epsiprantel

85. “Raspberry jam” appearance of spleen is observed in
   a) Swine fever b) Equine infectious anaemia c) Erysipelas d) Amyloidosis

86. Cardiac-specific enzyme/s for acute myocardial injury is
   a) Troponin I b) Troponin T c) Creatin kinase d) Both a&b

87. Mischief is punishable under the section
   a) IPC 428 b) IPC 429 c) IPC 420 d) Both a&b

88. PFA standards for different classes of milk are given below. Which one is wrong?

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<th>Fat % (min)</th>
<th>SNF % (min)</th>
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<tbody>
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<td>A. Standardized milk</td>
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<td>B. Recombined milk</td>
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<td>C. Toned milk</td>
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<td>D. Double toned milk</td>
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   a) A b) B c) C d) D
89. If valvular thrombus is associated with swine erysipelas, then mural thrombus is associated with which disease condition
   a) BQ b) HS c) Anthrax d) Pink eye

90. A glial cell which is not ectodermal in origin is
   a) Astrocyte b) Oligodendrocyte c) Microglia d) Ependymal cells

91. Red nucleus is seen in
   a) Plasma cell b) Macrophage c) Kupffer cells d) None

92. The Oxygen Dissociation Curve shifts to the right (low affinity for O₂) in the following condition
   a) Increase in hydrogen ion concentration
   b) Increase in organic phosphates/2, 3-DPG
   c) Increase in Temperature
   d) All

93. In pox lesions, which stage is involved in the ‘spread’ of virus?
   a) Papule b) Pustule c) Macula d) Vesicle

94. Who invented the milking machine in 1878?
   a) Carl Gustav de Laval b) Anna Baldwin c) Percy L d) Arthur Leslie Large

95. 1.3% sodium bicarbonate solution is
   a) Isotonic b) Hypertonic c) Hypotonic d) none

96. The '4 Rs' is a basic philosophy of animal ethics that refers to the principles of replacement, reduction, refinement and------------------
   a) Right Source b) Right Rate c) Right Place d) Rehabilitation
97. IgY is analogous to which Mammalian Ig-----
   a) Ig M b) IgG c) IgE d) Both b&c

98. Calcium and phosphorus specification (per cent by mass, min.) of broiler finisher diet as per BIS
   A) 3.0&0.5 b) 1.2&0.5 c) 1&0.5 d) 3.0 &0.6

99. To enable 10 million rural milk producer’s families to build a viable, self-sustaining dairy industry was the objective of -----------
   a) OF-III b) OF-II c) OF-I d) IRDP

100. ‘Marked cerebellar hypoplasia’ is associated with which viral agent?
    a) Parvo virus b) BVD-MD virus c) Both a&b d) None
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