118

QUESTION PAPER SERIES CODE
A

Registration No. : | | | | | | |

Centre of Exam. : _____

Name of Candidate : _____

Signature of Invigilator

COMBINED ENTRANCE EXAMINATION, 2018

M.V.Sc. ANIMAL BIOTECHNOLOGY

[Field of Study Code : MVS]

Time Allowed : 3 hours

Maximum Marks : 240

INSTRUCTIONS FOR CANDIDATES

Candidates must read carefully the following instructions before attempting the Question Paper :

(i) Write your Name and Registration Number in the space provided for the purpose on the top of this Question Paper and in the Answer Sheet.

(ii) **Please darken the appropriate Circle of Question Paper Series Code on the Answer Sheet.**

(iii) The Question Paper is divided into two Parts : Part—A and Part—B. Both Parts have multiple-choice questions. All answers are to be entered in the Answer Sheet provided with the Question Paper for the purpose.

(iv) Part—A consists of 60 questions and all are compulsory. Answer all the questions in the Answer Sheet provided for the purpose by darkening the correct choice, i.e., (a) or (b) or (c) or (d) with BALLPOINT PEN only against each question in the corresponding circle. Each correct answer carries *1·5* marks. **There will be negative marking and ½ mark will be deducted for each wrong answer.**

(v) Part—B consists of 100 questions. **Answer any 60 questions** in the Answer Sheet by darkening the correct choice, i.e., (a) or (b) or (c) or (d) with BALLPOINT PEN only against the corresponding circle. Each correct answer carries *2·5* marks. **There will be negative marking and 1 mark will be deducted for each wrong answer.**

In case any candidate answers more than the required 60 questions, the first 60 questions attempted will be evaluated.

(vi) Answer written by the candidates inside the Question Paper will not be evaluated.

(vii) Calculators and Log Tables may be used.

(viii) Pages at the end have been provided for Rough Work.

(ix) Return the Question Paper and Answer Sheet to the Invigilator at the end of the Entrance Examination. **DO NOT FOLD THE ANSWER SHEET.**

INSTRUCTIONS FOR MARKING ANSWERS

1. Use only Blue/Black Ballpoint Pen (do not use Pencil) to darken the appropriate Circle.
2. Please darken the whole Circle.
3. Darken ONLY ONE CIRCLE for each question as shown in example below :

Wrong	Wrong	Wrong	Wrong	Correct
● ⓑ ⓒ ●	Ⓐ ⓑ ⓒ ⓓ	Ⓐ ⓑ ⓒ Ⓓ	⊙ ⓑ ⓒ ●	ⓐ ⓑ ⓒ ●

4. Once marked, no change in the answer is allowed.
5. Please do not make any stray marks on the Answer Sheet.
6. Please do not do any rough work on the Answer Sheet.
7. Mark your answer only in the appropriate space against the number corresponding to the question.
8. **Ensure that you have darkened the appropriate Circle of Question Paper Series Code on the Answer Sheet.**

PART—A

Answer **all** questions

1. Which one of the following is the methyl ester artificial sweetener of dipeptide formed from aspartic acid and phenylalanine?
   (a) Alitame
   (b) Sucrose
   (c) Aspartame
   (d) Saccharin

2. Ranitidine is a drug used to treat
   (a) fever
   (b) headache
   (c) muscular pain
   (d) hyperacidity

3. Rayon (cellulose acetate) is an example of
   (a) natural polymer
   (b) semi-synthetic polymer
   (c) synthetic polymer
   (d) biological polymer

4. Cellobiose is a disaccharide made up of
   (a) glucose and fructose
   (b) glucose and glucose
   (c) glucose and sucrose
   (d) glucose and mannose

5. Millikan's oil drop method helps to determine
   (a) change on the proton
   (b) change on the electron
   (c) change to the neutron
   (d) entire change in the atom

6. The functional group in diazonium salt is

(a) $-NO_2$

(b) $-NH_2$

(c) $-N_2^+X^-$

(d) $-NH_4^+X^-$

7. Which of the following is a phenol?

(a) Picric acid

(b) Acetic acid

(c) Benzoic acid

(d) Hydrochloric acid

8. The temperature of liquid nitrogen used for cryopreservation of seeds/freezing of semen of animal is

(a) –190 °C

(b) –196 °C

(c) –90 °C

(d) –120 °C

9. Rainwater has a pH of

(a) 7

(b) 6·8

(c) 8·5

(d) 5·6

10. Which of the following is a linear compound?

(a) H_2O

(b) CO_2

(c) NH_3

(d) PBr_3

11. Which of the following is a strong base?

(a) Aniline

(b) Benzylamine

(c) Pyridine

(d) Methylamine

12. In the IUPAC nomenclature, the highest priority group is

(a) ketone

(b) alkane

(c) alkene

(d) halogen

13. Which of the following groups can be both oxidized or reduced?

(a) Alcohol

(b) Acid

(c) Ketone

(d) Amine

14. Ethyl acetate can undergo which of the following transformations?

(a) Base hydrolysis

(b) Substitution

(c) Dehydration

(d) Elimination

15. Anhydrides can be formed by which of the following reactions?

(a) Acid chloride and alcohol

(b) Acid and alcohol

(c) Acid and acid chloride

(d) Acid and amine

16. The 'one gene-one enzyme' hypothesis was proposed by

(a) Lederberg and Tatum

(b) Muller and Stadler

(c) Watson and Crick

(d) Beadle and Tatum

17. How many mitotic divisions will take place to produce 512 cells from a single parent cell?

(a) 9

(b) 256

(c) 158

(d) 511

18. Vivipary is

(a) seed germination with subterrancan cotyledons

(b) seed germination with epiterranean cotyledons

(c) fruit development without pollination

(d) seed germination inside the fruit, the fruit while attached to the plant

19. Mosquito coils/mats contain

(a) paraquat

(b) BHC

(c) toxaphene

(d) derivatives of allethrin

20. Match the following :

Hormone	*Source*
(A) Growth hormone	1. Ovary
(B) Oestrogen	2. Thyroid
(C) Thyroxine	3. Pituitary
(D) Adrenaline	4. Suprarenal gland

(a) (A)—4, (B)—3, (C)—2, (D)—1

(b) (A)—3, (B)—1, (C)—2, (D)—4

(c) (A)—1, (B)—4, (C)—2, (D)—3

(d) (A)—3, (B)—4, (C)—2, (D)—1

21. Ruminants have ____ number of compartments in their stomach.

(a) 1

(b) 2

(c) 3

(d) 4

22. Diseases transmitted from animal to man and vice versa are known as

(a) contagious diseases

(b) zoonotic diseases

(c) infectious diseases

(d) brucellosis

23. Match the following :

Disease	*Vector*
(A) Malaria	1. *Culex* sp.
(B) Cholera	2. *Aedes* sp.
(C) Dengue	3. *Anopheles* sp.
(D) Elephantiasis	4. *Musca* sp.

(a) (A)—4, (B)—3, (C)—1, (D)—2

(b) (A)—3, (B)—1, (C)—2, (D)—4

(c) (A)—1, (B)—4, (C)—3, (D)—2

(d) (A)—3, (B)—4, (C)—2, (D)—1

24. Sleeping sickness is caused by

(a) *Trypanosoma evansi*

(b) *Trypanosoma gambiense*

(c) *Trypanosoma foetus*

(d) *Trypanosoma cruzi*

25. Normal life span of red blood cell is

(a) 180 days

(b) 120 days

(c) 80 days

(d) 200 days

26. Which trophic interaction benefits one organism and neither benefits nor harms the other organism?

(a) Commensalism

(b) Amensalism

(c) Parasitism

(d) Symbiosis

27. Disease resistance mechanisms that are not specific to a particular pathogen come under

(a) adaptive immunity

(b) innate immunity

(c) passive immunity

(d) active immunity

28. ____ is endangered medicinal plant listed in the Red Data Book.

(a) Basil

(b) Bael

(c) Periwinkle

(d) Sarpagandha

29. Mesophiles grow in a temperature range of

(a) 25 °C to 45 °C

(b) 15 °C to 30 °C

(c) 22 °C to 45 °C

(d) 15 °C to 45 °C

30. Nitrogen fixing microorganism in legume crop is

(a) *Rhizobium*

(b) *Acetobacter*

(c) *Azospirillum*

(d) *Frankia*

31. The quadratic equation whose roots are 3 and -5 is given by

(a) $x^2 - 2x - 15 = 0$

(b) $x^2 - 5x + 15 = 0$

(c) $x^2 + 2x - 15 = 0$

(d) $x^2 + 3x - 15 = 0$

32. Find the 5th term of the AP series with a first term 11 and c.d. 7.

(a) 368

(b) 361

(c) 568

(d) 561

33. The product of two consecutive numbers is given by 3782. The numbers are

(a) 63, 64

(b) 57, 58

(c) 61, 62

(d) 71, 72

34. If two workers can do a definite work in 4 days and 6 days separately, how long it will take to finish that work when they work together?

(a) 10 days

(b) 2·8 days

(c) 2·4 days

(d) 2 days

35. A function $f(x)$ is defined by the equation $\sqrt{(x+2)}$. Then which of the following statements is correct?

(a) The domain of $f(x)$ is all the real numbers.

(b) The domain of x is all the real numbers.

(c) The domain of $f(x)$ is $-2 \leq x < \infty$.

(d) The domain of x is $-2 \leq x < \infty$.

36. The equation of the straight line is given by $6x + 2y = 18$. The x and y intercept is given by

(a) (3, 0), (0, 4)

(b) (4, 0), (0, 4)

(c) (3, 0), (0, 9)

(d) (4, 0), (0, 9)

37. The equation of the circle whose centre lies on the point (– 3, 4) and passes through the origin is given by

(a) $(x+3)^2 + (y-4)^2 = 5^2$

(b) $(x-3)^2 + (y+4)^2 = 5^2$

(c) $(x+3)^2 + (y-4)^2 = 7^2$

(d) $(x-3)^2 + (y+4)^2 = 7^2$

38. The equation of a line which is perpendicular to the line $3x - 4y + 12 = 0$ and passing through the origin is given by

(a) $3y + 4x + 12 = 0$

(b) $3x + 4y + 12 = 0$

(c) $3x + 4y = 0$

(d) $3y + 4x = 0$

39. $\sin 3\theta$ can be written in its expanded form as

(a) $3\sin\theta - 4\sin^3\theta$

(b) $-3\sin\theta + 4\sin\theta$

(c) $-4\sin\theta + 3\sin^3\theta$

(d) $-3\sin\theta + 4\sin^3\theta$

40. The two binary numbers (100 and 111) were added. The sum in the decimal number system is

(a) 100

(b) 10

(c) 11

(d) 101

41. The age difference between the two children of a man is 5 years. The product of their ages after two years will be 50. Find the ages of the children now.

(a) 8, 13

(b) 2, 7

(c) 3, 8

(d) 5, 10

42. A function is defined by $x^2 - 6x$. Find out whether the function has maxima or minima, and also calculate the value of maximum or minimum.

(a) Maxima, 2

(b) Minima, -2

(c) Maxima, -9

(d) Minima, -9

43. The two roots of a quadratic equation $(ax^2 + bx + c = 0)$ is given by $2 + i$ and $2 - i$, then which of the following statements is correct?

(a) All the coefficients a, b and c contain imaginary numbers.

(b) None of the coefficients contains any imaginary terms.

(c) Coefficients a and b are real and c is imaginary.

(d) Coefficient a is real and b and c are imaginary.

44. If $0 \leq \theta \leq 90°$, then the value of θ in $\cos^2 \theta - \sin^2 \theta = 1$ is

(a) 45°

(b) 30°

(c) 90°

(d) 0

45. $\int_2^3 (4x^3 + 3)\,dx =$

(a) 81

(b) 77

(c) 78

(d) 68

46. Which of the following quantities is dimensionless?

(a) Work

(b) Area

(c) Angle

(d) Force

47. The most suitable instrument for measuring the size of an atom is

(a) vernier caliper

(b) screw gauge

(c) electron microscope

(d) optical microscope

48. The component of contact force normal to the surfaces in contact is called

(a) gravitational component

(b) friction

(c) tension

(d) normal reaction

49. Which physical quantity is conserved during both elastic and inelastic collision?

(a) Linear momentum

(b) Velocity

(c) Potential energy

(d) Kinetic energy

50. Who discovered radioactivity?

(a) Rutherford

(b) Marie Curie

(c) Roentgen

(d) Becquerel

51. The heat transferred from a system to its surroundings (or vice versa) when a chemical reaction is run under conditions of constant pressure is equal to

(a) the change in the enthalpy of the system

(b) the change in the energy of the system

(c) the change in the free energy of the system

(d) the change in the entropy of the system

52. Three different capacitors are connected in series, then

(a) they will have equal charge

(b) they will have equal potential

(c) they will have less charge

(d) they will have more potential

53. A boy throws a ball vertically upwards with an initial speed of 50 m/s. How long the ball takes to reach the maximum height and what is its maximum height? [g (approx.) = 10 m/s^2]

(a) 1·2 s, 14·4 m

(b) 1·2 s, 7·2 m

(c) 0·6 s, 14·4 m

(d) 0·6 s, 7·2 m

54. A person pushes a 20 kg box horizontally with a force of 120 N for a distance of 6 m on a straight-line path. How much work is done on the box by the person?

(a) 120 J

(b) 2400 J

(c) 720 J

(d) 20 J

55. A boy weighing 30 kg is wearing a roller skating shoe and rolls down a slanted path having a vertical height of 2·5 m. The length of the slanted path is 10 m. If we consider the friction as negligible, find the speed of the boy at the bottom of the slant. [g (approx.) = 10 m/s^2]

(a) 7·1 m/s

(b) 9·2 m/s

(c) 7·3 m/s

(d) 6·5 m/s

56. If $\vec{A} = 2i + 3j$ and $\vec{B} = -i - 4j$, find the value of $\vec{A} + \vec{B}$.

(a) $i + j$

(b) $i - j$

(c) $2i - 12j$

(d) $2i + 12j$

57. Two cars of equal mass are travelling with a speed of 120 km/h and 60 km/h, respectively. Find the ratio of the kinetic energy of the two cars.

(a) 1

(b) 2

(c) 4

(d) ½

58. When body is earthed, electrons flow from the earth into the body. This means the body is

(a) charged negatively

(b) charged positively

(c) uncharged

(d) an insulator

59. An astronomical telescope has a large aperture to

(a) have high resolution

(b) reduce spherical aberration

(c) have low dispersion

(d) increase span of observation

60. Internal energy of an ideal gas does not change in

(i) an isothermal process

(ii) an adiabatic process

(iii) a reversible process

(iv) a cyclic process

Choose the correct option.

(a) (i) and (ii)

(b) (i) and (iii)

(c) (ii) and (iii)

(d) (ii) and (iv)

PART—B

Answer *any* **sixty** questions

61. Which of the following cell organelles is having its own DNA?

(a) Ribosome

(b) Endoplasmic reticulum

(c) Mitochondria

(d) Peroxisome

62. In the phenomenon of fluorescence, the wavelength of incident light is

(a) less than the emitted light

(b) more than the emitted light

(c) equal to the emitted light

(d) No relation with the emitted light

63. The fluidity of plasma membrane increases with

(a) increase in saturated fatty acids in the membrane

(b) increase in unsaturated fatty acids in the membrane

(c) increase in phospholipid content in the membrane

(d) increase in glycolipid content in the membrane

64. Which of the following is the deposit of reserve materials in the cytoplasm of bacteria?

(a) Inclusion body

(b) Endospore

(c) Cytoskeleton

(d) Ribosome

65. The cell organelles mainly responsible for protein sorting are

(a) nucleus and endoplasmic reticulum

(b) endoplasmic reticulum and Golgi apparatus

(c) nucleus, endoplasmic reticulum and Golgi apparatus

(d) ribosome, nucleus, endoplasmic reticulum and Golgi apparatus

66. An enzyme that recognizes a specific (palindromic) sequence and cuts within a DNA molecule is called

(a) exonuclease

(b) methylase

(c) modification enzyme

(d) restriction endonuclease

67. Citric acid cycle is inhibited by which of the following?

(a) Fructo-acetate

(b) Aerobic condition

(c) Malic acid

(d) Fluorouracil

68. The combination of an amino-alcohol, a fatty acid and a sialic acid forms

(a) phospholipids

(b) sulpholipids

(c) glycolipids

(d) aminolipids

69. Antigen binding site is formed by

(a) N-terminal ends of one heavy chain and its neighbouring light chain

(b) C-terminal ends of one heavy chain and its neighbouring light chain

(c) N-terminal ends of one heavy chain and its neighbouring heavy chain

(d) C-terminal ends of one heavy chain and its neighbouring heavy chain

70. The pH inside lysosome is

(a) 3

(b) 5

(c) 7

(d) 9

71. In the prophase stage of meiosis, crossing-over takes place during

(a) zygotene

(b) pachytene

(c) diplotene

(d) leptotene

72. The quality of a vaccine that confers solid protection to the host against any challenge (experimental or natural) by the pathogen is called

(a) potency

(b) efficacy

(c) safety

(d) sterility

73. The specialized cells of the mucosal epithelium covering the Peyer's patches and transport the undegraded antigens from gut lumen into the lamina propria are

(a) M cells

(b) N cells

(c) P cells

(d) R cells

74. Proteins like antibodies, depending on their solubility characteristics, come out of the solution at different concentrations of ammonium sulphate. The process is called

(a) salting

(b) salting in

(c) salting out

(d) de-salting

75. Eukaryotic RNA polymerase-II transcription factor responsible for phosphorylation of C-terminal domain of RNA polymerase-II is

(a) TF-II D

(b) TF-II A

(c) TF-II B

(d) TF-II H

76. In deoxy-sugar of DNA, oxygen is absent in which of the following positions of the sugar ring?

(a) Position 1

(b) Position 2

(c) Position 3

(d) Position 5

77. Which of the following subunits of prokaryotic RNA polymerase is responsible for promoter recognition?

(a) Alpha

(b) Beta

(c) Sigma

(d) Gamma

78. The wavelength used for measurement of concentration of DNA in a solution is

(a) 230 nm

(b) 280 nm

(c) 260 nm

(d) 240 nm

79. Cofactor for glycolytic enzyme hexokinase is

(a) Fe^{++}

(b) Mn^{++}

(c) Mg^{++}

(d) Cu^{++}

80. Which of the following activities is required for proofreading during DNA replication by DNA polymerase?

(a) 3′-5′ exonuclease activity

(b) 5′-3′ exonuclease activity

(c) 3′-5′ endonuclease activity

(d) 5′-3′ endonuclease activity

81. Mitochondrial DNA is replicated by

(a) DNA polymerase α

(b) DNA polymerase β

(c) DNA polymerase γ

(d) DNA polymerase δ

82. The necessary ingredients for DNA synthesis is mixed together in a test tube. In the mixture, DNA polymerase is from *Thermus aquaticus* and the template is from a human cell. The newly DNA synthesized would be of

(a) *Thermus aquaticus* DNA

(b) human DNA

(c) a mixture of *Thermus aquaticus* and human DNA

(d) human RNA

83. Which of the following statements best defines the 'quaternary structure' of a protein?

(a) The arrangement of two or more polypeptide subunits into a single functional complex.

(b) The folding of the polypeptide backbone in three-dimensional space.

(c) The interaction of amino acid side chains.

(d) The sequence of amino acids in a polypeptide chain.

84. Which of the following vectors can maintain the largest fragment of foreign DNA?

(a) YAC

(b) Cosmid

(c) Plasmid

(d) Phage

85. Which of the following second messengers signals the release of Ca^{++} from the endoplasmic reticulum?

(a) Cyclic AMP

(b) Cyclic GMP

(c) 1,2-diacylglycerol

(d) Inositol triphosphate

86. Sterilization of tissue culture medium is done by

(a) mixing the medium with antifungal agents

(b) filtering the medium through membrane filter

(c) autoclaving of medium at 120° for 15 min

(d) keeping the medium at −20 °C

87. The ability of a microscope to separate or distinguish two adjacent objects is

(a) magnification power

(b) numerical aperture

(c) resolving power

(d) analytical aperture

88. A mutation caused by a base substitution resulting in the formation of stop codon is called

(a) point mutation

(b) missense mutation

(c) nonsense mutation

(d) synonymous mutation

89. The genetic tendency/predisposition to develop allergic diseases such as allergic rhinitis, asthma, etc., is called

(a) affinity

(b) avidity

(c) anergy

(d) atopy

90. KOZAK element is associated with

(a) transcription

(b) translation

(c) replication

(d) RNA splicing

91. Lysozyme can cause hydrolysis of

(a) phosphodiester bond

(b) 1,4-beta glycosidic linkage

(c) 1,2-beta glycosidic linkage

(d) peptide bond

92. Glutathione is a

(a) tripeptide

(b) dipeptide

(c) tetrapeptide

(d) large sized protein

93. Which of the following is a polyunsaturated fatty acid?

(a) Palmitic acid

(b) Oleic acid

(c) Palmitoleic acid

(d) Arachidonic acid

94. The smallest monosaccharide having furanose ring structure is

(a) erythrose

(b) glucose

(c) fructose

(d) ribose

95. At pH below isoelectric point, an amino acid exists as

(a) cation

(b) zwitterion

(c) anion

(d) undissociated molecule

96. In nucleosides, sugar is attached with purine at

(a) nitrogen 1

(b) nitrogen 3

(c) nitrogen 7

(d) nitrogen 9

97. The terminal nucleotide sequence in tRNA is

(a) CCA at 5 end

(b) ACC at 5 end

(c) CCA at 3 end

(d) ACC at 3 end

98. The only ketogenic amino acid is

(a) trypsin

(b) glycine

(c) leucine

(d) valine

99. The enzyme responsible for interconversion of glyceraldehyde-3-phosphate and dihydroxyacetone phosphate is

(a) aldolase

(b) enolase

(c) ketolase

(d) enoyl reductase

100. Which of the following molecules contributes two carbons and one nitrogen atom in the purine structure?

(a) Glycine

(b) Alanine

(c) Glutamic acid

(d) Tyrosine

101. The ketone body exhaled by animals suffering from ketosis is

(a) acetoacetate

(b) hydroxybutyrate

(c) acetone

(d) hydroxyl acetate

102. Which of the following animals does not have gall bladder?

(a) Cattle

(b) Horse

(c) Dog

(d) Human

103. In ruminants, the main precursor of milk fat is

(a) acetic acid

(b) propionic acid

(c) butyric acid

(d) None of the above

104. Which of the following immunoglobulins is present in saliva?

(a) IgA

(b) IgD

(c) IgE

(d) IgG

105. Foot and mouth disease is caused by

(a) retrovirus

(b) aphthovirus

(c) adenovirus

(d) reovirus

106. 'Intestinal button ulcer' is the pathognomonic lesion of which of the following diseases?

(a) Classical swine fever

(b) Foot and mouth disease

(c) Enterotoxaemia

(d) Paratuberculosis

107. Which of the following antigenic variants of influenza virus is involved with swine flu?

(a) H_2N_5

(b) H_1N_1

(c) H_5N_1

(d) H_1N_5

108. Ascoli's precipitation test is one of the specialized tests for the diagnosis of

(a) anthrax

(b) plague

(c) paratuberculosis

(d) mastitis

109. Which of the following is ***not*** a characteristic of a stem cell?

(a) Self-renewal

(b) Differentiation

(c) Embryoid body formation

(d) Malignancy

110. Which of the following is responsible for antibody diversity?

(a) VDJ recombination

(b) Point mutation

(c) VDJ deletion

(d) SNP in MHC genes

111. Light chain of immunoglobulin is absent in

(a) dog

(b) goat

(c) camel

(d) chicken

112. Which of the following antibiotics is a structural analogue of para-aminobenzoic acid (PABA)?

(a) Sulfonamides

(b) Cephalosporin

(c) Tetracycline

(d) Gentamicin

113. Which of the following is an aminoglycoside antibiotic?

(a) Ciprofloxacin

(b) Neomycin

(c) Erythromycin

(d) Vancomycin

114. Buparvaquone is the drug of choice for the treatment of

(a) theileriasis

(b) babesiosis

(c) anaplasmosis

(d) trypanosomiasis

115. Autohaemotherapy is practised in the treatment of

(a) haemorrhagic septicaemia

(b) papillomatosis

(c) blackleg

(d) horn cancer

116. Ovulatory fossa is the characteristic feature of the reproductive system of

(a) cattle

(b) sheep

(c) goat

(d) mare

117. 'Let down of milk' is initiated by the hormone

(a) prolactin

(b) lactogen

(c) oxytocin

(d) lactopoietin

118. 'Sterility hump' is associated with

(a) pseudohermaphrodite

(b) cystic ovary

(c) endometritis

(d) metritis

119. Persistent corpus luteum is best treated with

(a) prostaglandin $F_{2\alpha}$

(b) progesterone

(c) PMSG

(d) HCG

120. Which of the following helminths is responsible for oesophageal fibrosarcoma in dogs?

(a) *Toxocara canis*

(b) *Ancylostoma caninum*

(c) *Spirocerca lupi*

(d) *Ascaris suum*

121. Haemorrhagic septicaemia in bovine is caused by

(a) *Pasteurella multocida* type-A

(b) *Pasteurella multocida* type-B

(c) *Pasteurella multocida* type-C

(d) *Pasteurella multocida* type-D

122. Occurrence of a disease in a community clearly in excess of acceptance is called

(a) sporadic

(b) epidemic

(c) pandemic

(d) endemic

123. Tuberculin test is an example of

(a) molecular diagnostic test

(b) serological test

(c) histopathological test

(d) allergic test

124. Which of the following is not a zoonotic disease?

(a) Brucellosis

(b) Haemorrhagic septicaemia

(c) Japanese encephalitis

(d) Swine flu

125. Neuro-cysticercosis is due to

(a) intermediate stage of tapeworm

(b) adult stage of tapeworm

(c) intermediate stage of roundworm

(d) adult stage of roundworm

126. Which of the following is a local anaesthetic agent?

(a) Lignocaine hydrochloride

(b) Halothane

(c) Diazepam

(d) Chloroform

127. Which of the following cartilages is involved in roaring in horse?

(a) Arytenoid cartilage

(b) Thyroid cartilage

(c) Cricoid cartilage

(d) Cuneiform cartilage

128. For correction of patellar subluxation in cattle, surgical intervention is required in which of the following ligaments?

(a) Middle patellar ligament

(b) Lateral patellar ligament

(c) Medial patellar ligament

(d) Superficial patellar ligament

129. Which of the following terms is used for inflammation of lips?

(a) Lipitis

(b) Cheilitis

(c) Omphalitis

(d) Gonitis

130. It is possible to reduce the calving interval by

(a) reducing the service period

(b) reducing the lactation length

(c) reducing the dry period

(d) reducing the gestation period

131. Grading up is recommended for the genetic improvement of breed/population which is

(a) well defined and elite

(b) non-descript

(c) inbred

(d) outbred

132. The traits which show maximum amount of heterosis are mainly governed by

(a) additive gene action

(b) recessive

(c) epistasis

(d) pseudodominance

133. Sib selection is different from family selection where

(a) the selected individuals are measured

(b) only males are measured

(c) only females are measured

(d) both males and females are measured

134. Mating between two established breed is known as

(a) crossbreeding

(b) incross breeding

(c) grading up

(d) line crossing

135. Toxic principle present in Subabul (*Leucaena leucocephala*) is

(a) mimosine

(b) tannin

(c) phytic acid

(d) oxalate

136. Fodder preserved under controlled anaerobic condition containing 35%–50% dry matter (DM) is

(a) roughage

(b) silage

(c) haylage

(d) straw

137. Bovine milk considered as diabetogenic is

(a) A1 milk

(b) A2 milk

(c) C1 milk

(d) C2 milk

138. According to FSS, the product obtained by draining after the coagulation of milk with a harmless milk coagulating agent, under the influence of harmless bacterial cultures is known as

(a) dahi

(b) yoghurt

(c) cheese

(d) paneer

139. In milk, casein is present in combination with calcium in the form of

(a) calcium hydrogen caseinate

(b) calcium hydroxyapatite

(c) calcium hydrogen succinate

(d) calcium butyrate

140. The 'Ash of milk' ***does not*** contain

(a) Ca

(b) Fe

(c) P

(d) Mg

141. The maximum size of fat globules in homogenized milk is

(a) more than 2μm

(b) less than 2μm

(c) more than 4μm

(d) 3-4μm

142. Karan Swiss breed of cattle is developed by

(a) Sahiwal × Brown Swiss

(b) Hariana × Brown Swiss

(c) Tharparkar × Brown Swiss

(d) Gir × Brown Swiss

143. Which one of the following is ***not*** a true constituent of milk?

(a) Milk fat

(b) Casein

(c) Lactose

(d) Phospholipid

144. In toned milk, the fat percentage is reduced to

(a) 3·0

(b) 1·5

(c) 4·5

(d) 0·5

145. Which breed of poultry is known for black meat?

(a) Aseel

(b) Kadaknath

(c) Ankaleshwar

(d) Miri

146. The most abundant protein in animal body is

(a) myosin

(b) actin

(c) collagen

(d) titin

147. Electric stimulation of freshly slaughtered carcass is done

(a) to improve flavor

(b) to improve texture

(c) to improve tenderness

(d) for keeping quality

148. Casing prepared from the stomach is known as

(a) middle

(b) bung

(c) cap

(d) maw

149. The chromosome number in pig is

(a) 64

(b) 78

(c) 28

(d) 38

150. Which of the following breeds of sheep is used for pelt production?

(a) Karakul

(b) Rambouillet

(c) Lincoln

(d) Merino

151. Floor space requirement for a bull under covered area is

(a) $10\ m^2$

(b) $12\ m^2$

(c) $120\ m^2$

(d) $8\ m^2$

152. Goat breed famous for the best quality meat and prolificacy is

(a) Jamunapari

(b) Black Bengal

(c) Beetal

(d) Marwari

153. Feed recommended in hot climate is

(a) high protein and low fibre

(b) low protein and high fibre

(c) low protein and low fibre

(d) equal protein and fibre

154. The species in which vertical and transverse diameters of pelvis are nearly equal is

(a) bovine

(b) equine

(c) caprine

(d) canine

155. The most common cause of dystocia in bitch is

(a) abnormal presentation and position

(b) uterine torsion

(c) incomplete cervical dialation

(d) uterine inertia

156. Amniotic vesicle can be palpable in cow between

(a) day 25–30 of gestation

(b) day 45–60 of gestation

(c) day 60–90 of gestation

(d) day 30–45 of gestation

157. Testis is placed obliquely in

(a) horse

(b) bull

(c) ram

(d) boar

158. Minimum percentage of crude protein (CP) required for preparation of complete feed blocks for the adult animals is

(a) 10%

(b) 12%

(c) 15%

(d) 20%

159. Feeds containing more than 18% crude fibre and less than 60% TDN are categorized as

(a) concentrates

(b) roughages

(c) leguminous feeds

(d) non-leguminous feeds

160. Parakeratosis is caused due to the deficiency of

(a) manganese

(b) cobalt

(c) zinc

(d) iron

★★★