



Department of Zoology, GCW University, Sialkot.

Entry Test for MS Zoology

Time Allowed 2 Hours

Name _____ **d/o** _____

Encircle the correct statement of the following MCQS.

1. Schizont stage of life cycle of malarial parasites occur in:

- a) RBC of man
- b) Gut of mosquito
- c) Salivary gland of mosquito
- d) Both b & c

2. Aurelia is a member of class:

- a) Hydrozoa
- b) Scyphozoan
- c) Cubozoa
- d) Anthozoa

3. Intermediate host in the life cycle of *Fasciola hepatica* is:

- a) Snail
- b) Cattle
- b) Pig
- d) Fish

4. Which of these parasites has no intermediate host?

- a) Liver fluke
- b) Tape worm
- c) Ascaris
- d) Trypanosome

5. Number of spermatheca in Earthworm are:

- a) One pair
- b) Two pairs
- c) Three pairs
- d) Four pairs

6. The class Cephalopods does not include:

- a) Octopus
- b) Cuttle fish
- c) Slug
- d) Nautilus

7. Silk is produced by:

- a) Musca
- b) Aedes
- c) Bombyx & Araneae spiders
- d) Bombyx only

8. Which of these is not related to insects?

- a) Apiculture
- b) Sericulture
- c) Lac industry
- d) Floriculture

9. Which of these develop through parthenogenesis?

- a) Queen bee
- b) Worker bee
- c) Drones
- d) Both b & c

10. Star fish larva is:

- a) Trochophore
- b) Bipinnaria
- c) Dipleura
- d) Amphiblastula

11. Adipose tissues store energy in the form of:

- a) Fatty acids
- b) Glycerol
- c) Triacylglycerol
- d) Linoleic acid

12. Diameter of DNA helix is strictly confined due to

- a) Complementation system
- b) Hydrogen bonds
- c) Adenine
- d) DNA backbone

13. One of the aromatic amino acids is

- a) Tryptophan
- b) Proline
- c) Alanine
- d) Threonine

14. Point at which a protein molecule is neutral is:

- a) pOH
- b) Protein index
- c) $-\log (H)$
- d) Isoelectric Point

15. Technique separate proteins on the basis of their sizes is

- a) Ion Exchange Chromatography
- b) Gel Filtration Chromatography
- c) Polyacrylamide Gel Electrophoresis
- d) Both (b) and (c)

16. Epimers of glucose is

- a) Fructose
- b) Galactose
- c) Ribose
- d) Deoxyribose

17. At the lowest energy level α -helix of polypeptide chain is stabilized

- (a) Hydrogen Bonds
- (b) Hydrophobic Interactions
- (c) Disulphide Bonds
- (d) Ester Linkage

18. Aerobic respiration produces _____ ATP molecules, _____ require oxygen to be available, and produces _____ as end product(s).

- a) 2, does not, CO₂ and water
- b) 2, does, lactic acid
- c) 36-38, does not, lactic acid
- d) 36-38, does, CO₂ and water

19. Proteins mostly show absorbance at

- a) Visible Region
- b) UV Region
- c) Infrared Region
- d) None

20. Non-essential fatty acids are oxidized to _____ by beta-oxidation

- a) CO₂
- b) Propionic acid
- c) Sialic Acid
- d) Acetyl CoA

21. The junction between the axon of one neuron and the dendrite of another neuron or effector cell is called _____.

- a) Synapse
- b) Nodes of Ranvier
- c) Neuromuscular junction
- d) All of above

22. The receptors which receive the stimuli of touch are called _____.

- a) Georeceptors
- b) Tactile receptors
- c) Hygroreceptors
- d) Phonoreceptors

23. _____ is concerned with posture and equilibrium.

- a) Auditory apparatus
- b) Vestibular apparatus
- c) All of above
- d) None of above

24. Ampullary organs are _____.

- a) Electoreceptors
- b) Mechanoreceptors
- c) Both a and b
- d) None of above

25. Parietal cells in the lining of the stomach secrete _____.

- a) Regulatory hormones b) Pepsinogen c) HCl and intrinsic factor d) Mucus

26. The neurons which transmit the nerve impulse to effectors are called?

- a) Inter neurons b) Sensory neurons
c) Motor neurons d) All of above

27. _____ detect change in temperature.

- a) Baroreceptors b) Proprioceptors
c) Thermoreceptors d) Chemoreceptors

28. Mechanoreceptor in lateral line system is called _____.

- a) Organ of corti b) Neuromasts
c) Tympanic membrane d) all of above

29. The outer ear consists of the _____ and external auditory canal.

- a) Small ossicles b) Auricle
c) Semicircular canals d) Vestibules

30. Normally the resting membrane potential is about _____.

- a) -80mV b) -70mV
c) -90mV d) -50mV

31. The platelet activating factor is

- a) ATP b) GTP
c) ADP d) none

32. The heart's natural pacemaker is termed the: _____

- a) Sinoatrial node b) Atrioventricular node
c) Bundle of His/atrioventricular bundle d) Purkinje fibers

33. The _____ binds the coagulation factors on the surface of platelets

- a) K^{+1} b) Ca^{+2}
c) Na^{+1} d) none

34. The circulatory pathway that carries blood from the digestive tract towards the liver is termed the:

- a) Coronary circuit b) Cerebral circuit c) Hepatic portal circuit d) Pulmonary circuit

35. The Glutamic Acid Carboxylation is done by _____

- a) Vit D b) Vit C
c) Vit K d) none

36. The soluble form of blood coagulating protein is _____

- a)Fibrin b)Albumin
c)Fibrinogen d)none

37) The neurotransmitter serotonin also causes _____

- a)Vasoconstriction b)Vasodilation
c)mitosis of smooth muscles d)None

38. Mitosis of smooth muscles is done by

- a)PDGF b)Thyroxine
c)Factor x d)None

39. Salicylic Acid is the inhibitor of the following enzyme

- a) Lactate Dehydrogenase b) Cyclooxygenase
b) Pyruvate carboxylase d) None

40. The glycoprotein involved in platelet aggregation is

- a) GPIa b) GPIb
c) GPId d) None

41. Making association without immediate reinforcement or reward is a type of learning called _____

- a) Latent learning b) classical conditioning
- c) instrumental conditioning d) imprinting

42. A person enters a room and feels unusual odour in room. soon his olfactory sense organ stop responding to this odour, this phenomenon is called _____

- a) Sensory adaptation b) habituation

c) classical conditioning d) none of these

43. Ritualization is free of any direct _____ significance.

a) Physiological b) psychological

c) social d) none of these

44. Division of labour exists In honey bee colony _____ send signals to recruits after discovering food.

a) Non selfsufficient b) brood queen

c) scouts d) all of these

45. _____ hypothesis is based on the idea that parental solicitude towards the young is correlated with the liklihood of genetic relatedness.

a) Certainty of paternity b) gamete ordor hypothesis

c) assocition hypothesis d) none of these

46. In many species social interaction involves agonistic behaviour that is defined as a group of actions including _____

a) Threats b) submissive behavior

c) appeasement d) all of these

47. The simplest form of dominance hierarchy is _____ -in wich one individual is dominant overall others in the group and subordinates are equal in rank.

a) Triangular relationship b)lineardominance

c)depotism d) none of these

48. Some species of arthropods don't seek company of other members but occasionally gather at one place due to moisture or temperature this type of grouping is called

a) Active grouping b) passive grouping

c) social grouping d) all of these

d) Using to

b) Want

c) Wanting to

b) Written

d) Write

b) Leaves

d) Leave

b) Lending

d) Had lent

b) Before to the

d) To prior the

b) Among

d) In

b) a little people

d) the little people

b) Before to the

d) To prior the

73. Distribute the handouts _____ the candidates.

- a) Between
- b) Among
- c) To
- d) In

74. Only _____ were present at the seminar.

- a) a few people
- b) a little people
- c) a few peoples
- d) the little people

75. I thought that he _____ coming today.

- a) Has been
- b) Is
- c) Was
- d) Has

Choose the lettered word or phrases that is most nearly opposite in meaning to the word in capital letters

76. DETER

- a) Twist
- b) Intimidate
- c) Encourage
- d) Straighten

77. INDIGENOUS

- a. Modern
- b) Alien
- c) Ornamental
- d) Nature

78. QUIZZICAL

- a) Amused
- b) Unequivocal
- c) Contorted
- d) Dissimilar

79. ANCILLARY

- a) Dependent
- b) Concomitant
- c) Appendix
- d) Primary

80. VIRTUOSO

- a) Wicked
- b) Dazzling

c)Mediocre

d) Bawdy

Analytical Reasoning

Question 81-85

A Railway system consists of six stations, G, H, I, J, K and L. Trains run only according to the following conditions:

- (a) From G to H (b) From H to G and from H to I (c) From I to J (d) From J to H and From J to K (e) From L to G, from L to K, and L to I (f) From K to J

It is possible to transfer at a station for another train.

81. How is it possible to get from H to J?

- a) A direct train from H to J?
- b) A train to G and transfer for a train to J
- c) A train to I and transfer for a train to J
- d) It is impossible to reach J from H

82. Which of following station CANNOT be reached by a train from any of other station?

- a) G
- b) H
- c) K
- d) L

83. Which of the following is a complete and accurate listing of the stations from which it is possible to reach I with exactly one transfer?

- a) G and H
- b) G and J
- c) J and K
- d) J and L

84. What is the greatest number of stations that can be visited without visiting any station more than once?

- a) 2

- b) 4
- c) 5
- d) 6

85. If station I is closed, which of the following trips is impossible?

- a) G to J
- b) J to K
- c) L to K
- d) L to J

Question 86-90

A student planning his curriculum for the upcoming semester must enroll in three courses. The available courses fall into one of five general areas: Math, English, Social studies, Science and Fine arts.

The student must take courses from at least two different areas.

If she takes fine arts course, she can't take an English course

If she takes Science, she must take a Math course: and if she takes a math course she must take a Science course.

She can take a social studies course only if she takes a Fine arts course

86. Which of the following is an acceptable schedule of courses with one subject from each listed area?

- a) Science, English and Fine arts
- b) Math, Science and Social studies
- c) Math, Social studies and Fine arts
- d) Math, Science and Fine arts

87. Which of the following is not an acceptable schedule?

- a) Two Math courses and one Science course
- b) Two Science courses and one Math course
- c) Two Fine arts courses and one Math course
- d) Two Social studies courses and one Fine arts course

88. Which of the following courses when taken with one course in Social studies is an acceptable schedule?

- a) One course in Math and one in Science
- b) One course in Fine arts and one in English
- c) Two courses in Fine arts
- d) Two courses in Math

89. If a student wishes to take a course in Math and a course in English, then she must select third course in the area of?

- a) English
- b) Fine arts
- c) Math
- d) Science

90. An acceptable schedule CANNOT include two courses in

- a) English
- b) Fine arts
- c) Math
- d) Science

Questions 91-95:

During the first half of the year, from January through June, the chairperson of the mathematics department will be on sabbatical. The dean of the college has asked each of the six professors in the department --- Arkes, Borofsky, Chang, Denture, Hobbes, and Lee--- to serve as acting chairperson during one of those months. The mathematicians can decide the order in which they will serve, subject only to the following criteria established by the dean.

- i. Chang will serve as chairperson in February.
- ii. Arkes will serve as chairperson before Hobbes does.
- iii. Borofsky and Dexter will serve as chairpersons in consecutive months.

91. Which of the following professors could serve as chairperson in January?

- a) Borodfsky

- b) Chang
- c) Dexter
- d) Lee

92. In how many ways can the schedule be made up if Lee has to serve as chairperson in May?

- a) 1
- b) 2
- c) 3
- d) 4

93. If Lee serves in April, all of the following could be true EXCEPT?

- a) Arkes serves in January
- b) Hobbes serves in march
- c) Borofsky serves in may
- d) Hobbes serves in June

94. If Borofsky serves in May, what is the latest month in which Arkes could serve?

- a) January
- b) February
- c) March
- d) April

95. Which of the following CANNOT be true?

- a) Arkes and Lee serve in consecutive months.
- b) Lee and Hobbes serve in consecutive months.
- c) Hobbes and Dexter serve in consecutive months.
- d) Arkes and Chang serve in consecutive months.

Question 96-100

7 persons live in a street having houses in line. Consider the following

- I. A lives in corner house
- II. C is between E and G

- III. There is 1 house between D and F
- IV. F is neighbor of G
- V. There are 2 hoses between A and G

96. Who lives in 2nd corner

- a) B
- b) C
- c) D
- d) E

97. Who lives in middle?

- a) C
- b) D
- c) E
- d) G

98. Who lives between B and G

- a) D
- b) E
- c) F
- d) C

99. _____ is neighbor of A

- a) F
- b) E
- c) D
- d) C

100. There are _____ hoses between B and E

- a) 0
- b) 1
- c) 2
- d) 3

