1. The study of biological structure of a particular species of animal.
   (a) Systemic anatomy  (b) Special anatomy
   (c) Comparative anatomy  (d) Regional anatomy

2. The cells responsible for resorption of bone salts is
   (a) Osteocyte  (b) Osteoclast
   (c) Osteoblast  (d) All of these

3. The total number of bone in case of ox is
   (a) 208  (b) 218
   (c) 201  (d) 205

4. Bones are covered by a membrane called __________ except at the articular surface.
   (a) Periosteum  (b) Endosteum
   (c) Both (a) and (b)  (d) None of these

5. Guttural pouch are found in
   (a) Canine  (b) Bovine
   (c) Equine  (d) Caprine

6. A small projection on the bone is called__________.
   (a) Spine  (b) Hamulus
   (c) Tubercle  (d) Tuberosity

7. Floating ribs are found in __________.
   (a) Pig  (b) Horse
   (c) Cow  (d) Dog

8. Spindle shaped muscle fiber are present in
   (a) Skeletal muscle  (b) Smooth muscle
   (c) Cardiac muscle  (d) All of these

9. Which brain cell is phagocytic in nature
   (a) Microglia  (b) Amphicyte
   (c) Astrocyte  (d) All of these
10. Each bundle of the muscle fibers is covered by a layer of connective tissue called___________
   (a) Endomysium  (b) Perimysium  
   (c) Epimysium (d) None of these

11. Which muscle is voluntary in nature?
   (a) Skeletal muscles  (b) Smooth muscles  
   (c) Cardiac muscles (d) All of these

12. Mammary gland is a
   (a) Modified Sweat gland  (b) Mixed gland  
   (c) Modified Sebaceous gland (d) All of these

13. The 3rd cranial nerve is
   (a) Olfactory  (b) Occulomotor  
   (c) Optic (d) Trochlear

14. The largest paranasal sinus is
   (a) Maxillary sinuses  (b) Ethmoid sinuses  
   (c) Frontal sinuses (d) Sphenoid sinuses

15. Superficial Gluteus muscle is absent in __________.
   (a) Horse  (b) Ox  
   (c) Dog (d) Sheep

16. After cleavage of dividing cells, _____________ developed into three layers of cell known as germ layers which ultimately developed into tissue and organs.
   (a) Morula  (b) Blastula  
   (c) Gastrula (d) All of these

17. Which one is called the true stomach among the four compartments of the ruminant stomach.
   (a) Rumen  (b) Reticulum  
   (c) Omasum (d) Abomasum

18. Sublingual gland is single in ______________.
   (a) Cow  (b) Dog  
   (c) Horse (d) Goat

19. Gall bladder is absent in ____________.
   (a) Horse  (b) Dog  
   (c) Cow (d) Goat

20. In which layer of the skin are the sensory nerve endings found?
   (a) Hypodermis  (b) Epidermis  
   (c) Dermis (d) Subcutis

21. In poultry true stomach is :-
   (a) Gizzard  (b) Proventriculus  
   (c) Crop (d) Abomasum

22. Amputation of horn can be done under
   (a) Cornual nerve block  (b) Caudal epidural  
   (c) Anterior epidural (d) Retrobulbar nerve block
23. Abscess should be open by Syme’s abscess knife at
   (a) Lateral part   (b) Place of pointing
   (c) Medial part   (d) All of these
24. Cauterization of vessels by mono-polar and bipolar coagulation is called
   (a) Torniquet   (b) Ligation
   (c) Diathermy   (d) All of these
25. Surgical operation for providing drainage from middle ear is known as __________.
   (a) Zepps’ operation   (b) Bulla osteotomY
   (c) Hyovertebrotomy   (d) Ventriculectomy
26. Wound which does not heal is known as ________.
   (a) Maggot wound   (b) Ulcer
   (c) Infected wound   (d) Contaminated wound
27. Last stage of wound healing is __________.
   (a) Wound contraction   (b) Epithelization
   (c) Fibroplasia   (d) Vasodilatation
28. In dog the commonest site of urinary obstruction is
   (a) Behind the os-penis   (b) Ischial arch
   (c) Before the os-penis   (d) All of these
29. Green stick fracture is often seen in
   (a) Aged animal   (b) Adult animal
   (c) Young animal   (d) No age discrimination
30. An intramedullary pinning technique in which multiple small diameter pins are placed down the
    medullary cavity rather than single large pin is called
   (a) Multiple pinning   (b) Transfixation pinning
   (c) Stack pinning   (d) Micro pinning
31. Perineal hernia is predominantly seen in
   (a) Old un-castrated male dog   (b) Old spayed female dog
   (c) Bitch   (d) All of these
32. During cystorrhaphy, the wound should be suture by
   (a) Cushing followed by Lembert   (b) Cushing by simple interrupted
   (c) Lembert followed by Cushing   (d) Lembert by simple interrupted
33. The best treatment of fistula is __________.
   (a) Antibiotics   (b) Antibiotics and corticosteroids
   (c) Surgical removal   (d) Counter irritants
34. The site of incision of thoracocentesis is
   (a) 3-5th rib   (b) 5-7th rib
   (c) 8th rib   (d) 8-9th rib
35. The radiographic diagnosis of intestinal obstruction is done by using __________.
   (a) Barium sulphate   (b) Conray -420
   (c) Urographin   (d) Ipamidol
36. The best treatment of long bone fracture is ___________.
   (a) POP bandages  (b) Intramadulary pinning  
   (c) Intramadulary nailing  (d) Bone plating

37. Suturing of lacerated nostril is performed under _______ nerve block.
   (a) Infra-orbital  (b) Retro bulbar  
   (c) Mandibular  (d) Supra-orbital

38. Fluid appears as ________________ in X-ray film.
   (a) White  (b) Black  
   (c) Shades of Gray  (d) Almost white

39. The best anaesthetic technique for laparotomy in cattle is
   (a) Local infiltration  (b) Paravertebral  
   (c) Field block  (d) Anterior caudal epidural

40. The presence of casts in the urine is called as _________________.
   (a) Crystalluria  (b) Pyuria  
   (c) Cylindruria  (d) Ketonuria

41. Multiple myeloma is a tumor of _________________.
   (a) Neutrophils  (b) Eosinophils  
   (c) Plasma cells  (d) Lymphocytes

42. The surgical correction of teat pea in cattle is performed by ________.
   (a) Teat slitter  (b) Hudson teat spider  
   (c) Teat tumour extractor  (d) Teat dilator

43. According to The World Organisation for Animal Health (OIE) ____________ has become the latest (as of 15th August, 2019) country to have a confirmed incidence of African Swine Fever in Asian region.
   (a) China  (b) Myanmar  
   (c) Laos  (d) Vietnam

44. Hepatic Coccidiosis in rabbits is caused by _________________.
   (a) Eimeria zuernii  (b) Eimeria tenella  
   (c) Eimeria magna  (d) Eimeria stiedae

45. The presence of blood in sputum is known as _________________.
   (a) Hematemesis  (b) Hemoptysis  
   (c) Epistaxis  (d) Hematoma

46. Diseases which are acquired during intrauterine life of an individual.
   (a) Hereditary disease  (b) Congenital disease  
   (c) Acquired disease  (d) None of these

47. Skin lesions with slightly raised diamond-shaped red spots in pig are the characteristics of ________.
   (a) Swine fever  (b) African Swine fever  
   (c) Swine Erysipelas  (d) Swine flu

48. Duration of the disease is short and it last for few hours to 48 hours
   (a) Acute disease  (b) Per- acute disease  
   (c) Sub- acute disease  (d) Chronic disease
49. Diseases which affects a large population of animals in large areas.
   (a) Sporadic disease  (b) Enzootic disease
   (c) Epizootic disease  (d) Endemic disease

50. Malignant oedema is cause by_______
   (a) Clostridium septicum  (b) Clostridium botulinum
   (c) Clostridium perfingens  (d) None of these

51. Colic occurs due to irritation of the gastro-intestinal mucosa with a violent irregular peristaltic movement frequently observed in nervous temperament group of horse
   (a) Tympanic colic  (b) Spasmodic colic
   (c) Impactive colic  (d) Extra-luminal colic

52. Greasy (Steatorrhoea) consistency of faeces is commonly observed in __________
   (a) Pre hepatic Jaundice  (b) Hepatic jaundice
   (c) Post hepatic jaundice  (d) None of these

53. A chronic condition in which the pancreas produce little or no insulin.
   (a) Type I diabetes  (b) Type II diabetes
   (c) Pre diabetes  (d) Gestational diabetes

54. Froathy bloat is found in_________
   (a) Primary Tympany  (b) Secondary Tympany
   (c) Both (a) and (b)  (d) None of these

55. Excessive destruction of erythrocytes is characteristic of:
   (a) Thalassemia  (b) Aplastic anemia
   (c) Pernicious anemia  (d) Hemolytic anemia

56. Turkey Egg Kidney is seen in_________.
   (a) Swine Pox  (b) Swine Influenza
   (c) Swine Fever  (d) Swine Erysipelas

57. Anthrax is also called as _________.
   (a) Splenic fever  (b) Desert fever
   (c) Undulant fever  (d) All of these

58. Scrapie is a __________
   (a) Progressive fatal disease of CNS  (b) Disease of young animals
   (c) The causal agent is antigenic  (d) All of these

59. Enlargement of Bursa of fabricius in poultry is seen in__________.
   (a) CRD  (b) IB
   (c) RD  (d) IBD

60. Presence of Glucose in urine can be detected by ________ test.
   (a) Robert’s test  (b) Benedict’s test
   (c) Rothera’s test  (d) Gmelin’s test

61. Enlargement of Sciatic nerve is seen in_______.
   (a) Ranikhet disease  (b) Marek’s disease
   (c) Chronic respiratory disease  (d) Infectious Coryza
62. Mn deficiency is chicken will lead to __________.
   (a) Pica  (b) Star grazing condition
   (c) Crazy chick disease  (d) Slipped Tendon

63. The long half life of PMSG is due to __________.
   (a) Glycoproteins  (c) Sialic acid
   (b) Prolactin  (d) Foetal origin

64. Most of the developmental anomalies occur during
   (a) Period of embryo  (b) Period of ovum
   (c) Period of fetus  (d) During birth

65. Animal showing external evidence of pro-oestrus with vulval oedema, hyperemia & sanguinous vulval discharge is _______
   (a) Cattle  (b) Bitch
   (c) Doe  (d) Ewe and Mare

66. Prolonged dystocia leads to fatigue of the uterine muscle and produce contraction or retraction rings called as
   (a) Bandl’s ring  (b) Robert’s ring
   (c) Schaafer’s ring  (d) Uterine ring

67. Cesarean section is more difficult to perform in which species in comparison to other domestic animals
   (a) Sow  (b) Bitch
   (c) Mare  (d) Ewe

68. Mammary gland duct system growth is under the influence of ______.
   (a) Estrogen  (b) Progesterone
   (c) Prolactin  (d) Prostaglandins

69. Semen freezes at _________ °C temperature.
   (a) – 0.22  (b) – 0.33
   (c) – 0.44  (d) – 0.55

70. Repulsion may be accomplished by the operator’s arm, the arm of an assistant or by a
   (a) Fetotome  (b) Obstetrical chain
   (c) Ropes  (d) Crutch repeller

71. Severe bleeding from the uterus of large animals may be controlled by
   (a) Prolactin  (b) Oxytocin
   (c) Progesterone  (d) Gonadotropin

72. Maternal Recognition of Pregnancy (M.R.P) is responsible for
   (a) Fetal growth  (b) Implantation
   (c) Maternal circulation  (d) Fertilization

73. In the testes, testosterone secreting cells are ________.
   (a) Germinal epithelium  (b) Leydig cells
   (c) Sertoli cells  (d) Blood testes barrier
74. Predominate Ig in follicular fluid is ————
   (a) Ig A  (b) Ig M  (c) Ig G  (d) Ig E

75. Follicular development is _________ in ovary containing Corpus Luteum.
   (a) Enhanced  (b) Suppressed  (c) Both (a) and (b)  (d) None of these

Directions (Questions 76-79): Find the missing number from the series:

76. 64, 71, 80, ...?..., 104, 119
   (a) 82  (b) 89  (c) 91  (d) 101

77. 1, 6, ...?..., 22, 33, 46
   (a) 9  (b) 13  (c) 16  (d) 20

78. 2, 5, 9, 14, 20, ...?...
   (a) 24  (b) 26  (c) 27  (d) 34

79. 3, 5, 9, 17, 33 , ...?..., 129
   (a) 65  (b) 73  (c) 95  (d) 109

Directions (Questions 80-83): Find the missing character from the given alternatives:

80. O
    ?
    26
   (a) 45  (b) 50  (c) 60  (d) 63

81. 2
    ?
    256 16
   (a) 4  (b) 8  (c) 12  (d) 14

82. 21
    ?
    32 45
   (a) 52  (b) 58  (c) 60  (d) 62
Direction (Question 84 - 87): Read the following passages carefully and choose the best answer to each of the questions out of the four alternatives:

The history of the concept of personal authenticity can be traced back to ancient Greek philosophy as revealed in injunctions such as “Know thyself” and “To thine own self be true.” However, there is no single, coherent body of literature on authentic-self behavior, no bedrock of knowledge. Rather, there are unconnected islands that address different aspects of authenticity in rather piecemeal fashion, including historical analyses, clinical treatments, social-psychological perspectives, and developmental formulations.

Before exploring these islands of insight, it is important to define the construct of authenticity. In so doing, it can best be put in bold relief by considering its opposite, namely, lack of authenticity or false-self behavior. Consistent with the impetus for this volume, it should be noted that far more attention has been devoted to the lack of authentic-self behavior, within the clinical, social-psychological, and developmental literatures, where theorists and investigators have examined deceit of others, secrecy, imposter tendencies, self-monitoring, compliance, and self-deception. From a less scientific perspective, one can observe the vast vocabulary in the English language to describe deceit (Lerner, 1993), suggesting its salience in our collective psyche. Verb forms make reference to fabricating, withholding, concealing, distorting, falsifying, pulling the wool over someone’s eyes, posturing, charading, faking, and hiding behind a facade. Adjectives include elusive, evasive, wily, phony, artificial, two-faced, manipulative, calculating, pretentious, crafty, conniving, duplicitous, deceitful, and dishonest. Noun forms include hypocrite, charlatan, chameleon, impostor, phony, fake, and fraud.

84. “To thine own self be true” has the same meaning as
   (a) Be true and honest to oneself
   (b) Be true to others
   (c) Be aware of oneself
   (d) Honesty is the best policy

85. “Bedrock” has the same meaning as
   (a) solid
   (b) bed
   (c) basis
   (d) tough

86. Noun forms for ‘Deceit’ include
   (a) artificial
   (b) phony
   (c) faking
   (d) charlatan

87. The antonym for ‘Compliance’ is
   (a) acquiescence
   (b) disobedience
   (c) complain
   (d) agreement
Directions (Questions 88-90): Read the following passages carefully and choose the best answer to each of the questions out of the four alternatives:

At an abstract level, toughness is about the harmony between physiological systems and ultimately, about the correspondences of physiological systems with psychological ones. The anthropologist Gregory Bateson (1979) observed that when a changed environment forces an organ system to adapt so much that the system nears the limits of its genetic potential, not only is that system strained, but other organ systems with which that system interacts are similarly strained. As an example of cascading negative impacts, consider the downstream impacts of a lifetime of smoking on reducing respiratory efficiency. By leading to reduced physical activity, respiratory insufficiency may ultimately lead to muscular weakness, and then to a higher ratio of fat to lean tissues. Those changes may in turn lead to bone decalcification and perhaps to insulin insensitivity, sugar intolerance, circulatory breakdown, infection, and so on. Based on Bateson’s observations, we suggest several principles that underlie toughness theory. The first is that all major physiological systems within an organism interact, so that the state of one system (e.g., the major muscles) will influence most others (e.g., the endocrine and neural systems). The second is that in order to maintain general health, physical systems should be stimulated and used in ways that maintain them near the midpoints of their genetically determined operating potentials. The third principle follows from the first two—similar to most systems, for best results the body must be exposed to environments it was designed to experience, and in general ways the organism must behave in ways that correspond with the ways it was designed to behave.

88. Which of the following is not an impact of smoking according to the passage?
   (a) higher ratio of fat to lean tissues
   (b) muscular weakness
   (c) weaker bone density
   (d) reduced physical activity

89. “Cascade” has the same meaning as
   (a) flow
   (b) crash
   (c) cage
   (d) important

90. The antonym for ‘Exposed’ is
   (a) visible
   (b) invulnerable
   (c) open
   (d) susceptible

Directions (Questions 91-95): Given below are problem figures. Choose the best alternative among the answer figures:

91. 

| Q | XQ | QX | XQX | XXQ |

92. 

| QX | XQXX | XXQXX | QXX |

   (a) (b) (c) (d)
Directions (Questions 96 -100): In each question below are two statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then, decide which of the given conclusions logically follow from the given statements.

96. Statements
   I : Some hats are caps
   II : Some caps are mats
Conclusions
   I : Some caps are hats
   II : Some mats are caps
(a) If only conclusion I follows  (b) If only conclusion II follows
(c) If either I or II follows    (d) If both I and II follows

97. Statements
   I : Some stones are bricks
   II : Some bricks are trees
Conclusions
   I : Some stones are trees
   II : Some trees are bricks
(a) If only conclusion I follows  (b) If only conclusion II follows
(c) If either I or II follows    (d) If both I and II follows

98. Statements
   I : Some books are tables
   II : Some tables are mirrors
Conclusions
   I : Some mirrors are books
   II : No book is mirror
(a) If only conclusion I follows  (b) If only conclusion II follows
(c) If either I or II follows    (d) If both I and II follows

99. Statements
   I : Some papers are pens
   II : Some pencils are pens
Conclusions
   I : Some pens are pencils
   II : Some pens are papers
(a) If only conclusion I follows  (b) If only conclusion II follows
(c) If either I or II follows    (d) If both I and II follows

100. Statements
    I : Some cups are plates
    II : Some plates are jugs
Conclusions
    I : Some cups are jugs
    II : Some jugs are plates
(a) If only conclusion I follows  (b) If only conclusion II follows
(c) If either I or II follows    (d) If both I and II follows

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