Subject: Veterinary Physiology

1. Inhibitory factor which prevent lactogenesis is
    a. Insulin
    b. Prolactin
    c. Progesterone
    d. ACTH

2. Which endocrine gland secrets DHEA and cortisol
    a. Pituitary gland
    b. Pineal Gland
    c. Parathyroid gland
    d. Adrenal Gland

3. In the intestine, the dietary fats are hydrolysed by
    a. Triacylglycerol lipase
    b. Pancreatic Lipase
    c. Adenylate cyclase
    d. Protein Kinase

4. When adenyl cyclase is activated
    a. Steroid hormones enter the cell
    b. cAMP is broken down
    c. G-proteins bind to cAMP
    d. cAMP is formed

5. Hormone which is responsible for broodiness behaviour in birds
    a. Oxytocin
    b. Cortisol
    c. Prolactin
    d. ADH

6. Which of the following receptor cell detected the painful sensations
    a. Naked nerve ending
    b. Miessner's corpuscles
    c. Krauze's end bulb
    d. Ruffini's end organ

7. Which hormone plays a pivotal role in social bonding, reproduction and parturition
    a. Prolactin
    b. Melatonin
    c. Oxytocin
    d. Adrenalin

8. For water re absorption ADH act on the DCT on
    a. Principal cell
    b. S cells
    c. G cells
    d. Intercaleted cell

9. The duration of one respiratory cycle is
    a. 5 seconds
    b. 2 seconds
    c. 10 seconds
    d. 3 seconds

10. How would you diagnose the aplastic anaemia by
    a. Bone marrow biopsy
    b. Blood smear
    c. Spleen biopsy
    d. Complete blood count

11. Releasing hormone complexes with neurophysins and transmit to posterior pituitary gland by
    a. Diffusion
    b. Nissles' granules
    c. Portal system
    d. Herring bodies

12. The Galectopoietic hormone in cow is
    a. Prolactin
    b. Growth hormone
    c. Testosterone hormone
    d. Thyroid hormone

13. Which one of the following amylolytic enzyme decreases with age
    a. Sucrase
    b. Lactase
    c. Amylase
    d. Maltase

14. Which of the following test is most indicative for cardiac damage
    a. Troponin
    b. Complete blood count
    c. Creatine kinase
    d. Lactate dehydrogenase

15. Brains ability to change in response to experience or damage is called
    a. Laterilization
    b. Lesioning
    c. Neuroplasticity
    d. Functionality

16. The amount of blood pumped by left ventricle in one minute would equal to
    a. Half of the cardiac output
    b. Amount of the blood that flowed through coronary circulation
    c. Amount equal to stroke volume
    d. Amount of the blood that flowed through the lungs

17. S.A. node is the pacemaker of heart because of
    a. Natural leakiness to Na+
    b. Natural leakiness to K+
    c. Located in right atrium
    d. Neural control

18. Alpha, beta, theta and delta waves are observed in
    a. Electrocardiogram
    b. Electrocardiograph
    c. Electroencephalogram
    d. Electromyogram

19. Kata thermometer is used to measurement of
    a. Atmospheric pressure
    b. Cooling power of air
    c. Humidity and rainfall
    d. Temperature of open area

20. How much amount of circulating blood normally transit through capillaries
    a. 35%
    b. 15%
    c. 10%
    d. 20%

21. The anticoagulant used for ESR determination by Westerngreen method is
    a. 38% Sodium citrate
    b. EDTA
    c. Heparin
    d. 3.8% Sodium citrate

22. During intense exercise, fatigue is most likely to be caused by
    a. Increase of ATP
    b. Accumulation of metabolic by products
    c. Depletion of glycogen stores
    d. Low muscle pH

23. Stacks or aggregations of RBCs formed because of unique discoid shape of cells is called as
    a. Rouleaux formation
    b. Plasma Skimming
    c. Erythropoiesis
    d. Agglutination

24. Which one of the following is not secreted by parietal cells of stomach
    a. Water
    b. HCl
    c. Intrinsic factor
    d. Extrinsic factor

25. Study of the properties of fluids in motion is called as
    a. Fluid mechanics
    b. Fluid dynamics
    c. Fluid statics
    d. Dynamics

26. Bernoulli's theorem deals with principle of
    a. Force
    b. Energy
    c. Mass
    d. Momentum

27. The porphyria is caused due to defect in the uroporphyrinogen decarboxylase is termed as
    a. Acute intermittent porphyrin
    b. Variegate porphyria
    c. Porphyria cutanea tarda
    d. Hereditary corproporphyria

28. The function of transcortin is
    a. Transportation of thyroid hormones
    b. Transportation of Phospholipids
    c. Transportation of corticosteroid
    d. Binding with Progesterone

29. Which enzyme regulates the synthesis of estrogen from testosterone
    a. Hexokinase
    b. Aromatase
    c. Phospholipase
    d. Hyaluronidase

30. Which of the following part of the circulation has the highest compliance
    a. Capillaries
    b. Artery
    c. Veins
    d. Aorta

31. The amount of water loss by the perspiration is about
    a. 400 ml/day
    b. 1000 ml/day
    c.1500 ml/day
    d.600 ml/day

32. In peripheral nervous system, the myelin sheath is formed by
    a. Oligodendrocytes
    b. Schwann cells
    c. Ependymal cells
    d Astrocytes

33. Semen ejaculation and uterine contraction is controlled by
    a. Prolactin
    b. Relaxin
    c. Oxytocin
    d. Renin

34. Which of the following is also referred to as "dreamless sleep"
    a Rapid eye movement
    b. Paradoxical sleep
    c. Slow wave sleep
    d Desynchronized sleep

35. Point of inflection in growth curve coincides to
    a. Birth
    b. Conception
    c. Puberty
    d. Death

36. Which one of the following statement is incorrect
    a. Aldosterone facilitate sodium reabsorption
    b. RAAS activated during high blood pressure
    c. ACE stimulate the conversion of angiotensin-I into angiotensin-II
    d. ANP inhibits Aldosterone and ADH secretion

37. Which one of the following is a least toxic excretory products in animals
    a. Urea
    b. Uric acids
    c. Ammonia
    d. Ammonium chloride

38. In neuron, the trigger zone for the action potential is:
    a Axon hillock
    b. Dendrite
    c. Soma
    d. Presynaptic terminal

39. What will happens if PCT of nephron is removed
    a. Urine is more concentrated
    b. Urine is not formed
    c. Urine is more diluted
    d. Quality and quantity of urine is not affected

40. Concentrated urine is voided by desert species due to
    a. Loop of henle is extended up to cortico-medullary junction
    b. More numbers of cortical nephron in kidney
    c. Large relative medullary thickness
    d. More scarcity of water in desert area

41. Which blood constituents remain unchanged in quantity after passing through the kidney
    a. Glucose and proteins
    b. Urea and proteins
    c. Urea and uric acids
    d. Glucose and Urea

42. The juxtaglomerular apparatus is formed by cellular modification in the
    a. Afferent and DCT
    b. Afferent and PCT
    c. Efferent and DCT
    d. Efferent and PCT

43. Which one of the following is not favored the formation of large quantities of dilute urine
    a. Anti diuretic hormone
    b. Alcohol
    c. Caffeine
    d. Renin

44. Salts are reabsorbed from glomerular filtrate under the influence of
    a.ADH
    b. Mineralocorticoids
    c. Oxytocin
    d. Glucocorticoids

45. Apart from excretion, what is another potent function of the kidney
    a. Hormonal regulation
    b. Temperature regulation
    c. Spermatogenesis
    d. Osmoregulation

46. Duration of one muscle twitch is equal to
    a. 1 second
    b. 10 second
    c. 5 second
    d. 0.1 second

47. During muscle contraction, calcium binds with
    a. Tropomycin
    b. Troponin-C
    c. Troponin-I
    d. Troponin-T

48. Which of the following also shortens, when a muscle fiber shortens
    a. Actin filament
    b. Myosin filament
    c. Sarcomere
    d. Z line

49. During one cross-bridge cycle in skeletal muscle contraction
    a. Cross bridge binds to troponin
    b. ATP binds with actin binding sites
    c. Cross bridge performs two strokes
    d. One molecule of ATP is used

50. The contractile protein of skeletal muscles involving ATPase activity is
    a. Myosin
    b. Actin
    c. Troponin
    d.Tropomyosin

51. The process by which WBCs squeeze through capillary endothelial pore
    a. Pinocytosis
    b. Chemotaxis
    c. Opsonization
    d. Diapadesis

52. Eicosanoids are
    a. Steroid class
    b. Fatty acid class
    c. Peptide class
    d. Glycoprotein class

53. The condition resulting from inadequate production of surfactant that consequence to collapse of alveoli
    a. Pneumothorax
    b. Pulmonary embolism
    c. Hypoxia
    d. Respiratory distress syndrome

54. When you inhale, your lungs expand easily because they have
    a. High compliance
    b. High resistance
    c. Low compliance
    d. High elasticity

55. Which of these statements is true for internal respiration
    a. Production of ATP
    b. Exchange of gases between alveoli and blood stream
    c. Exchange of gases between bloodstream and tissue cells
    d. Transfer of gases from atmosphere to lung and vice versa

56. Lack of surfactant is associated with
    a. Increased compliance
    b. Decreased compliance
    c. Both decrease and increase
    d. No effect on compliance

57. 2,3 DPG molecules compete for the oxygen binding sites of haemoglobin, it is present in
    a. Blood of lungs
    b. Blood plasma
    c. Leucocytes
    d. Erythrocytes

58. Life span of avian erythrocyte is
    a.100-120 days
    b. 20-30 days
    c. 60-70 days
    d. 125-150 days

59. Which of the following would not cause an increase in erythropoietin production
    a. Altitude hypoxia
    b. Polycythemia
    c. Severe blood loss
    d. Anaemic condition

60. In camel, erythrocytes are
    a. Circular, biconcave and nucleated
    b. Oval and nucleated
    c. Oval and non-nucleated
    d. Circular, biconcave and non-nucleated

61. Which hormone is responsible for migratory behaviour in birds
    a. Oxytocin
    b. Thyroxin
    c. Prolactin
    d. Insulin

62. Moulting of feathers in birds is regulated by
    a. Prolactin hormone
    b. Thyroid hormone
    c. Melatonin hormone
    d. Corticosteroid hormone

63. The effect of CO_2 and H^+ on the ability of hemoglobin to yield or receive oxygen is called as
    a Haldane effect
    b. Chloride shift
    c. Bicarbonate effect
    d. Bohr effect

64. Release of oxytocin by the posterior pituitary gland is controlled by
    a. Changes in arterial blood pressure
    b. Oxytocin releasing hormone
    c. Changes in body temperature
    d. Neural signals from Hypothalamus

65. Which cells provide nutrition to developing germ cells
    a. Interstitial cells
    b. Leydig cells
    c. Sustantacular cells
    d. Spermatogonia

66. Which of the following species is commonest example of high flanker
    a. Bull
    b. Stallion
    c. Dog
    d. Ram

67. Sialic acid content of glycoprotein hormone affects its
    a.Mechanism action
    b. Solubility
    c.Ttransportation
    d. Life span

68. Which one referred as a temporary endocrine organ
    a. Placenta
    b. Pancreas
    c. Pineal body
    d. Thymus

69. After ovulation, animal fails to fertilize then the corpus luteum
    a. Produces much more oxytocin and relaxin hormone
    b. Is active and produce more FSH and LH
    c. Is maintained and secreted progesterone
    d. Regresses by PGF2α that produces from uterine endometrium

70. Concentration of ammonia and total VFAs in rumen is highest for
    a. Buffalo
    b. Cattle
    c. Goat
    d. Sheep

71. Successive occurrence of the respiratory cycles in a waxing and waning pattern is referred to as
    a. Cheyne-Stokes breathing
    b. Costal breathing
    c. Abdominal breathing
    d. Grouped breathing

72. In hemorrhagic anaemia, types of anaemia is
    a. Macrocytic normochromic
    b. Normocytic normochromic
    c. Microcytic hypochromic
    d. Microcytic normochromic

73. Hypoxic condition that results in
    a. Apnoea
    b. Polypnoea
    c. Hyperpnoea
    d. Dyspnoea

74. Sertoli cell tumor of testes in dog secrets large quantity of
    a. Estrogen
    b. Testosterone
    c. Prolactin
    d. Androgens

75. Vomiting centre is located at:
    a. Amygdala
    b. Hippocampus
    c. Basal ganglia
    d. Chemoreceptor trigger zone

76. Absence of which gastric gland cell leads to pernicious anaemia
    a. Goblet cell
    b. Chief cell
    c. Mucus neck cell
    d. Oxyntic cell

77. The release of which hormone is associated with the Fergusion‘s reflex
    a. Progesterone
    b. Estrogen
    c. Oxytocin
    d. Relaxin

78. Which of the following hormone acts primarily to increase bicarbonate output by duct cells of pancreas
    a. CCK
    b. VIP
    c. Leptin
    d. Secretin

79. Hemoglobin synthesis starts when succinyl Co A combine with
    a. Glycin
    b. Leucin
    c. Alanine
    d. Metheonine

80. Maternal recognition of pregnancy is responsible for
    a. Fertilization
    b. Implantation
    c. Fetal Growth
    d. Maternal circulation

81. The active pump responsible for the HCl secretion in stomach is
    a. Na^+-K^+ ATPase
    b. H^+-K^+ ATPase
    c. Na^+-HCO_3
    d. Na^+-H^+ ATPase

82. Which of the following species does not depend on thermoregulatory sweating for heat dissipation
    a. Birds
    b. Dog
    c. Horse
    d. Camel

83. Which of the following specie have 100% Juxtamedullary nephrons?
    a Cattle
    b. Buffalo
    c. Sheep
    d. Cat

84. When environmental temperature becomes very high and the animal is not able to maintain homeothermy then
    a. Increase metabolic rate
    b. Decrease feed intake
    c. Drespiration rate
    d. Decrease peripheral blood flow

85. Hormone involved in prolactin release inhibition is
    a. Dopamine
    b. Epinephrine
    c. Estrogen
    d. Oxytocin

86. Choice of anticoagulant that used for estimation of blood glucose level
    a. EDTA
    b. Sodium fluoride
    c. Sodium citrate
    d. Heparin

87. In avians, Koilin membrane is present in
    a. Ventriculus
    b. Proventriculus
    c. Crop
    d. Gizzard

88. When a muscle contract, tension develops because of
    a. Length-tension relationship
    b. Overlapping arrangement of the actin and myosin filament
    c. Interaction between the actin and myosin filament
    d. Slackening within the connective tissue element

89. Which of the following tissue or organ is best adapted for anaerobic respiration
    a. Brain
    b. Smooth muscle
    c. Cardiac muscle
    d. Skeletal muscle

90. Cerebral blood flow may be increased by increasing
    a. pH
    b. Carbon dioxide
    c. Ventilation
    d. Arterial pressure

91. Larger the body surface area has greater rate of heat transfer
    a. Allen's rule
    b. Wilson rule
    c. Bergmann's rule
    d. Golger rule

92. Duration of spermatogenic cycle in bull is
    a. 39 days
    b. 61 days
    c. 52 days
    d. 47 days

93. The extra pyramidal system is not concerned with
    a. Stretch reflex
    b. Sensation of viscera
    c. Spasticity
    d. Rightening reflex

94. The basal ganglia are primarily concerned with
    a. Short term memory
    b. Sensory integration
    c. Neuro-endocrine control
    d. Control of movement

95. The shape of Foetal haemoglobin oxygen dissociation curve is
    a. Sigmoid
    b. Parabolic
    c. Linear
    d. Hyperbolic

96. The sympathetic system
    a. Has short post ganglionic fibres
    b. Consist of vagus nerve
    c. Produces nicotine at its nerve endings
    d. Has a thoraco-lumbar outflow from the spinal cord

97. Surfactant is secreted by
    a. Type 2 pneumatocytes
    b. Type 1 pneumatocytes
    c. Goblet cells
    d. Pulmonary vessels

98. Which of the following is not increased during exercise
    a. Stroke volume
    b. Heart rate
    c. Total Peripheral resistance
    d. Systolic BP

99. Which of the animal has maximum systolic and diastolic blood pressure
    a. Birds
    b. Kangaroo Rat
    c. Camel
    d. Giraffe

100. Reaction of the body to an emergency is controlled by
    a. Somatic nervous system
    b. Sympathetic nervous system
    c. Parasympathetic nervous system
    d. Enteric nervous system

101. Organ of phonation in birds
    a. Syrinx
    b. Larynx
    c. Trachea
    d. Epiglottis

102. The functional cyclical corpus luteum of non pregnant animal is
    a. CL Verum
    b. CL Albicance
    c. CL Spurium
    d. CL Hemorragicum

103. Enzyme which is involved during the process of ovulation in cows
    a. Lipase
    b. Collagenase
    c. Hyaluronidase
    d. Esterase

104. The probable cause of delayed ovulation in cow is
    a. Delay in FSH release
    b. Delay in LH release
    c. Delay in oestrogen release
    d. Delay in progesterone release.

105. The hormone required for ductal growth and development of mammary gland
    a. Oxytocin
    b. Prolactin
    c. Estrogen
    d. Progesterone

106. Physiological changes that result from the prolonged exposure to a single component of the environment are called as

a. Acclimatization

b. Acclimation

c. Homeorhesis

d. Adaptation

107. Reaction time has co-relation with

a. Sex drive

b. Motility of sperm

c. Fertility of sperm

d. Concentration of sperm

108. Cornificaton of vaginal epithelium is increased due to

a. Rise in progesterone

b. Rise in FSH

c. Rise in estrogen

d. Rise in prolactin

109. Which one of the following antibody molecule is biggest in size

a. IgM

b. IgE

c. IgA

d. IgG

110. In Bruce effect

a. Increase the heart rate

b. Female animal terminate pregnancy in exposure to unfamiliar male

c. Synchronization of estrus when females are exposed to male

d. Greater muscle work done, more ATP utilized

111. Which of the following increases the blood pressure

a. Angiotensin-II

b. Atrial natriuretic peptide

c. C-type atrial Natriuretic peptide

d. Brain atrial natriuretic peptide

112. Maintenance of constant body temp is the function of

a. Pons
b. Medulla
c. Cerebellum
d. Hypothalamus

113. Which part of brain is also called as "Emotional Brain"

a. Hypothlamus
b. Limbic system
c. Brain stem
d. Cerebellum

114. The function of tapetum lucidum in eye is

a. To convert light to nerve impulse
b. To focus light upon to the retina
c. To secret aqueous humour
d. To reflect light back on to the retina

115. Olfactory bulb plays a role in

a. Visual communication
b. Taste communication
c. Smell communication
d. Auditory communication

116. Behaviour associated with threat, attack or defence on the part of animal is called as

a. Epimeletic
b. Imprinting
c. Eliminating
d. Agonistic

117. Heterophils are seen in blood of

a. Goat
b. Fowl
c. Rabbit
d. Camel

118. Which one of the actions of the parasympathetic nervous system is

a. Inhibits peristalsis

b. Dilation of bronchioles

c. Constriction of pupils

d. Sweat secretion

119. In classical (Pavlovian conditioning) Salivation to food is a

a. Conditioned stimulus (CS)
b. Conditioned response (CR)
c. Unconditioned stimulus (US)
d. Unconditioned response (UR)

120. Osmolarity of urine in the cortex is equal to

a. 900 mOsm/L
b. 600 mOsm/L
c. 300 mOsm/L
d. 1200 mOsm/L

Key

1.	C
2.	D
3.	B
4.	D
5.	C
6.	A
7.	C
8.	A
9.	A
10.	A
11.	D
12.	B
13.	B
14.	A
15.	C
16.	D
17.	A
18.	C
19.	B
20.	C
21.	D
22.	B
23.	A
24.	D
25.	B
26.	B
27.	C
28.	C
29.	B
30.	C

31.	A
32.	B
33.	C
34.	C
35.	C
36.	B
37.	B
38.	A
39.	C
40.	C
41.	A
42.	A
43.	D
44.	B
45.	D
46.	D
47.	B
48.	C
49.	D
50.	A
51.	D
52.	B
53.	D
54.	A
55.	C
56.	B
57.	D
58.	B
59.	B
60.	C

61.	C
62.	B
63.	D
64.	D
65.	C
66.	B
67.	D
68.	A
69.	D
70.	C
71.	A
72.	B
73.	B
74.	A
75.	D
76.	D
77.	C
78.	D
79.	A
80.	B
81.	B
82.	A
83.	D
84.	B
85.	A
86.	B
87.	D
88.	C
89.	D
90.	B

91.	C
92.	C
93.	B
94.	D
95.	D
96.	D
97.	A
98.	C
99.	D
100.	B
101.	A
102.	C
103.	B
104.	B
105.	C
106.	B
107.	A
108.	C
109.	A
110.	B
111.	A
112.	D
113.	B
114.	D
115.	C
116.	D
117.	B
118.	C
119.	D
120.	C