# Subject: Veterinary Physiology

- The galactopoietic hormone in goat 1. .
  - a. Insulin
  - b. Progesterone
  - c. Prolactin
  - d. Growth hormone

#### 2. The hormone which is responsible for broodiness behaviour in birds

- a. Prolactin
- b. Cortisol
- c. ADH
- d. Oxytocin

ोजान विश्वह The reabsorption of water in birds is due to

a. ADH

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- b. Arginin vasotocin
- c. Oxytocin
- d. Prolactin

The pace maker of respiration is

- a. Ventral respiratory group of neurons
- b. Pneumotaxic centre
- c. Dorsal respiratory group of neurons
- d. Apnaustic centre

The total area of respiratory membrane is

- a.  $16 \text{ m}^2$
- b. 160 m<sup>2</sup>
- c. 6 m<sup>2</sup>
- d.350 m<sup>2</sup>
- The secretion of hydrogen ions in DCT by 6.
  - a. G cells
  - b. S cells
  - c. Principal cell
  - d. Intercaleted cell

7. Which one of the following amylolytic enzyme is more in young ones

- a. Sucrase
- b. Maltase
- c. Amylase
- d. Lactase

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

#### 9. The duration of expiration in respiratory cycle is

- a. 10 seconds
- b. 2 seconds
- c. 5 seconds
- d. 3 seconds
- 10. During intense exercise, fatigue is most likely to be caused by
  - a. Increase of ATP
  - b. Depletion of glycogen stores
  - c. Accumulation of metabolic by products
  - d. Low muscle pH

#### Neurotransmitter that controls prolactin secretion is-

- a. serotonin
- b. Somatostatin
- c. acetylcholine
- d. Dopamine

Excitatory post synaptic potentials can be provided by agents that close:

- a. Potassium channels
- b. Calcium channels
- c. Magnesium channels
- d. Sodium channels
- 13.

11.

12.

In embryonic life telencephalon is responsible for the formation of:

- a. Cruracerebri
- b. Cerebral cortex
- c. Hypothalamus
- d. Epithalamus

#### 14. The corpus luteum during pregnancy is also known as

- a. CL haemorragicum
- b. CL albicans
- c. CL pregnana
- d. CL verum

15. Immediate memory is synaptic potentiation due to accumulation of:

- a. Calcium ions
- b. Sodium ions
- c. Potassium ions
- d. Magnesium ions

- 16. The rectal temperature of birds is around
  - a. 38°C
  - b. 39°C
  - c. 29°C
  - d. 41°C

#### 17. Some transmitter systems do not involve distinct projection pathways: a. Endorphin

- a. Endorphi
- b. Glycine c. CAPM
- d.Acetyl choline
- 18.

19.

In microsmatic animals an important role in olfaction is play by: a. Epiglottis

- b. Nasal passages
- c. Mouth
- d. External nares

# Impaired stereogenesis is an early sign of damage to:

- a. Spinal cord
- b. Medulla oblongata
- c. Choroid
- d. Cerebral cortex
- 20. Increase in size of various parts/ organs of the body by multiplication of cells called
  - a. Growth
  - b. Development
  - c. Differentiation
  - d. Maturation
- 21. Addition's disease is caused as result of
  - a. Hypo- adrenocorticism
  - b. Hyper adrenocorticism
  - c. hyper thyroidism
  - d. hypothyroidism
- 22. The paired presentation of the conditioned stimulus and unconditioned stimulus is called:
  - a. Reinforcement
  - b. Avoidance response
  - c. Passive avoidance
  - d. Active avoidance

- 23. Reflex centers for erection and ejaculation are located in which region of the spinal cord.
  - a. Lumbar
  - b. sacral
  - c. thoracic
  - d. Cervical
- 24. To be able to influence activity in its target cells, if a hormone requires preaction of another hormone then the relationship is described as
  - a. Synergism
  - b. Permissive action
  - c. Antagonism
  - d. None of these
- 25.
- Type of learning occurs most frequently in response to nausea and is associated with taste or odor
  - a. Classical conditioning
  - b. Operant conditioning
  - c. Conditioned taste aversion
  - d. Spatial learning
- 26.
- Cells that outnumber neurons in brain tissue are called:
- a. Schawnn cells
- b. Neuroglia cells
- c. Astrocytes
- d. Microglia cell
- The biosynthesis of haemoglobin starts in the
  - a. Erythrocytes
  - b. Late normoblast
  - c. Rubricyte
  - d. Reticulocyte
- 28.

- The ADH hormone which is secreted from hypothalamus act on which cells of DCT
  - a. Principal cell
  - b. Intercalated cell
  - c. I cell
  - d. F cell
- 29. The Chemo receptors are more effective in controlling the respiratory rate in
  - a. Increased Co2 in blood
  - b. Decreased O2 in blood
  - c. Increased in Hydrogen ion
  - d. Increased in oxygen in blood

- 30. Adrenaline causes
  - a. Increase in respiratory rate
  - b. Decrease in respiratory rate
  - c. Transient cessation of respiration
  - d. No change in respiratory rate
- 31. The total number of air sacs in birds is
  - a. 9
  - b. 4
  - c. 8
  - d. 6
- 32.
- The rate and depth of respiration is control by

Insufficiency in cytochrome oxidase enzyme

- a. Ventral respiratory group of neurons
- b. Dorsal respiratory group of neurons
- c. Pneumotaxic centre
- d. Apnaustic centre

3.

- a. Hypokinetic Hypoxia
- b. Anemic Hypoxia
- c. Histotoxic Hypoxia
- d. Arterial Hypoxia
- 34.
- 15 gram of haemoglobin carries
- a. 20.1 ml oxygen
- b. 2.01 ml oxygen
- c. 13.4 ml oxygen d. 1.34 ml oxygen
- 35.
- During hibernation there is reduction in:
- a. Thermo genesis
- b. Heart rate
- c. Respiration
- d. Pulse rate

36. Eccrine sweat glands are more important for thermal sweating in:

- a. Dogs
- b. Camel
- c. Humans
- d. Sheep

37. Vasodilator produced by sweat glands;

- a. Histamine
- b. Bradykinin
- c. Acetylcholine
- d. Serotonin

- 38. The photoreceptors which affects the reproductive stimulation in birds is located at:
  - a. Medulla oblongata
  - b. Pons
  - c. Hypothalamus
  - d. Thalamus
- 39. Neurohumor responsible for fever is
  - a. Enkephalins
  - b. Prostaglandin
  - c. GABA
  - d. Serotonin
- 40.

Release of acetylcholine from the nerve endings at myoneural junction is:

- a. Ca++ ion dependent
- b. Na+ ion dependent
- c. Mg++ ion dependent
- d. K++ ion dependent
- The hormone essential for lactogenesis and maintenance of milk Production in cow when lactation has been established:
  - a. Oestrogen
  - b. Growth hormone
  - c. Progesterone
  - d. Prolactin
- 42. The myelin forming cells in CNS nerves are
  - a. Schwann cells
  - b. Oligodendrocytes
  - c. Neuroglia
  - d.Microglia
- 43. A hormone that is immunosuppressant for the uterus and there by avoid rejection of fetus:
  - a. Oestrogens
  - b. Progesterone
  - c. Relaxin
  - d. Inhibin
- 44. Fetal hemoglobin oxygen dissociation curve is
  - a. Hyperbolic
  - b. Sigmoid
  - c. Parabolic
  - d. Linear

- 45. Transferin proteins are responsible for the transport of:
  - a. Calcium
  - b. Iron
  - c. Copper
  - d. Haemoglobin

#### 46. The light bands contain only actin filaments and are called as

- a. A-band
- b. I-band
- c. H-zone
- d. M-line

# 47. Enzymes that are responsible for the catabolism of catecolamines are:

- a. COMT
- b. Choline acetyl transferase
- c. Both COMT and MAO
- d. MAO

# Summer sterility in rams is due to:

- a. Excess of thyroxine
- b. Low level of thyroxine
- c. Normal FSH but low levels of LH
- d. Normal thyroxine
- 49.

. Stacks or aggregations of RBCs formed because of unique discoid shape of cells is called as

- a. Rouleaux formation
- b. Plasma Skimming
- c. Agglutination
- d. Erythropoiesis

50.

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

# 51. In ECG, Ventricular muscle depolarization is indicated by

- a. PR interval
- b. P wave
- c T wave
- d. The QRS complex

# 52. Lack of surfactant is associated with:

- a. Increased compliance
- b. Decreased compliance
- c. No effect on compliance
- d. Normal compiance

- 53. The effect of  $CO_2$  and  $H^+$  on the ability of hemoglobin to yield or receive oxygen is called as:
  - a. Chloride shift
  - b. Haldane effect
  - c. Bohr effect
  - d. Henderburg effect
- 54. Successive occurrence of the respiratory cycles in a waxing and waning pattern is referred to as:
  - a. Grouped breathing
  - b. Costal breathing
  - c. Abdominal breathing
  - d. Cheyne-Stokes breathing
- 55. Vomiting centre is located at:
  - a. Basal ganglia
  - b. Chemoreceptor trigger zone
  - c. Amygdala
  - d. Hippocampus
- 56. In ruminants, the principal fermentation gases are:
  - a. CO<sub>2</sub>
  - b. CH<sub>4</sub>
  - c. O<sub>2</sub>
  - d. Both CO<sub>2</sub> and CH<sub>4</sub>

Which of the following hormone acts primarily to increase bicarbonate output by duct cells of pancreas:

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- a. CCK
- b. VIP
- c. Secretin
- d. Leptin
- 58. . "Hunger hormone" is:
  - a. Motilin
  - b. Somatostatin
  - c. Ghrelin
  - d. VIP

59. Which of the following specie have 100% Juxtamedullary nephrons

- a. Cattle
- b. Buffalo.
- c. Cat
- d. Sheep

- 60. Instrument for measuring the speed of the wind is:
  - a. Wind vane
  - b. Anemometer
  - c. Actinometer
  - d. Barometer
- 61. In classical (Pavlovian conditioning) salivation to food is a
  - a. Unconditioned response (UR)
  - b. Conditioned response (CR)
  - c. Conditioned stimulus (CS)
  - d. Unconditioned stimulus (US)
- 62. Releasing hormone complexes with neurophysins and transmit to posterior pituitary gland by
  - a. Diffusion
  - b. Portal system
  - c. Nissles' granules
  - d. Herring bodies

#### The anticoagulant used for blood glucose determination is

- a. Heparin
- b. EDTA
- c. 3.8% Sodium citrate
- d. Sodium fluoride
- 64. The function of transcortin is
  - a. Transportation of corticosteroid
  - b. Transportation of Phospholipids
  - c. Transportation of thyroid hormones
  - d. Binding with Progesterone
- 55. D

- Duration of spermatogenic cycle in bull is
  - a. 39 days
  - b. 47 days
  - c. 52 days
  - d. 61 days
- 66. Surfactant is secreted by
  - a. Goblet cells
  - b. Type 1 pneumatocytes
  - c. Pulmonary vessels
  - d. Type II pneumatocytes
- 67. Which of the animal has maximum systolic and diastolic blood pressure
  - a. Kangaroo Rat Birds
  - b. Human
  - c. Camel
  - d. Giraffe

- 68. Duration of one muscle twitch is equal to
  - a. 1 second
  - b.0.03 second
  - c. 5 second
  - d. . 0.1 second

# 69. Sodium is reabsorbed from glomerular filtrate under the influence of

- a. . Oxytocin
- b ADH
- c. Glucocorticoids
- d. Aldosterone
- 70. In neuron, the action potential is generated at:
  - a Dendrite
  - b. Soma
  - c. Postsynaptic terminal
  - d. Axon hillock

# Point of inflection in growth curve coincides to

- a. Birth
- b. Death
- c. Conception
- d. Puberty
- 72.
- The process by which Neutrophils squeeze through capillary endothelial pore a. Pinocytosis
  - b. Opsonization
  - c. Chemotaxis
  - d. Diapedesis
- . The condition resulting from inadequate production of surfactant that consequence to collapse of alveoli
  - a. Respiratory distress syndrome
  - b. Atrial Hypoxia
  - c. Pneumothorax
  - d. Pulmonary embolism
- 74. In birds, erythrocytes are
  - a. Circular, biconcave and nucleated
  - b. Oval and non-nucleated
  - c. Oval and nucleated
  - d. Circular, biconcave and non-nucleated
- 75. Release of oxytocin by the posterior pituitary gland is controlled by
  - a. Changes in arterial blood pressure
  - b. Changes in body temperature
  - c. Changes in blood glucose level
  - d. Neural signals from Hypothalamus

- 76. In glycoprotein hormone its sialic acid contents affects
  - a. Transportation
  - b. Solubility
  - c. Life span
  - d. Mechanism action

# 77. Which one referred as a biological clock

- a. Pineal gland
- b. Pancreas
- c. Placenta
- d. Thymus
- 78. Cerebral blood flow may be increased by increasing
  - a. Ventilation
  - b. Carbon dioxide
  - c. pH
  - d. Arterial pressure
- 79.

80.

- Total VFAs and ammonia concentration in the rumen is highest in
  - a. Cattle
  - b. Goat
  - c. Sheep
  - d. Buffalo
- When environmental temperature becomes very high and the animal is not able to maintain homeothermy then
  - a. Decrease peripheral blood flow
  - b. Increase metabolic rate
  - c. Decrease respiration rate
  - d. Decrease feed intake
- 81. 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
- 82. Enzyme which is involved during the process of ovulation in cows
  - a. Collagenase
  - b. Lipase
  - c. Hyaluronidase
  - d. Esterase

- 83. Time between application of stimulus & response of whole animal is termed as
  - a. Learning
  - b. Instinct
  - c. Reaction time
  - d. Kinesis
- 84. A decrease in the probability of response to a stimulus upon repeated presentation of the stimulus is

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- a. Aggression
- b. Habituation
- c. Socialization
- d. Flight reaction
- Absence of which gastric gland cell leads to pernicious anaemia a. Chief cell
  - b. Mucus neck cell
  - c. Goblet cell
  - d. Parietal cell
- 86.

85.

Fergusion's reflex is associated with the release of the hormone

- a. Relaxin
- b. Oxytocin
- c. Progesterone
- d. Estrogen

87.

An inventory of behaviour patterns typical of an animal or species is called

- a. Ecograph
- b. Ethogram
- c. Drive
- d. Devine
- 88. Thyroxine and triiodothyronine are the derivatives of
  - a. Tryptophan
  - b. Phenylalanine
  - c. Tyrosine
  - d. Arginine
- 89. Goitrogens interfere with the activity of
  - a. Thymus
  - b. Pituitary
  - c. Thyroid
  - d. Hypothalamus

- 90. Failure of descend of testes through inguinal canal is called
  - a. Inguinal hernia
  - b. Cryptorchidism
  - c. Phimosis
  - d. Paraphimosis
- 91. Biome refers to
  - a. The biosphere and its functions
  - b. The climate of an area and the types of animals and vegetation that are
  - found in that area
  - c. Biotic factors
  - d. Abiotic factors
- 92. In which species the urine is excreted along with faeces
  - a. Bovine
  - b. Canines
  - c. Avian
  - d. Feline
  - pH regulation in the kidney occur in the following
  - a. Glomerulus
  - b. Distal convoluted tubule
  - c. Loop of henle
  - d. Collecting duct
- 94.

- Partial pressure of CO<sub>2</sub> in the alveolar air is
  - a. 45 mmHg
  - b. 105 mmHg
  - c. 95 mmHg
  - d. 40 mmHg
- 95.

The centre for heat regulation in birds is mostly situated in:

- a. Olfactory lobe
- b. Spinal cord
- c. Hypothalamus
- d. Prioptic area

- The melatonin is synthesized from: a. Arginin
- b. Histamine
- c. Tryptophan
- d. Tyrosine
- 97. During muscle contraction, Calcium binds with
  - a. Tropomyosin
  - b. Troponin C
  - c. Troponin I
  - d. Troponin T

- 98. In avians, Koilin membrane is present in:
  - a. Crop
  - b. Proventriculus
  - c. Gizzard
  - d. Caeca
- 99. Which of the species does not depend on thermoregulatory sweating for heat dissipation
  - a. Camel
  - b. Dog
  - c. Horse
  - d. Birds
- 100. Maternal recognition of pregnancy is responsible for
  - a. Maternal circulation
  - b. Fertilization
  - c. Fetal Growth
  - d. Implantation

#### Only VFA capable of being used for gluconeogenesis is:

a. Acetate

- b. Butyrate
- c. Propionate
- d. Aceto acetate
- 102. Which of the following is NOT the function of kidney?
  - a. Excretion of waste products/ metabolic waste products and foreign particles
  - b. Site for erythrocytes production
  - c. Regulation of acid base balance
  - d. Regulation of water and electrolytes
- 103. Triphasic contractions of reticulum occur only during:
  - a. Eructation
  - b. Mixing of ingesta
  - c. Rumination
  - d. Defecation
- 104. The receptors of protein hormones reside in
  - a. Cell membrane
  - b. Nucleus
  - c. Ribosomes
  - d. Mitrocondria
- 105. The muscle pulls back penis into the prepuce after ejaculation
  - a. Ischiocavernosus muscle
  - b. Bulbospongiosus muscle
  - c. Retractor penis muscle
  - d. Urethral muscle

- 106. The collapse of alveoli is prevented by the surfactant
  - a. Dipalmityl lecithin
  - b. Lipoprotein
  - c. Phospholipids
  - d. Sulphonamyl chloride
- 107. Life span of avian erythrocyte is
  - a. 20-30 days
  - b. 60-70 days
  - c. 100-120 days
  - d. 125-150 days
- 108. Which of the following species is commonest example of high flanker
  - a. Stallion
  - b. Bull
  - c. Ram
  - d. Dog
- 109. In hemorrhagic anaemia, types of anaemia is
  - a. Normocytic normochromic
  - b. Microcytic hypochromic
  - c. Microcytic normochromic
  - d. Macrocytic normochromic
- 110. Which of the following would not cause an increase in erythropoietin production
  - a. Polycythemia
  - b Severe blood loss
  - c. Anaemic condition
  - d. Altitude hypoxia
  - 111. Larger the body surface area has greater rate of heat transfer
    - a. Allen's rule
    - b. Wilson rule
    - c. Golger rule
    - d. Bergmann's rule
- 112. Which enzyme regulates the synthesis of estrogen from testosterone
  - a. Phospholipase
  - b. Hyaluronidase
  - c. Hexokinase
  - d. Aromatase
- 113. Which of the following part of the circulation has the highest compliance
  - a. Aorta
  - b. Artery
  - c. Capillaries
  - d. Veins

- 114. The amount of water loss by the perspiration is about
  - a. 400 ml/day
  - b. 600 ml/day
  - c. 1000 ml/day
  - d. 1500 ml/day
- 115. Which one of the following is a least toxic excretory products in animals a. Ammonia
  - b. Ammonium chloride
  - c. Urea
  - d. Uric acids
- 116. Concentrated urine is voided by desert species due to
  - a. More scarcity of water in desert area
  - b. More numbers of cortical nephron in kidney
  - c. Loop of henle is extended up to cortico-medullary junction

The contractile protein of skeletal muscles involving ATPase activity is

d. Large relative medullary thickness

- a. Troponin
- b. Tropomyosin
- c. Actin
- d. Myosin
- 118. 2,3 DPG molecules compete for the oxygen binding sites of haemoglobin, it is present in
  - a. Blood plasma
  - b. Platelets
  - c. WBC
  - d. RBC
- 119. The basal ganglia are primarily concerned with
  - a. Neuro-endocrine control
  - b. Short term memory
  - c. Sensory integration
  - d. Control of movement
- 120. Which one of the following antibody molecule is biggest in size
  - a. IgA
  - b. IgG
  - c. IgE
  - d. IgM

1.	С		31.	Α		61.	Α		91.	В
2.	Α		32.	С		62.	D		92.	С
3.	В		33.	С		63.	D		93.	В
4.	С		34.	Α		64.	Α		94.	D
5.	В		35.	Α		65.	D		95.	С
6.	D		36.	С		66.	D		96.	С
7.	D		37.	В		67.	D		97.	В
8.	D		38.	С	100	68.	D		98.	С
9.	D		39.	В	14	69.	D		99.	D
10.	С	10	40.	Α		70.	D	100	100.	D
11.	D	0	41.	B		71.	D	23	101.	С
12.	Α	1	42.	В	A. 7	72.	D	1	102.	В
13.	С		43.	D	2.4	73.	Α		103.	С
14.	С		44.	Α	1	74.	С		104.	В
15.	D		45.	B		75.	D		105.	С
16.	D		46.	В	-	76.	С		106.	Α
17.	В		47.	С		77.	Α	100	107.	Α
18.	Α		48.	Α	1	78.	В		108.	Α
19.	D		49.	Α		79.	В		109.	Α
20.	Α		50.	В		80.	D	. /	110.	Α
21.	Α		51.	D		81.	D		111.	D
22.	Α		52.	В	$\sim$	82.	Α		112.	D
23.	A		53.	С	89.	83.	С		113.	D
24.	В		54.	D	55	84.	В		114.	Α
25.	D		55.	В		85.	D		115.	D
26.	В		56.	D	11.	86.	В		116.	D
27.	С		57.	С	201	87.	В		117.	D
28.	Α		58.	С	-	88.	С		118.	D
29.	Α	-	59.	С		89.	С		119.	D
30.	С	]	60.	В		90.	В		120.	D