OBADIAH OPOKU-BAMFOH BRINGS TO YOU
ENTOMOLOGY PAST QUESTIONS.

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BOMSO 21'

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QUESTION (MCQs) COLLECTION TEMPLATE

DISCIPLINE/SUBJECT : (ENTOMOLOGY)

Topic : General Entomology

1.Insects are thought to be so very successful because of

a. Their small size b. Ecological diversity

c. Ability to utilize many food sources d. Reproductive potential e. All of the above

2.For their size, insects are much stronger than man because

a. Their muscles are naturally stronger
b. They can control muscle response more precisely
c. They have giant nerve fibers
d. Of physical properties related to their small size
e. None of the above

3.Insects are considered to be beneficial because they are

a. Effective pollinators b. Make useful products

c. Act as biological control agents d. Are a potential protein source
e. All of above

4.The most important vectors (transmission agents) of human disease would probably be

a. Moths b. Ants

c. Beetles d. Fleas

e. Cockroaches

5.The most important reason for the success of insects as a group is probably

a. Parthenogenetic reproduction b. Muscle strength to weight ratio

c. Ability to digest unusual foods d. Ability to fly

e. None of the above

6. **In grasshoppers, the sclerite on the front of the head located between the frons & the labrum is**

a. Clypeus b. Maxilla

c. Gena d. Vertex

7. The modified hind wings in flies (used for balance) are called:

a. Elytra b. Halteres

c. Hamuli d. Tegmina

8. Another name for an insect walking leg is:

a. Ambulatory b. Fossorial

c. Cursorial d. Saltatorial

9. A spray that kills insects when they touch it is called

a. A contact insecticide b. A fumigant

c. A stomach poison d. A desiccant

10. You find something crawling on your dog that looks like a small flat brown bug; it has eight legs. It is:

a. An insect b. A flea

c. A tick d. A brown bug

11. Mosquito males locate females by using:

a. Scolopophorous sensillae b. Campaniform sensillae

c. Tympanum d. Compound eyes

12. The use of X-ray irradiated flies for pest management is an example of:

a. Sterile male release b. Neoplasia induction

c. Mutant proliferation d. Environmental hazards

13. What is the mode of action of organophosphate insecticides?

a. Chitin-synthesis inhibition b. Mixed-function oxidase inhibition

c. Physical suffocation d. Acetylcholinesterase inhibition

e. Changing the ion permeability of membranes

14. More than 500 species of insects are currently resistant to one or more pesticides.

How are insects able to resist the toxic action of pesticides?

a. Cross-resistance b. Mixed-function oxidases

c. Behavioral adaptations d. Physiological changes at the level of the target site e. All of the above

15. Ants are:

a. The largest group of social insects (ca. 9,000 described species)
b. The only social insects in the order Hymenoptera
c. The only group of insects to be found in the fossil record d. a. and b.
e. None of the above

16. The greatest threat to biodiversity in terms of the percentage of species affected is:

a. Habitat degradation b. Disease

c. Overexploitation d. Pollution

e. None of the above

17. Mutualisms have evolved between:

a. Ants and bees (particularly Africanized Honey Bees)
b. Ants and termites (e.g., the Formosan termite that has invaded Hawaii)
c. Ants and plant feeding insects that produce honeydew (e.g., aphids and scale insects)
d. Ants and plants that provide rewards in the form of food (e.g., extrafloral nectar) e. (c) and d.

18. The notion that preservation of one species (often a "charismatic" organism that acts as a "flagship species") may aid in the preservation of many others is often called:

a. A „habitat saver" b. The „umbrella effect"

c. the „conservation strategy" d. A „non-target effect"

e. All of the above

19. Current uses of genetically modified organisms include:

a. Glyphosate (Roundup) resistant plants
b. Insect resistant plants expressing the Bacillus thuringiensis (Bt) endotoxin gene
c. Enhanced microbial pesticides, e.g., baculoviruses expressing scorpion toxin genes d. Production of vaccines
e. All of the above

20. Pathogen derived resistance refers to:

a. Use of Bacillus thuringiensis endotoxin against Colorado Potato Beetle
b. Use of genes from a virus to protect a plant from a very similar or homologous virus isolate
c. Coat protein mediated cross protection
d. a. and c. e. b. and c.

21. The highest, or most developed, form of sociality among insects is referred to as:

a. Subsocial b. Semisocial

c. Eusocial d. Communal

e. Quasisocial

22. Some of the evolutionary advantages of social behavior include:

a. Improved resource acquisition b. Improved defense

c. Improved survival of offspring d. reduced stinging requirements

e. a., b. and c.

23. Worker honey bees in a colony:

a. Are all sterile females b. Have the same mother

c. Are diploid d. Are haploid

e. a., b. and c.

24. Honey bee caste determination is:

a. Is age related and regulated genetically and hormonally
b. Is regulated by photoperiod and temperature
c. Is regulated by the waggle dance
d. Is determined by pesticides in the environment
e. All of the above

25. Termites differ from honeybees in that they:

a. Are haplo-diploid b. Have no males

c. Are diploid d. Have a fertile queen and king in each colony e. c. and d.

26. Family of the Droscha magniferae:

a. Coccidae b. Aleurodidae

c. Aphididae d. Pyralidae

27. The two most important structural insect pests in urban situations are:

a. Moths and butterflies b. Spiders and scorpions

c. Beetles and flies d. Termites and ants

e. None of the above

28. Family of the Emmalocera deprcsella:

a. Chrysomelidae b. Pyralidae

c. Anobiidae d. Noctuidae

29. Family of the Spodoptera litura:

a. Chrysomelidae b. Pyralidae

c. Anobiidae d. Noctuidae

30. Family of the Pectinophora gossypiella:

a. Tenebrionidae b. Noctuidae

c. Gelechiidae d. Aphididae

31. Approaches to biological control tactics include classical, augmentative and conservation. Classical biological control is the:

a. Preservation of natural enemies (predators & parasitoids) that are already established in an area
b. Importation and release of an insect pest to a new area to provide hosts for natural enemies
c. Culture and release of natural enemies that are already established in the field, but that need a "boost" to effectively control the insect pest species
d. Importation and release of natural enemies from the native home of an alien insect pest that has invaded a new area
e. Use of chemical insecticides to reduce alien insect pests to establish new equilibrium position

32. Family of the Bemisia tabaci:

a. Apionidae b. Aleurodidae

c. Pyralidae d. Pyrrhocoridae

33. An example(s) of a relative method to assess economic threshold levels for an insect pest is:

a. Number of insects per leaf b. Number of insects per plant

c. Number of insects per twig traps d. Pheromone e. a., b., and c.

34. Quarantine of an insect pest involves:

a. Eradication of the pest b. Limit the movement of the pest

c. Cooperation of the public d. b. and c.

e. a., b. and (c

35. The equilibrium level in an insect population:

a. Is the point at which insects can begin to migrate
b. Refers to fluctuations in the population around a mean
c. Is important in determining pest status d. All of the above e. b. and (c)

36. Which chemicals do insects use to communicate messages at the following three levels, respectively: within the insect body, intra-specifically (between members of the same species), and inter-specifically (between members of different species)? a. Hormone, PTTH, and tympanum, respectively.

b. Kairomone, pheromone and hormone, respectively.
c. Hormone, pheromone and allomone, respectively.
d. Juvenile hormone, PTTH and luciferin, respectively.
e. Kairomone, pheromone and allomone, respectively.

37. The honey bee waggle dance conveys information about the location of nectar sources to other worker bees in the hive. Which of the following senses do worker bees use to interpret the dance?

a. Sight. b. Smell.

c. Taste. d. Touch.

e. b., c. and d. only.

38. What is the insect auditory sense structure that detects sound (analogous to the human ear) called?

a. Lek. b. Antenna.

c. Kairomone. d. Tympanum.

e. Luciferin.

39. Insects can create vibrations that are transmitted through a substrate:

a. That send very specific intraspecific messages, e.g. courtship songs.
b. And used for efficient intraspecific communication over short distances.
c. That represent a secure means of intraspecific communication.
d. And attract mates from great distances, well over a mile. e. a., b. and c.

40. The honey bee worker has a "stinger" which

a. Is a modified ovipositor and associated with a poison gland that produces the venom.
b. Has a barb on it which can imbed into the skin and be released by muscles to allow the bee to sting another victim.
c. Has a barb on it which can imbed into the skin of an animal and is left behind to continue injecting venom into the victim.
d. a. and b.. e. a. and c.

41. Bubonic plague is:

a. Present in rodent populations along with its efficient louse vector in the Sierra Mountains of California.
b. Present in bear populations along with its efficient flea vector in the Sierra Mountains of California.
c. Present in rodent populations along with its efficient flea vector in the Sierra Mountains of California.
d. No longer a threat because the flea vector has been eradicated with chemical insecticides in the Sierra Mountains of California.
e. No longer a threat because the louse vector has been eradicated with chemical insecticides in the Sierra Mountains of California

42. Examples of some density-independent mortality factors in insect populations are:

a. Predators, parasitoids, and pathogens.
b. Predators, chemical insecticides, and intraspecific competition.
c. Chemical insecticides, hurricanes, and temperature extremes (i.e., hot and cold)
d. Chemical insecticides, flooding, and intraspecific competition.
e. Chemical insecticides, flooding, and predators.

43. Which of the following responses occur when predators interact with prey populations?

a. A numerical response. b. A functional response.

c. A lag effect. d. a., b. and c..

e. a. and b. only.

44. An example of a biological control against insects is the use of

a. Herbicides b. Wildlife refuges

c. Pesticides d. Sex hormones

45. As human consumers become less tolerant of insect damage on fruit, the economic thresholds for fruit pests are likely to:

a. Increase b. Remain the same

c. Decrease d. No way to tell

46. Which of these is NOT considered an insect growth regulator?

a. Synthetic pyrethroid b. Juvenile hormone analogue

c. Chitin inhibitor d. Ecdysteroid

47. Organophosphate and carbamate insecticides work by disrupting an insect's:

a. Digestive system b. Nervous system

c. Respiratory system d. Endocrine system

48. The sterile-male technique would probably not work well for an insect pest whose:

a. Population is extremely abundant. b. Individuals are easily mass reared.

c. Females mate only once in their lifetime. d. Males are very strong fliers.

49. Which of these is an "unbiased" sampling strategy?

a. Malaise trap
b. Light trap
c. Sticky trap
d. None of these

50. Breeding nursey stock for higher levels of secondary plant compounds would be an example of:

a. Antixenosis
b. Xenobiosis
c. Antibiosis
d. Tolerance

51. Which of these is likely to be regarded as the most "useful" biological control agent

a. A beetle that feeds on kudzu.
b. A parasite of lady beetles.
c. A predator of robber flies.
d. A viral pathogen of lacewings.

52. To which of these groups do insect pathogens belong?

a. Viruses and bacteria
b. Protozoa and fungi
c. Bacteria and protozoa
d. All of these

53. Pest outbreaks tend to occur when:

a. Crops are planted in monoculture.
b. Natural enemies are imported from abroad.
c. Farmers switch to new crops.
d. All of these.

54. Biological control is likely to be most effective when the predator or parasite has a:

a. Long life cycle
b. Wide range of preferred hosts
c. High reproductive rate
d. All of these

55. Which insect orders contain species that are important pests of domestic animals?

a. Siphonaptera and Coleoptera
b. Orthoptera and Hemiptera
c. Diptera and Phthiraptera
d. All of these

56. Which control strategy is likely to have the greatest impact on non-target organisms?

a. Chemical control
b. Cultural control
c. Biological control
d. Physical/mechanical control

57. Which insect order is most closely related to Diptera?

a. Hymenoptera b. Orthoptera

c. Plecoptera d. Thysanura

58. To which class of arthropods do lobsters and shrimp belong?

a. Crustacea b. Arachnida

c. Myriapoda d. Xiphosura

59. The order Hemiptera contains:

a. Bed bugs and stink bugs b. Chewing and sucking lice

c. Roaches and mantids d. Crickets and grasshoppers

60. Which order is not holometabolous?

a. Siphonaptera b. Hymenoptera

c. Thysanoptera d. Neuroptera

61. Which order is exclusively herbivorous?

a. Trichoptera b. Odonata

c. Phasmatodea d. Thysanoptera

62. Which order is exclusively parasitic?

a. Diplura b. Phthiraptera

c. Zoraptera d. Diptera

63. Sucking mouthparts are NOT found in:

a. Fleas b. Lice

c. Flies d. Ants

64. All ametabolous insects are:

a. Predatory b. Wingless

c. Endognathous d. All of these

65. Immatures of the Neuroptera would be classified as:

a. Scavengers b. Parasites

c. Herbivores d. Predators

66. What do the orders Mantodea, Dermaptera, and Isoptera have in common?

a. Winglessness b. Chewing mouthparts

c. Herbivory d. All of these

67. Which insect order is most closely related to Dermaptera?

a. Hymenoptera b. Orthoptera

c. Plecoptera d. Thysanura

68. Which arthropods have chelicerae?

a. Spiders b. Millipedes

c. Shrimp d. All of these

69. The order Orthoptera contains:

a. Bed bugs and stink bugs b. Chewing and sucking lice

c. Roaches and mantids d. Crickets and grasshoppers

70. Which characteristic would not be found in the Onychophora?

a. One pair of antennae b. Three tagmata

c. Jointed legs with claws d. Segmented body

71. Which order is exclusively hematophagous (blood feeders)?

a. Siphonaptera b. Thysanoptera

c. Phasmida d. Hymenoptera

72. Which structure is always associated with the Hymenoptera?

a. Furcula b. Hamuli

c. Collophore d. Elytra

73. Chewing mouthparts never occur in:

a. Fleas b. Earwigs

c. Beetles d. Bees

74. All neopterous insects are:

a. Predatory
b. Wingless
c. Ectognathous
d. Hemimetabolous

75. Which developmental stage is found only in the Ephemeroptera?

a. Prepupa
b. Naiad
c. Subimago
d. Imago

76. Which orders are most important in the transmission of human disease?

a. Phasmatodea and Odonata
b. Hymenoptera and Siphonaptera
c. Diptera and Phthiraptera
d. Hemiptera and Thysanoptera

77. A naiad is best described as a(n):

a. Predatory larva
b. Wingless adult
c. Aquatic nymph
d. Scavenger

78. Which order is most closely related to Dermaptera?

a. Isoptera
b. Mecoptera
c. Psocoptera
d. Coleoptera

79. Chelicerate arthropods include:

a. Millipedes and centipedes
b. Lobsters and shrimp
c. Spiders and ticks
d. Lice and fleas

80. Which statement is true for all crustacea?

a. They live on land
b. They have chewing mouthparts
c. They have six walking legs
d. They are paleopterous

81. Which insect order is never associated with plants?

a. Hymenoptera
b. Thysanoptera
c. Hemiptera
d. Siphonaptera

82. Human disease pathogens are transmitted by which order?

a. Hymenoptera
b. Thysanoptera
c. Diptera
d. All of these

83. Odonata and Plecoptera are similar because both have:

a. Aquatic nymphs
b. Endopterygote development

c. Paleopterous wings d. All of these

84. Which insect order never lives in aquatic environments?

a. Trichoptera b. Plecoptera

c. Diptera d. Orthoptera

85. Hemiptera and Hymenoptera are similar because both have:

a. Holometabolous development b. Piercing-sucking mouthparts

c. Neopterous wings d. All of these

86. Which insect order is most commonly found in soil litter?

a. Collembola b. Neuroptera

c. Lepidoptera d. Phasmatodea

87. In a male insect, which structure would lie below (ventral to) the anus?

a. Epiproct b. Aedeagus

c. Paraproct d. Furca

88. Which compound would be found in the exocuticle but NOT in the endocuticle?

a. Chitin b. Protein

c. Quinone d. Wax

89. To which body segment are the elytra attached?

a. Mesothorax b. Prothorax

c. First abdominal d. Metathorax

90. The shell of an insect's egg is called the:

a. Serosa b. Chorion

c. Amnion d. Periplasm

91. Damage symptoms of the emmalocera depressella?

a. Bunchy top b. Dead harts pulled easily

c. Spiral glasseries d. Dead hearts cannot palled easily

92. Which structure is unicellular?

a. Spine b. Gland

c. Seta d. Pile

93. What is the function of the micropyle in an insect's egg?

a. Water balance b. Respiration

c. Nutrition d. Sperm entrance

94. Which mouthparts lie between the labrum and the maxillae?

a. Hypopharynx b. Labium

c. Mandibles d. Palps

95. A line of weakness between adjacent sclerites that breaks during molting is called a

a. Apodeme b. Ecdysial suture

c. Apophysis d. Epistomal suture

96. Chitin is most abundant in which part of the exoskeleton?

a. Epicuticle b. Cuticulin layer

c. Procuticle d. Epidermis

97. In a male insect, which structure would lie above (dorsal to) the anus?

a. Epiproct b. Aedeagus

c. Paraproct d. Furca

98. What type of chemical monomer forms the backbone of a chitin molecule?

a. Lipid b. Sugar

c. Quinone d. Amino Acid

99. To which body segment are the halters attached?

a. Mesothorax b. Prothorax

c. First abdominal d. Metathorax

100. Which structure lies between the buccal cavity and the salivarium? a. Labium b. Cibarium

c. Labrum d. Hypopharynx

101. Which structure(s) would be found on an insect's pretarsus? a. Trochanter b. Furca
c. Empodium d. All of these

102. Indirect flight muscles cause wing movement by:
a. Moving thoracic sclerites b. Pulling on axillary sclerites

c. Exerting hydrostatic pressure d. All of these

103. What is the maximum number of ocelli that may be found in an adult insect? a. Zero b. Five
c. Three d. Twenty

104. Which mouthparts lie between the labrum and the maxillae? a. Hypopharynx b. Labium
c. Mandibles d. Palps

105. Which sclerite lies below (ventral to) the frons?
a. Gena b. Occiput

c. Clypeus d. Labium

106. A tormogen cell is always associated with a(n):
a. Spine b. Apodeme

c. Gland d. Seta

107. Chitin is a very important part of the insect's exoskeleton because: a. It is impermeable to water. b. It is rigid and inflexible.
c. It is not digested by common enzymes. d. It is flexible and elastic.

108. Which structure lies below the frons and above the labrum? a. Trochanter b. Clypeus
c. Furca d. Gena

109. Where is the genital opening found on a typical insect?
a. Just above the epiproct. b. Just below the anus.

c. Between the paraprocts. d. Inside the tentorium.

110. Parapsidal furrows are grooves found on the mesonotum of some parasitic wasps.

These grooves would be located:

a. Above and between the front wings. b. Under the halteres.

c. On the epimeron. d. No way to tell.

111. Which part of the exoskeleton lies between the wax layer and the cement layer? a. Exocuticle b. Cuticulin layer

c. Endocuticle d. None of these

112. Which suture is not found on the head capsule?

a. Pleural suture b. Subgenal suture

c. Epistomal suture d. Frontal suture

113. Which statement about valvulae is incorrect?

a. They are part of the female genitalia. b. They lie just inside the valvifers.

c. They are arranged in three pairs. d. They guide the egg during oviposition.

114. The cibarium is best described as:

a. Thoracic muscles that move the wings. b. A structure on the pretarsus.

c. The innermost layer of the epicuticle. d. A muscular pump that sucks food into the mouth.

115. Elastic regions of the exoskeleton:

a. Are generally known as sclerites. b. Are found only at the joints.

c. Lack a well-defined exocuticle. d. Contain high concentrations of quinones.

116. Which layer(s) of the exoskeleton is(are) secreted by the epidermis? a. Endocuticle b. Epicuticle
c. Exocuticle d. All of these

117. Which structure is not part of the central nervous system?
a. Frontal ganglion b. Circumesophageal commissure

c. Tritocerebrum d. Subesophageal ganglion

118. An insect must use both of its compound eyes (simultaneously) in order to perceive: a. Distance or depth b. Ultraviolet light
c. Shape or size d. Polarized light

119. The chemical trail produced by foraging ants would be classified as a(n): a. Kairomone b. Allomone
c. Pheromone d. None of these

120. Which statement about the insect's nervous system is incorrect? a. The ventral nerve cord controls the heart and gut.
b. The caudal ganglion controls the external genitalia.
c. The brain controls the eyes and antennae.
d. The subesophageal ganglion controls the mouthparts.

121. The deutocerebrum innervates the:
a. Mouthparts b. Antennae

c. Compound eyes d. Heart

122. An ommatidium is best defined as a:
a. Subdivision of the ventral nerve cord. b. Functional unit of the compound eye.

c. Mechanoreceptor used for proprioception. d. Ventral lobe of the insect's brain.

123. Fly larvae (maggots) move away from a bright source of light. This is an example of a a. Taxis b. Reflex
c. Kinesis d. Transverse orientation

124. A male empiid fly courts a female for 20 minutes and then gives up after he fails to elicit any response. This is an example of:
a. Conditioning b. Imprinting

c. Habituation d. Instrumental learning

125. The circumesophageal connective joins the:

a. Deutocerebrum with the tritocerebrum. b. Tritocerebrum with the subesophageal ganglion.

c. Two lobes of the tritocerebrum. d. Frontal ganglion with the hypocerebral ganglion.

126. Compared to most learned behaviors, instinctive (innate) behavior is:

a. More stereotyped b. Less complex

c. Not subject to evolutionary change d. All of these

127. When laying eggs, a female insect returns to her larval host plant, even though she has not fed upon this plant during her adult life. This is an example of: a. Conditioning b. Habituation

c. Imprinting d. Instrumental learning

128. In most insects, the sense of smell is localized in the:

a. Tarsi b. Antennae

c. Maxillary palps d. Frons

129. In insects with dichromatic (2 pigment) color vision, maximum color discrimination is in the range from:

. Red to green . UV to green

. Yellow to blue . Bee violet to bee purple

130. The mandibular gland substance of the queen honey bee inhibits ovarian development among worker bees in the same hive. This is an example of a(n): a. Allomone b. Synomone

c. Pheromone d. Kairomone

131. If a nerve impulse started in the tritocerebrum and passed through the stomodeal nervous system until it reached the heart, it would not pass through the: a. Recurrent nerve b. Subesophageal ganglion

c. Frontal nerve d. Hypocerebral ganglion

132. An insect's mechanoreceptors would NOT be sensitive to:

a. Body movement b. Sound vibrations

c. Wind speed d. Water vapor

133. Stridulation is a method of producing sound by:

a. Vibrating the wings. b. Vibrating a resonant membrane.

c. Striking the substrate. d. Rubbing body parts together.

134. In an ant nest, all workers are:

a. Adult males b. Immature males

c. Adult females d. Immature females

135. Which pair of structures have the most similar sensory functions?

a. Chordotonal organs and tympana b. Stemmata and pressure receptors

c. Flex receptors and cerci d. Antennae and hair beds

136. A firefly would most likely be classified as a _____ insect. a. Crepusular b. Eusocial

c. Diurnal d. Solitary

137. Female pseudergates may molt into determinant nymphs whenever:

a. Soldier pheromone is too high b. Queen substance is too high

c. King substance is too high d. None of these

138. All insects must communicate in order to:

a. Find a mate b. Survive the winter

c. Locate food d. Avoid predation

139. Any chemical used to repel predators would always be classified as a(n): a. Pheromone b. Hormone

c. Kairomone d. Allomone

140. Insects that share a common nest site but do not care for their young are said to be a. Quasisocial b. Semisocial

c. Communal d. Solitary

141. Stridulation is a method of producing sound by:

a. Vibrating the wings b. Vibrating a resonant membrane

c. Striking the substrate d. Rubbing body parts together

142. Which event might initiate nocturnal behavior in an insect whose activity cycle is under exogenous control?

a. Sunrise b. Solar eclipse

c. Rainfall d. None of these

143. Which communication signal has low information content, but can be long-lasting in the environment?

a. Wing color patterns b. Light flashes

c. Stridulation d. Marking pheromones

144. The sterile-male technique works best when:

a. The target population is large. b. Females mate repeatedly.

c. The pest species can be mass-reared. d. All of these.

145. If the acute dermal LD-50 of an insect is 50 mg/kg, then: a. 50 insects can be killed with 50 mg of the product.

b. One insect can be killed with 50 mg of the product.

c. 50% of the insects can be killed with 50 mg of the product.

d. None of these

146. Anaphylactic shock is best described as an extreme type of: a. Entomophibia b. Allergic reaction

c. Parasitosis d. Envenomization

147. *Vibrio cholerae*, the causal agent of cholera, can be carried from one place to another on the feet of flies. This is an example of which type of transmission? a. Obligatory b. Mechanical

c. Transovarial d. Facultative

148. Compared to first generation pesticides, the newer second and third generation compounds are:

a. More selective and less persistent. b. More toxic and less selective.

c. More persistent and less selective. d. None of these.

149. What is the generally accepted mode of action for organophosphate insecticides? a. Chitin inhibitor b. Cholinesterase inhibitor

c. Stomach poison d. Respiratory toxin

150. Which of these denotes a type of host plant resistance characterized by the ability of the plant to outgrow and/or repair damage resulting from an insect attack? a. Antibiosi b. Symbiosis

c. Antixenosis d. Tolerance

151. Which of these is a cultural method for controlling insects? a. Crop rotation b. Window screens

c. Quarantine d. Sex pheromone traps

152. Which class of chemical insecticides is characterized by a relatively high degree of environmental persistence?

a. Carbamates b. Synthetic pyrethroids

c. Organophosphates d. Chlorinated hydrocarbons

153. Which sampling strategy is best suited for insects that live in the soil?

a. Sex pheromone trap b. Sweeping

c. Berlese funnel d. Light trap

154. Which common name is incorrectly written?

a. Horsefly b. Honey bee

c. Ground beetle d. Lightningbug

155. As human consumers become less tolerant of insect damage on fruit, the economic thresholds for fruit pests are likely to:

a. Increase b. Remain the same

c. Decrease d. No way to tell

156. Which of these is NOT considered an insect growth regulator?

a. Synthetic pyrethroid b. Juvenile hormone analogue

c. Chitin inhibitor d. Ecdysteroid

157. Organophosphate and carbamate insecticides work by disrupting an insect's:

. Digestive system . Nervous system

. Respiratory system . Endocrine system

158. **The sterile-male technique would probably not work well for an insect pest whose:** a. Population is extremely abundant. b. Individuals are easily mass reared.
c. Females mate only once in their lifetime. d. Males are very strong fliers.

159. Which of these is an "unbiased" sampling strategy?

a. Malaise trap b. Light trap

c. Sticky trap d. None of these

160. Breeding nursey stock for higher levels of secondary plant compounds would be an example of:

a. Antixenosis b. Xenobiosis

c. Antibiosis d. Tolerance

161. Which of these is likely to be regarded as the most "useful" biological control agent? a. A beetle that feeds on kudzu. b. A parasite of lady beetles.
c. A predator of robber flies. d. A viral pathogen of lacewings.

162. To which of these groups do insect pathogens belong?

a. Viruses and bacteria b. Protozoa and fungi

c. Bacteria and protozoa d. All of these

163. Pest outbreaks tend to occur when:

a. Crops are planted in monoculture. b. Natural enemies are imported from abroad.
c. Farmers switch to new crops. d. All of these.

164. Biological control is likely to be most effective when the predator or parasite has a(n)

a. Long life cycle b. Wide range of preferred hosts

c. High reproductive rate d. All of these

165. Which insect orders contain species that are important pests of domestic animals? a. Siphonaptera and Coleoptera b. Orthoptera and Hemiptera
c. Diptera and Phthiraptera d. All of these

166. Which control strategy is likely to have the greatest impact on non-target organisms? control?

a. Chemical control b. Cultural control

c. Biological control d. Physical/mechanical control

167. The pedicel is the name for the:

a. 1st leg segment b. 1st antennal segment

c. 2nd leg segment d. 2nd antennal segment

168. Which hormone would NOT be found in adult insects?

a. Brain hormone (PTTH) b. Juvenile hormone

c. Eclosion hormone d. All of these

169. Aquatic immatures of All holometabolous insects are known as: a. Nymphs b. Larvae

c. Naiads d. Young

170. Suppose you find an interesting arthropod living on the bottom of a fresh water pond. It has eyes, antennae, mandibles, and 10 pairs of legs. You conclude that this organism belongs in the class:

a. Insecta b. Crustacea

c. Diplopoda d. Arachnida

171. "Lumpers" sometimes include Blattodea and Phasmida as suborders of: a. Hemiptera b. Orthoptera

c. Phthiraptera d. Neuroptera

172. Chewing mouthparts are not found in:

a. Thrips b. Crayfish

c. Millipedes d. Bees

173. Which order is exclusively herbivorous?

a. Hemiptera b. Odonata

c. Phasmida d. Thysanoptera

174. In insect development, the germ band:

a. Forms the amnionic membrane. b. Differentiates into three germ layers.

c. Gives rise to the cleavage and activation centers.

d. Remains undifferentiated throughout the larval stages.

175. Which part of a molt does not occur during apolysis?

a. Formation of new epicuticle b. Resorption of old endocuticle

c. Formation of new quinone crosslinkages. d. Activation of molting fluid

176. In larval insects, which hormone inhibits the development of imaginal discs?

a. Juvenile hormone b. Eclosion hormone

c. Brain hormone d. Ecdysteroids

177. In a normally developing insect, a high titer of juvenile hormone should not be found:

a. While it is molting from first to second instar b. Before it becomes a pupa.

c. When it is a sexually mature adult. d. In an adult male.

178. Which part of a molt does not occur during apolysis?

a. Formation of new epicuticle b. Resorption of old endocuticle

c. Formation of new quinone crosslinkages d. Activation of molting fluid

179. In an insect egg, the embryo begins to develop as soon as:

a. Cells reach the oosome. b. The zygote nucleus starts to divide.

c. Hormones are secreted by the activation center.

d. Yolk contracts from one side of the egg.

180. Which order would a "lumper" NOT include in the Orthoptera? a. Mantodea b. Grylloblattodea

c. Phasmida d. Isoptera

181. Which of these characteristics do insects and crustaceans have in common? a. Mandibulate mouthparts b. Jointed legs

c. Open circulatory system d. All of these

182. In an obtect pupa:

a. The insect is surrounded by a silken cocoon. b. The larval exoskeleton becomes a puparium.

c. The insect's body forms a chrysalis. d. All of these.

183. Which structures would be found in an eruciform larva, but not in a scarabaeiform larva

A. Prolegs b. Compound eyes

c. Mandibles d. All of these

184. Which order is most closely related (phylogenetically) to the Neuroptera? a. Mecoptera b. Phthiraptera

c. Blattodea d. Odonata

185. Which class is most closely related (phylogenetically) to the Insecta?

a. Xiphosura b. Myriapoda

c. Crustacea d. Arachnida

186. Which group of insects has simple metamorphosis? . Fleas

. Beetles

. Flies . Bugs

187. Insect blood does not:

a. Clot b. Flow through the wings

c. Contain antibodies d. Transport hormones

188. In insects, the first pair of post-oral appendages are called mandibles. What are these appendages called in Arachnids?

a. Maxillae b. Walking legs

c. Antennae d. Chelicerae

189. Which insects do NOT damage horticultural crops (as immatures)? a. Sawflies b. Whiteflies

c. Butterflies d. Caddisflies

190. Which insects would be classified as decomposers?

a. Termites b. Thrips

c. Crickets d. Stoneflies

191. Which sclerite lies below the epistomal suture?

a. Frons b. Clypeus

c. Labrum d. Gena

192. Chewing mouthparts are not found in:

a. Crickets b. Thrips

c. Weevils d. Earwigs

193. Which statement about insect development is correct? a. The embryo is nourished by yolk stored in the egg.

b. The germ band develops inot the embryo.

c. The serosa forms the yolk sac membrane.

d. All of these.

194. Which part of a molt does not occur during apolysis?

a. Formation of new epicuticle b. Resorption of old endocuticle.

c. Formation of new quinone crosslinkages. d. Activation of molting fluid.

195. Which order is both ectognathous and wingless?

a. Collembola b. Phthiraptera

c. Thysanoptera d. Diplura

196. Why are termites classified as orthopteroids?

a. They are wingless b. They have cerci and chewing mouthparts

c. They are social insects d. All of these

197. A terrestrial arthropod with more than five pairs of legs could not be a(n): a. Isopod b. Centipede

c. Arachnid d. Symphylan

198. Which group of insects has incomplete metamorphosis?

a. Fleas b. Beetles

c. Flies d. Bugs

199. Which insects do not feed on plants?

a. Thrips b. Whiteflies

c. Lacewings d. Sawflies

200. The recurrent nerve joins:

a. The two lobes of the tritocerebrum b. The tritocerebrum with the subesophageal

c. The frontal and hypocerebral ganglia d. The tritocerebrum with the frontal ganglion

201. If an insect's developmental threshold is 15 degrees F, how many degree-days (DD. does it on a day when the average temperature is 72 degrees F? a. 87 DD b. 57 DD

c. 30 DD d. No way to tell

202. Broad-spectrum detoxification enzymes are commonly found in:

a. Blood feeding insects b. Polyphagous herbivores

c. Insect parasitoids d. All of these

203. If a population's intrinsic rate of increase ("r") is less than one, then the population is:

a. Growing rapidly b. Stable

c. Growing slowly d. Declining

204. When laying eggs, a female insect returns to her larval host plant, even though she has not fed upon this plant during her adult life. This is an example of:

a. Conditioning b. Habituation

c. Imprinting d. Instrumental learning

205. When a newly emerged queen honey bee hears the sound of "piping and quacking" from unemerged queens, she will find and destroy their cells. Apparently, these sounds are an example of:

a. A releaser b. A transverse orientation

c. Appetative behavior d. A fixed action pattern

206. Behavior patterns that change drastically over the lifetime of an insect are probably:

a. Learned b. Innate

c. Imprinted d. Afferent

207. What information could NOT be determined from a life table?

a. Significant mortality factors b. Intrinsic rate of increase

c. Environmental carrying capacity d. Stage-specific mortality rate

208. A certain insect usually becomes active each day at dusk. If kept in the dark all day, it will still become active around sunset even though it cannot see the sun.

This behavior is an example of:

a. A circadian rhythm b. Transverse orientation

c. Diurnal behavior d. Exogenous entrainment

209. Worker ants remember landmarks around their nest entrance & use these as a guide when returning home. This behavior is an example of: a. Imprinting b. Conditioning

c. Habituation d. Instrumental learning

210. Chemicals released by threatened aphids elicit defensive behavior among the ants that tend these aphids. Such chemicals would be best described as:

a. Allomones b. Hormones

c. Pheromones d. Kairomones

211. Substances in the frass produced by bark beetles attract predators & parasites to

trees that are infested by these beetles. Such substance would be best described as a. Allomones b. Hormones

c. Pheromones d. Kairomones

212. When predator changes its search image in response to a change in the density of prey, it exhibits a(n):

a. Conditioned response b. Functional response

c. Numerical response d. None of these

213. Which insects are most likely to pollinate foul-smelling flowers?

. Hover flies . Honey bees

. Carrion beetles . Stink bugs

214. If an insect's subesophageal ganglion were paralyzed, it would be unable to: a. Eat b. See

c. Fly d. Walk

215. Fly larvae (maggots) move directly away from a bright source of light. This is an example of a:

a. Taxis b. Reflex

c. Kinesis d. Transverse orientation

216. Ants remember a food trail by the location of landmarks along the way. This is an example of:

a. Conditioning b. Imprinting

c. Habituation d. Instrumental learning

217. A male empiid fly courts a female for 20 minutes and then gives up after he fails to elicit any response. This is an example of:

a. Conditioning b. Imprinting

c. Habituation d. Instrumental learning

218. The central nervous system of an insect controls the:

a. Mandibles and maxillae b. Legs and wings

c. Heart and foregut d. None of these

219. The major differences between European and Africanized honey bees are: a. Physical (size) b. Behavior (agressiveness)

c. Ecological (habitat) d. All of these

220. The information content of a sound signal is based on changes in: a. Amplitude (loudness) b. Duration (pulsation)

c. Frequency (pitch) d. All of these

221. An ommatidium is the functional unit of the:

a. Protocerebrum b. Compound eye

c. Subesophageal ganglion d. Male reproductive system

222. Which of these could be an example of an entrainment cue?

a. Odor of a predator b. Darkness after sunset

c. Odor of a host plant d. Darkness before sunrise

223. It is possible that an immature insect might imprint on:

a. Odor of a predator b. Darkness after sunset

c. Odor of a host plant d. Darkness before sunrise

224. Which of these is a primary ecological event?

a. Competition b. Parasitism

c. Immigration d. None of these

225. Which of these is a secondary ecological event?

a. Emigration b. Mortality

c. Predation d. None of these

226. Which of these is an example of a Mullerian mimic?

a. A bee that looks like a wasp b. A fly that looks like a bee

c. A katydid that looks like a leaf

d. A caterpillar that looks like a snake

227. Family of the Heliothis armigera

a. Noctuiidae

b. Plutellidae

c. Chrysomelide

d. Pyraustidae

228. Visceral (stomodaeal) Nervous System:

a. Frontal ganglion b. Hypocerebral ganglion

c. Recurrent nerve d. Subesophageal ganglion

229. Brain:

a. Optic lobes b. Neurosecretory cells

c. Circumesophageal commissure d. Tritocerebrum

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a. A bee that looks like a wasp b. A fly that looks like a bee

c. A katydid that looks like a leaf d. A caterpillar that looks like a snake

237. Tanymecus indicus feed on the crop

a. Paddy b. Maize

c. Sorghum d. Mustard

238. Visceral (stomodaeal) Nervous System:

a. Frontal ganglion b. Hypocerebral ganglion

c. Recurrent nerve d. Subesophageal ganglion

239. Brain:

a. Optic lobes b. Neurosecretory cells

c. Circumesophageal commissure d. Tritocerebrum

240. Chemicals which kill the pests are called.

a. Insecticides b. Pesticides

c. Acaricides d. Avicides

241. Immature stage of beetle is termed as

a. Larva b. Caterpillar

c. Grub d. Maggot

242. Mites have _____ pairs of legs and two distinct body regions

a. 2 b. 4

c. 6 d. 3

243. Predator has _____ type of mouthparts

a. Sponging b. Rasping & sucking

c. Chewing d. Piercing

244. Instar is _____.

a. Immature of moths b. Stage b/w two moults

c. A larva d. Crop pest

245. Cotton jassid belongs to _____ order of class insecta.

a. Homoptera b. Thysanoptera

c. Coleoptera d. Orthoptera

246. If an insecticide has 170 ml / acre dose rate and a pack size of 700 ml, how much acre it will spray?

a. 4 b. 2

c. Several d. Single

247. If 500 m^2 sprayed with 16 liter of knapsack sprayer, how much spray volume is used per acre?

a. 80 liter b. 128 liter

c. 150 liter d. 130 liter

248. PB-rope L is _____.

a. Novel insecticide b. Sex pheromone

c. Carbamate d. Organophosphate

249. IGR effect

a. Egg development b. Pupal development

c. Larval development d. Adult emergence

250. _____ type of nozzle is used for spraying a weedicide.

a. ULV disc b. T-jet

c. Hollowcone d. None of them

251. Active ingredient in Steward is

a. Chlorphyrifos b. Oxadiazine

c. Spinosad d. Indoxacarb

252. Hollowcone nozzle is used to spray

a. Weedicide b. Insecticides

c. None of them

253. Pest spectrum of Steward on cotton crop

a. Heliothus only b. Earias & Heliothus

c. Heliothus, Spodoptera, Earias d. Pectinophora

254. *Helicoverpa armigera* eggs are

a. In bunchies under leaf b. Scattered mainly 1/3 portion of plant

c. Not visible without lenses

255. Cotton sticks should be placed _____ to reduce pink bollworm carry over

a. Horizontally b. Vertically

c. Inside store

256. PB-rope is a successful IPM tool for _____ management.

a. Army worm b. Americon bollworm

c. Pink bollworm

257. Pink bollworm take diapause in

a. Soil b. Unopened boll

c. Double seed d. All of above

258. Green band is present on fore-wing of moth of

a. Army worm b. Earias insulana

c. Earias vitella d. none of these

259. Rosette flower is attack of

a. Pink bollworm b. American bollworm

c. Armyworm

260. Gurdaspur borer over-winter as

a. Larva b. Pupa

c. Adult d. None of these

261. Brinjal fruit borer over-winter as

a. Larva b. Pupa

c. Adult d. None of these

262. Maize stem borer damage maize at _____ stage.

a. Adult b. Larvae

c. Both of these

263. Rice stem borer hibernate as

a. Larva b. Pupa

c. Adult d. None of these

264. Pesticide ordinance was imposed in

a. 1971 b.1973

c. 1975 d. 1979

265. ETL level of Thrips is

a. 8 / leaf b. 12 / leaf

c. 5 / leaf d. None of these

266. Rice burn is caused by

a. Rice hispa b. White backed plant hopper

c. Rice green leaf hopper d. Brown hopper

267. Chilo partellus lay eggs on the _____ .

a. Lower side of leaves b. Middle portion of leaves

c. Upper side of leaves d. None of these

268. *Bracon hebetor* is _____.

a. Larval parasitoid b. Pupal parasitoid

c. Nymphal parasitoid d. None of these

269. *Epipyrope melanoluca* is _____.

a. Larval parasitoid b. Pupal parasitoid

c. Nymphal parasitoid d. Adult parasitoid

270.Red pumpkin beetle lay eggs

a. In the soil b. On upper side of leaves

c. On middle portion of leaves d. None of these

271. Mango mealy bug has _____ generations in a year

a. 4 b. 1

c. 3 d. 6

272. First insect fossil was found in

a. England b. Russia

c. Scotland d. USA

273. The international code of zoological nomenclature consists of

a. 57 articles b. 67 articles

c. 77 articles d. 87 articles

274. Which is the following is not head secleroid

a. Gena b. Frons

c. Epimeron d. Vertex

275. Which is the following is cross vein

a. Costa b. Radial

c. Media d. Cubitus

276. In Hymenoptera, the first abdominal segment which is fused with metathorax is called

a. Cornical b. Epiproct

c. Propodium d. Gaster

277. Which is the following is abdominal appendages

a. Gonopore b. Cerci

c. Waist d. Apophysis

278. Which of the following muscles are directly related to wings

a. Dorsal muscle b. Axillary muscle

c. Basalar muscle d. Sub-alar muscle

279. Economic threshold level of jassid is

a. 1 b. 2

c. 3 d. 4

280. The alimentary canal of insect is derived from

a. Ectoderm b. Ectoderm & endoderm

c. Ectoderm & mesoderm d. Ectoderm & mesoderm

281. Most of the caterpillar have legs or abdominal legs on segments

a. 2-5 & 10 b. 3-6 & 10

c. 6-10 d. 5-8 & 10

282. Wingless hexapod with six abdominal segments

a. Diplura b. Thysanura

c. Collembola d. Protura

283. Monocondylic single mandible is found in

a. Homoptera b. Thysanoptera

c. Hymenoptera d. Diptera

284. Most of the insects excrete 80-90 % of their nitrogen waste in the form of

a. Urea b. Uric acid

c. Ammonia d. Ammonium nitrate

285. Which of the following is systemic insecticide

a. Methamidophos b. Imidachloprid

c. Cypermethrin d. None of these

286. The density of pest population at which control measure should be applied

a. GEL b. PBL

c. EIL d. ETL

287. The fertilized female of lac insect lays eggs ranging from

a. 100-200 b. 200-500

c. 500-700 d. Less than 100

288. Which is the following bug is a pest of brinjal

a. Painted bug b. Plant bug

c. Lace bug d. Stink bug

289. Sugarcane borer which does not belong to the family pyralidae a. *Ammalocera depressella* b. *Chilo infuscatelus*

c. *Sesamia inferens* d. *Chilo auricilia*

290. Which of the following is neuropteran predators.

a. Brumus b. Chrysoperla

c. Cryptolaemus d. Apis

291. Chemical name of Proclaim is

a. Indoxacarb b. Emmamectan-benzoate

c. Cypermethrin d. Bifenthrin

292. Trade name of spinosad is

a. Timer b. Denitol

c. Tracer d. Arrivo

293. Trade name of difenthioron is

a. Endosulfon b. Carbofuron

c. Polo d. Bestox

294. Chemical present in Mospilon

a. Buprofezin b. Imidacloprid

c. Acetamaprid d. None of these

295. Trade name of methoxy-fenozide is

a. Runner b. Proaxix

c. Cascade d. None of these

296. ETL level of mites in cotton is _____.

a. 12-15 b. 8-10

c. 6-7 d. None of these

297. DDT discovered in _____.

a. 1941 b.1939

c. 1945 d. None of these

298. Which term is used for the movement of coxa towards body

a. Protraction b. Adduction

c. Abduction d. Promotion

299. One mesometathoracic & eight abdominal spiracles are functional the respiratory system is called

a. Holoneustic b. Perineustic

c. Hemineustic d. Metaneustic

300. The origin of foregut is

a. Ectodermal b. Mesodermal

c. Endodermal d. None of these

301. Foregut is lined internally by

a. Peritrophic membrane b. Epithelial membrane

c. Intima d. Taenidia

302. The function of peritrophic membrane is

a. Absorption b. Assimilation

c. Protection d. All of these

303. The nervous system of insect is derived from

a. Ectoderm b. Mesoderm

c. Endoderm & mesoderm d. Endoderm

304. Stick insects & leaf insects belongs to the order

a. Orthoptera b. Embioptera

c. Phasmida d. Dictyoptera

305. Order Odonata includes

a. May flies b. Dragon flies

c. Stone flies d. None of these

306. Cotton stainer is _____.

a. Pectinophora b. Dytiscus

c. Helicoverpa d. Dysdercus

307. In the formation of cuticle, which of the following layer is secerated first

a. Exo-cuticle b. Wax layer

c. Endo-cuticle d. Cuticulin layer

308. Moulting fluid is able to digest

a. Cement layer b. Cuticulin layer

c. Endo-cutilce d. Exo-cuticle

309. Pheromones are synthesized by

a. Thoracic glands b. Neuro-secretary cells

c. Glandular epidermal cells d. All of the above

310. The gland which produces pheromones in queen honey bee is _____. a. Mandibular glands b. Maxillary glands

c. Labial glands d. Tharyngial glands

311. Which of the following organs are involved in excretion

a. Malpighian tubules b. Integument

c. Wall of the alimentary canal d. All of these

312. Factors on which penetration of insecticide through insect cuticle does not depend on

a. Thickness of the cuticle b. Chemical nature of the cuticle

c. Components of the cuticle d. Nature of the carriers and solvents

313. In physiological considerations, the resistance to insecticide may be developed due to a. Conversion of toxicant to non toxic metabolites

b. Excretion of toxicant c. Storage of the toxicant

d. All of the above

314. Nicotinic effects of organo-phosphatic insecticide result in

a. Giddiness b. stiffness of the neck

c. Ataxia d. None of these

315. Insects feeding on plants of several genera within a family are called

a. Phytopagous b. Polyphagous

c. Oligophagous d. Monophagous

316. Which of the following order comprises phytophagous insects

a. Odonata b. Phasmida

c. Siphonoptera d. Mallophaga

317. Which of the following order comprises predacious insect

a. Phasmida b. Neuroptera

c. Isoptera d. Lepidoptera

318. Which of the following order comprises parasitic insects

a. Hymenoptera b. Thysanoptera

c. Phasmida d. Lepidoptera

319. Sexual dimorphism is found in _____.

a. Mango mealy bug b. Aphid

c. Whitefly d. Jassid

320. Which of the following cotton pest belong to family Pyrrhocoridae

a. Dysdercus b. Pectinophora

c. Earias d. Bemisia

321. Which of the following insect belongs to family Dermestidae

a. *Sytophilus oryzae* b. *Trogoderma granarium*

c. *Tribolium castaneum* d. None of these

322. Which of the following produces more lac, & is important for commercial production

a. Male b. Female

c. Nymph d. All of the above

323. The fertilized female of mulberry silkworm lays eggs within 24 hours

a. 100-200 b. 200-300

c. 300-400 d. 400-500

324.In honey bees when the larvae are fed on regular diet of pollen & honey which cast is produced.

a. Queen b. Workers

c. Drones d. All of these

325. Where the nectar is converted into honey

a. In the alimentary canal of the queen b. In the alimentary canal of the worker

c. In royal chamber d. In special cell of the hive

326. The average locust swarm spread over

a. 5 km^2 b. 10 km^2

c. 15 km^2 d. 20 km^2

327. Which of the following does not belong to order Lepidoptera a. Groundnut leaf minor b. Pea leaf minor

c. Citrus leaf minor d. None of these

328. The type of parthenogenesis where only males are produced is a, Arrhenotoky b. Thelytoky

c. Amphitoky d. None of these

329. Originally, the phytophagous insects were

a. Monophagous b. Polyphagous

c. Oligophagous d. All of these

330. The minimum period to be given for the assessment of effectiveness of a biocontrol agent is

a. 2 years b. 3 years

c. 4 years d. 5 years

331. Vertical resistance is also called

a. Oligogenic b. Specific

c. Monogenic d. All of these

332. Horizontal resistance is also known as

a. Non-specific b. General

c. Polygenic d. All of these

333. The device fitted at the end of the spray-launce & is used for atomization is

a. Hose b. Cut off device

c. Boom d. Nozzle

334. In solid cone nozzle, the solid cone of liquid is formed due to

a. Bigger size of the cap b. Bigger size of the orifice plate

c. Central hole in swirl plate d. Small size of strainer

335. The nozzle used for producing mist

a. Blast nozzle b. Rotatory energy nozzle

c. Kinetic energy nozzle d. Annular nozzle

336. The nozzle used to produce fog

a. Gaseous energy nozzle b. Thermal energy nozzle

c. Centrifugal energy nozzle d. Kinetic energy nozzle

337. The greater part of the fat body is made of cell called

a. Haemocytes b. Trophocytes

c. Lamphocytes d. Nephrocytes

338. Which of the following is European species

a. Apis dorsata b. Apis mellifera

c. Apis indica d. Apis florea

339. *Bacillus thuringiensis* is most effective at pH

a. 3-6 b. 9-10

c. 11-14 d. all of these

340. Environment is sum of _____ factors effecting an organism.

a. Some b. Two

c. All d. None

341. Abiotic environment includes _____

a. Living organisms b. Nonliving organisms

c. Weather d. Weather and all nonliving organisms

342. Micro environment is _____

a. Environment very close to an organism b. General environment

c. Environment of a certain area.

343. Macro environment is _____

a. Environment very close to an organism b. General environment

c. Overall environment of a certain area.

344. Ecological action is_____

a. Effect of various factors on the life on an individual
b. Effect of temperature and humidity on the life of an individual
c. Effect of factors other than temperature and humidity on the life of an individual

345. Ecological reaction is_____ a. Response of an individual to all environmental factors

b. Rsponse to temperature and humidity by an individual
c. Rsponse to factors other than temperature and humidity by an individual

346. Plants have _____ effect on the life of the insects

a. Useful b. Harmful

c. None d. Both

347. _____features of soil effect the insects

a. Texture b. Structure

c. None d. Both

348. _____ is the most important physical factor which effects the life of an insect

a. Temperature b. Humidity

c. Light d. None of the above.

349. Optimum temperature range for majority of the insects is

a. 28-30 °C b. 40-50 °C

c. 80-90 °C d. 10-20 °C

350. Absolute humidity is

a. Actual amount of water in the air

b. Amount of the water in the air as compared with the amount need to saturate the air c. None of above.

351. Relative humidity is _____- a. Actual amount of water in the air

b. Amount of the water in the air as compared with the amount need to saturate the air c. None of above.

352. Directed movement of the insects in response to light are called

a. Phototaxis b. Photokinesis

c. Nocturnal d. None of above

353. Non directional movements of the insects in response to light are called

a. Phototaxis b. Photokinesis

c. Nocturnal d. None of above

354. Insects which are active in the day time are called

a. Nocturnal b. Diurnal

c. Crepuscular d. None of above

355. Insects which are active in the night time are called

a. Nocturnal b. Diurnal

c. Crepuscular d. None of above

356. Insects which are active at dawn or dusk are called as

a. Nocturnal b. Diurnal

c. Crepuscular d. None of above

357. Range of the light spectrum which is perceived by the insect is

a. 2500- 7000 º A b. 500-1500 º A

c. 9000-15000 º A d. None of these

358. The environment in which a community lives is called as

a. Biotype b. Biome

c. Biosphere d. None of these

359. A regional ecosystem is called

a. Biotype b. Biome

c. Biosphere d. None of these

360. The entire earth having the living organisms is called as

a. Biotype b. Biome

c. Biosphere d. None of these

361. 100 º C is equal to

a. 212 º F b. 100 º F

c. 300 º F d. None of above.

362. Freezing point of water is

a. 32 º F b. 100 º F

c. 212 º F d. None of these

363. Boiling point of water is

a. 32 º F b. 100 º F

c. 212 º F d. None of these

364. Most efficient thermometers used are

a. Liquid filled thermometers b. Gas filled thermometers

c. Metallic thermometers.

365. Alcohol responds to change in temperature in

a. 7-8 seconds b. 10-20 seconds

c. 1-2 seconds.

366. Mercury filled thermometer responds to the change in temperature in

a. 25-28 seconds b. 35-40 seconds

c. 7-8 seconds.

367. The study of one or more individuals of a species in relation to environment is called

a. Autecology b. Synecology

c. None of these

368. The study of community in relation to environment is called

a. Autecology b. Synecology

c. None of these

369. The competition with in the individual of a species is called

a. Intra specific competition b. Inter specific completion c. None.

370. The competition between the individual of different species is called a. Intra specific competition b. Inter specific competition c. None.

371. The interaction in which at least one species is harmed is called as a. Positive interaction b. Negative interaction

c. Commensalisms d. None of these

372. The interaction in which at least one species is benefited & other is not harmed is called as

a. Positive interaction b. Negative interaction

c. Commensalisms d. None of these

373. The interaction in which both species are benefited is called as a. Positive interaction b. Negative interaction

c. Commensalisms d. Symbiosis

374. The type of interaction in which the food is exchanged between 2 individuals of the same species or different species is called as

a.Trophallaxix b. Positive interaction

c. Negative interaction d. Commensalisms

375. The association in which in the normal situation both species live neutral called as a. Neutral interaction b. Positive interaction
c. Negative interaction d. Commensalisms

376. Biotic components of an ecosystem are
a. Animals b. Plants

c. Both animals and plants d. None of these

377. Natality is_____
a. Birth rate b. Death rate
c. Rate of increase in size. d. None of these

378. Mortality is _____
a. Birth rate b. Death rate

c. Rate of increase in size. d. None of these

379. Living place of an individual is called
a. Habitat b. Niche.

c. Environment

380. Role of an individual in the community is called as
a. Habitat b. Niche.

c. Environment

381. Acarology is study of
a. Mites b. Insects

c. Birds

382. Mites and ticks are collectively called
a. Insects b. Mammals

c. Ccari

383. Mites belong to Class
a. Insecta b. Arachnida

c. Crustacea

384. Mites are second most diverse group of living organisms after ---------- --------

a. Birds b. Mammals

c. Insects

385. Mites have generally ---------- pairs of walking legs

a. 2 b. 3

c. 4 d. Many

386. Mites have ---------- pair of antenna

a. 1 pair b. 2 pairs

c. 0 pair

387. In mites the body is divided into ---------- regions

a. 1 b. 2

c. 3 d. 4

388. When head and thorax are fused they are collectively called

a. Head b. Thorax

c. Abdomen d. Cephalothorax

389. Two spotted spider mites belong to family

a. Tetranychidae b. Phytoseiidae

c. Cunaxidae d. Tenuipalpidae

390. Any organism which harms or causes damage to man directly or indirectly called

a. Insect Pest b. Pest

c. Agriculture Pest d. None of above

391. Scutellum is the primary feeding organ the

a. Larvae b. Germinating embryo

c. Adults d. Pupae

392. Insects which are active at night are called

a. Divrnal Insects
b. Nocturnal Insects
c. Crepuscular Insects
d. None of above

393. Viviparous insects produce

a. Eggs
b. Young ones
c. Nymph
d. None of above

394. A free living animal that attacks and feeds on other organisms is called

a. Predator
b. Parasite
c. Parasitoid
d. Scavenger

395. The study of insects is called

a. Entomology
b. Applied Entomology
c. Zoology
d. None of above

396. Insects which are found every where are called

a. Cosmopolitan insects
b. Household Insects
c. Store grain insects
d. None of above

397. The study of form and structure of insects is called

a. Insect morphology
b. Insect Physiology
c. Insect Ecology
d. None of above

398. Whiteflies have eggs

a. Elongate
b. Conical
c. Stalked
d. Oval

399. Three main parts of antennae

a. Scape, Peidcel, Flagellum
b. Ring, Funicle, Club
c. Scape, Club, Flagellum
d. Pedicel, Scape, Club

400. Antennae are lacking in insect order

a. Protura
b. Collembola

c. Diptera d. Thysanura

401. A material which is used to dilute active material is called

a. Adjunant b. Adhesive

c. Carrier d. Agitation

402. The food of honey bee queen is called

a. Gelly b. Royal gelly

c. Bee bread d. Nectar

403. Rearing of silk worm for commercial production of silk is called

a. Sericulture b. Apiculture

c. Floriculture d. Lac-culture

404. Lac is produced by insects

a. *Bombyx mori* b. *Laceifera lacca*

c. Apis dorsata d. Apis cerana

405. The ability of a plant by means of which it is less damaged by insects is

a. Tolerance b. Pest avoidance

c. Plant Resistance d. Resistance

406. A population or group of insects composed of a single genotype is called

a. Pilosity b. Biotype

c. Genotype d. Phenotype

407. What is most social insect

a. Black ants b. Termites

c. Honey bee d. None of above

408. Which insect have bacteria and protozoa in their digestive system

a. Termites b. Ants

c. Silver fish d. None of above

409. Butterflies have antennae

a. Capetates b. Clavate

c. Geniculata fish d. Flabellata

410. Example of monophagous insect is

a. *Helicoverpa armigera* b. Ants

c. Green lace wing d. None of above

411. The mixture of active and inert ingredients is called

a. Formulation b. Doze

c. Active ingredient d. None of above

412. What is antidote

a. Treatment given to counteract the effects of a poison

b. Increase the affect of a poison

c. No action against poison d. None of above

413. The group of pesticide which goes into the system of host and kills pest without harming host is called

a. Systemic b. Contact

c. Selective d. Protectant

414. The parasite which requires only one host for its complete life cycle is called

a. Monophagous parasite b. Zeophagous parasite

c. Phytophagous parasite d. Entomophagous parasite

415. The best example of parasites are

a. Ichnenmonids b. *Trichogramma* spp,

c. Cotesia sp d. All of above

416. The pesticide which is used for killing or controlling the eggs of insects is

a. Avicide b. Ovicide

c. Pesticide d. Fungicide

417. The chemical used of control of insects is called

a. Avicide b. Insecticide

c. Pesticide d. Fungicide

418. Cypermethrin, Deltamethrin, Permethrin are example of

a. Organophosphates b. Pyrethroids

c. Organochlorine d. Carbamate

419. Desert locust is

a. Migrant pest b. Occasional pest

c. Key pest d. Potential pest

420. Use of living organism to bring down the pest population below economic threshold level is called

a. Biological control b. Cultural control

c. Physical control d. Natural control

421. An egg parasitoid of lepidopterous insect is

a. *Trichogramma* sp b. *Apanteles* sp

c. Water joint beetle d. Ichnenmon

422. Population prediction of a particular sp with in field is called

a. Forecasting b. Haemo spora

c. Surveillance d. Pest scouting

423. Zinc phosphide is

a. Rodenticide b. Pesticide

c. Insecticide d. Weedicide

424. Insect are

a. Cold blooded animals b. Warm blooded animals

c. None of above

425. Most of insects require

a. Vitamin A b. Vitamin B

c. Vitamin D d. Vitamin C

426. Which is the strongest animal of the world

a. Whales b. Elephant

c. Birds d. Insects

427. The fleas do

a. Fly b. Never fly

c. May or may not fly

428. Which insect cut the root of the plant

a. Mole cricket b. Pyrilla

c. Ground Beetle d. Grylloblatta

429. What is the family of Mosquito

a. Cullicidae b. Pyralidae

c. Tineidae d. Bombicidae

430. Photogentic organs are present

a. Flies b. Fire files

c. Wasps d. Honey bee

431. Insect are

a. Cold blooded animals b. Warm blooded animals

c. None of above

432. In honey bees a flight for mating purpose is called

a. Nuptial flight b. Straight flight

c. Tactile flight d. None of above

433. Total or complete resistance against any adverse condition is called

a. Hmmunilog b. Tolerance

c. Resistance d. Plant resistance

434. Costal margin of wing of insect is

a. Frontal margin b. Outer margin

c. Hinder margin d. Inner margin

435. Apical margin of wing of insect is

a. Hinder margin b. Frontal margin

c. Outer margin d. Inner margin

436. Dragonfly and damselfly have type of legs

a. Frssotial
b. Metatorial

c. Raptorial
d. Basket like

437. Jumping legs present in grasshopper known as

a. Saltatorial
b. Raptorial

c. Cursorial
d. Natatorial

438. Function of Exo cuticle in insect is

a. Rigidity of body
b. Impermeability of water

c. Prevent evaporation
d. Toughness of flexibility

439. The insect skeleton is composed of series of plates called

a. Seclerites
b. Conjunctivae
c. Sutures
d. Somites

440. Fast acting pharomones are

a. Primers
b. Releasers
c. Semio chemicals
d. Allelochemicals

441. Social behaviour is present in

a. Termites
b. Ants bees
c. Butterflies
d. Termites, ant, Bees

442. What are productive insects

a. Silkworms, lac insects, honey bees
b. Parasites, predators, pollinators
c. Silkworm, Pollinators, predators
d. Lac insect, Honey bees, Pollinators

443. The Rapid Reappearance of the pest population in injurions number is called

a. IPM
b. IPC

c. Pest resurgence
d. Pest outbreak

444. Various methods of pest scouting are

a. Maryo‟s method
b. Diagonal method
c. Zig zag method
d. All of the above

445. Potential pest also called

a. Secondary pest
b. Major pest
c. Minor pest
d. Key pest

446. Aphis lions are predator of

a. Aphid
b. Jassid
c. Sugarcane borer
d. Pyrilla

447. Pheromone used against the fruitfly is

a. Dichlorvos
b. Malathion
c. Carbofuron
d. Mancoze

448. The concentration of toxicant that kills 50% of the exposed organism is called

a. LC_{50}
b. LD_{50}
c. LC_{25}
d. None of above

449. Toxin refers to a

a. Poison
b. Prisoner material
c. Both of them
d. None of above

450. A substance that is destructive to nerve tissue is called

a. Toxicant
b. Seuath
c. Aerosol
d. Toxin

451. A substance added to a pesticide to improve the qualities of pesticides formulation is called

a. Adjuvant
b. Synergist
c. Activator
d. Agitator

452. A chemical which inhibits clotting mechanisms of the blood are called

a. Chronic poison
b. Bait
c. Defoliate
d. Acute poisoning

453. What is antidote of anticongular rodenticide

a. Vitamin k
b. Atropine
c. Diazepam
d. Earbiturates

454. Diazepam is an antidote of

a. Organophosphate b. Carbamate

c. Organochlorines d. Pyrethorids

455. The pesticide does not allow larval insect pest to moult further is called

a. Insect growth regulator b. Fumigants

c. Sterilant d. Protectant

456. Antecedents prevent pest to cause damage is called

a. Sterilant b. Pretectant

c. Systemic d. Contact

457. For safe application of pesticide which things are required

a. Goggles, Respirator b. Overall, gloves

c. Head cores d. All of above

458. The ingredient of pesticide formulation responsible for toxic effect is called

a. Active ingredient b. Inert ingredient

c. Dose d. Pesticide

459. Mosquitoes, bed bugs are

a. Permanent parasite b. Intermittent parasite

c. Transitory parasite d. Obligate parasite

460. Insects that are parasite to other insects are called

a. Entamophagous parasite b. Zoophagous parasites

c. Phytaphagous parasite

461. The control of pest by human controlling activities and laws is called

a. Regularity method b. Chemical method

c. Genetic method d. Physical method

462. Cotton bollworms, sugarcane borers are

a. Major pest b. Key pest

c. Minor pest d. Secondary pest

463. All the practices used to control the pest population within certain limit are called

a. Artificial control b. Natural control

c. Cultural control d. Chemical control

464. The lowest pest population that will cause economic damage is called a. Economic injury level b. Economic threshold level

c. Economic damage d. None of above

465. The pest which damages the crop and causes a loss in quality or such pest is called

a. Insect pest b. Pest

c. Economic pest d. None of above

466. The largest insect of the world

a. Elephant beetle b. Hairy winged beetle

c. Grosshopper d. Cocas

467. Where the most insects are abundant

a. Tropical region b. Sub tropical

c. Temperate region d. None of above

468. Which sex of mosquite bite two human being

a. Male b. Female

c. Both of sex d. None of above

469. Fire flies are

a. Flies b. Beetles

c. Fleas d. Wasps

470. Commercial rearing of honey is called

a. Sericulture b. Apiculture

c. Flopriculture d. Lac culture

471. What is bee bread

a. Honey and wax b. Pollen and nectar

c. Honey and pollen

472. The colony of termites is called

a. Termitorium b. Cage

c. Hive d. Comb

473. The bees not reared for commercial purpose are called

a. Domestic bees b. Child bees

c. None of above

474. The show acting pheromones are called

a. Primers b. Releasers

c. Semio chemicals d. Allelo chemicals

475. Which enzyme breaks protein

a. Carbohydrates b. Lipases

c. Proteage d. Anylase

476. Cocomofian in response to touch

a. Chemokinensis b. Stereokinensis

c. Hydrokinensis d. Klinokinensis

477. The hearing organs in grasshopper is

a. Johnshon‟s organ b. Tympanal organs

c. Chrodotonal organ d. None of above

478. What organ of digestive system prevents the regurgitation

a. Crop b. Gizzard

c. Esophagous d. Pharynx

479. Which harmone cause moulting in insect

a. Ecdysone b. Juvenils

c. Activation hormone d. None of above

480. Metalegs of worker honeybee is

a. Antenna cleaner b. Silk secreting

c. Cursorial d. Pollen collecting

481. Grasshopper and Cockroach have type of wings is

a. Tegmina b. Hemelytra

c. Stripy d. Membranous

482. Compodeiform is type of

a. Larvae b. Pupae

c. Eggs d. Naiad

483. Housefly have mouth parts

a. Sponging type b. Siphoning type

c. Rasping type d. Piering sucking type

484. A few species of ants and termites which depend on cultivated plants are a. Agricultural insect b. Insect pest

c. Pest d. None of above

485. Suffering caused in insects due to lack of food is called

a. Aestivation b. Starvation

c. Dormancy d. None of above

486. Young ones of fly is

a. Imago b. Maggot

c. Grub d. Puparium

487. Resting stage in endopterygota is called

a. Larva b. Adult

c. Pupae d. Nymph

488. What is T.S.O.

a. Technical Sales Officer b. Technical Scientific Officer

c. Tehsil Sales Officer d. None of above

489. The living organisms that usually large, stronger and more intelligent then the parasite is called

a. Host b. Prey

c. Predator d. Parasite

490. Termites workers are

a. May be a non reproductive male or, non reproductive females

b. A non reproductive male c. A non reproductive female

d. None of above

491. Area of each Haemocytometer counting chamber is

a. 9 mm^2 b. 1mm^2

c. 6 mm^2 d. None

492. Which solution is used for blood cell counting

a. Wright stain b. Benedicts reagent

c. Toisson‟s solution d. All

493. Which are basophilic cells

a. Prohaemocytes b. Granular Hemocytes

c. Podocytes d. Oenocytes

494. The blood cells perform the function of coagulation are known as

a. Prohemocytes b. Cystocytes

c. Podocytes d. Oenocytes

495. Granular Hemocytes are produced from

a. Prohemocytes b. Cystocytes

c. Vermiform cell d. All

496. No. of blood cells in one mm^3 is more than

a. 1,20,000 b. 1,40,000

c. 1,30,000 d. 1,00,000

497. Phagocytosis in the body is done by

a. Granular hemocytes b. Cystocytes

c. Oenocytes d. All

498. The function of hemocytopoietic organs is

a. Destruction of blood cell b. Production of blood cell

c. Cleaning of blood d. All

499. Close packed fibres contains Nuclei in

a. Central column b. Periphery

c. Longitudinal rows d. At all places

500. The size of tubular muscle fibers is

a. 10-25 µm b. 10-100 µm

c. 100 µm-1 mm d. None

501. H. Huxley and A-F Huley gave the model of

a. Muscle contraction b. Bone movement

c. Muscle structure d. All

502. Aerodynamics deals with

a. Motion of liquid b. Motion of gases

c. Motion of wings d. All

503. Upward movement of wing is known as

a. Lift b. Thrust

c. Upstroke d. Downstroke

504. Wing Muscle frequency for Aedes spp. is

a. 1000 HZ b. 600 HZ

c. 100 HZ d. 50 HZ

505. The structure of ecdysone is similar to

a. Phenolic compound b. Cholesterol

c. Chlorpophyll d. Terpenes

506. The example of lipid related Hormone is

a. Allatotropin b. Diuretic Hormone

c. Juvenile Hormone d. All of above

507. Tyrosine is an example of non-essential

a. Lipid b. Aminoacid

c. Protein d. Hormone

508. Corpora cardiaca produce

a. Juvenile Hormone b. Ecdysone

c. Prothoracicotropic Hormone d. All of above

509. Shedding of old skin is done by

a. Eclosion hormone b. Ecdysone

c. Bursicon d. All

510. Bursicon perform the function of

a. Tanning b. Moulting

c. Maturity d. All

511. Corpora allata is a

a. Endocrine glands b. Neurohemal organs

c. Neurosecretory cells d. Internal organs

512. The concentration of Juvenile Hormone is high at

a. Egg stage b. Pupal stage

c. Adult stage d. All

513. Embryo having 3 layer during the development is known as

a. Gastrula b. Blastula

c. Germ band d. None

514. When embryo head end moves towards the posterior pole of egg, this movement is known as

a. Anatrepsis b. Katatrepsis

c. Posterior closure d. None

515. The eggs of Dermatobia (Diptera. are stimulated to hatch by

a. Deoxygenated water b. Warmth

c. Radiation d. None

516. Maceration is the process of

a. Clearing b. Grinding

c. Boiling d. None

517. The most important tanning agent is

a. Sclerotin b. Tyrosine

c. Phenole d. All

518. Proventriculus perform the function of

a. Digestion b. Secretion

c. Grinding d. Storing

519. Gizzard has four mobile lips with spines on them, for staining in

a. Fleas b. Beetles

c. Bees d. Whitefly

520. Goblet cells of Mid gut in Lepidoptera accumulate

a. Metal and dyes b. Enzymes

c. Food d. Vitamins

521. The pH of mid gut is

a. 8 b. 6

c. 10 d. 9

522. □-amylase act on

a. 1,4 □ glucosidic linkage b. 1,6 □ glucosid

c. 1,2 □ glucosidic linkage d. All of above

523. Higher termites digest the cellulose with the help of

a. Protozoa b. Bacteria

c. Fungus d. Cellulases

524. Hemicellulases can hydrolyze the

a. Cellulose b. Hexosan only

c. Pentosan d. b & c

525. Pepsin acts only in

a. Neutral medium b. Basic medium

c. Acidic medium d. All

526. The excretory function of Malpighian tubules is observed by a. Marcello Malpighi (1669) b. Herold (1816)

c. Meckel (1820) d. All

527. The excretory product which is less toxic and insoluble called

a. Ammonia b. Urea

c. Uric acid d. b & c

528. H:N. Ratio in uric acid is

a. 1:1 b. 2:1

c. 3:1 d. None

529. In mosquitoes, the anal lobe can absorb

a. Food b. Salts

c. Heat d. All

530. Muscles which are responsible for heart beat in insects are

a. Pulsating muscles b. Alary muscles

c. Dorso-ventral muscles d. None

531. In insects, oxygen is delivered by

a. Red blood cells b. White blood cells

c. Tracheal system d. All

532. Pliasma of blood contains

a. 60% H_2O b. 80% H_2O

c. 90% H_2O d. 95% H_2O

533. The neuron that conduct signals away from the central nervous system is known as

a. Afferent neurons b. Efferent neurons

c. Internuncial neuron

534. Antennal sensilla is an example

a. Machanoreceptors b. Chemoreceptors

c. Photoreceptors

535. Repeatedly firing on Mechanoreceptor as long as stimulus persists known as

a. Phasic response b. Quick response

c. Tonic response d. All

536. Pressure receptors give information about depth/height to

a. Terrestrial insects b. Subterramean insect

c. Aquatic insects d. All

537. Tympanal organs are present on the front tibia in

a. Cicadas b. Crickets

c. Moths d. Grasshoppers

538. Chemical substances in gaseous form are detected in insect by a. Gustatory receptors b. Olfactory receptors

c. Stretch receptors d. All

539. The type of birth in which insect directly lays young one known as

a. Oviparity b. Viviparity

c. Parthenogenesis d. None

540. Pupae having appendages free and visible externally is present in

a. Butterflies b. Beetles

c. Flies d. Moths

541. Study of adverse effects of chemical on living organisms

a. Drug science b. Toxicology

c. Physiology d. None

542. Any agent that is capable of producing a deleterious response in biological systems producing death.

a. Poison b. Drug

c. Biochemical agent

543. Toxicity of chemical depends on

a. Time b. Concentration

c. Route of administration d. All

544. When the action of one chemical reduce the other chemical known as

a. Antogonism b. Synergism

c. Potentiation d. Additive effect

545. Effects produced by the ingestion of caustic substances or of irritant material

a. Local toxicity b. Systemic toxicity

c. Immediate toxicity d. Delayed toxicity

546. The time required to kill 50% test animal is

a. LD_{50} b. LT_{50}

c. LC_{50} d. a & b

547. Margin of safety

a. LD_1/ED_{99} b. LD_{99}/ED_1

c. LD_{50}/ED_{50} d. None

548. Toxicity of insecticide by administration of single lethal dose for a short period of time is

a. Acute b. Chronic

c. Sub chronic

549. Acaricides are used to kill

a. Algae b. Fungi

c. Mites d. None

550. Chemical used to kill birds

a. Onicides b. Predicides

c. Avicides d. Silricides

551. Chemical used to kill fish

a. Piscicide b. Predicides

c. Siluicides d. Avicides

552. Chemical used to destroy or inactive harmful micro-organisms

a. Desiccant b. Disinfectant

c. Defsliants d. None

553. Poisons cause unconsciousness in insects and are fat soluble

a. Narcotic poisons b. Nerve poisons

c. Physical poison d. Miscellaneous

554. Poisons inhibits the acetylcholinerase resulting build up of Acetylcholine

a. Axonic poison b. Synaptic poison

c. Nerve poison d. Muscle poisons

555. Insecticide which block the insect spiracles are

a. Muscle poison b. Physical poisons

c. Narcotic d. None

556. Sodium arsenate is a

a. Inorganic b. Organic

c. Element d. None

557. Nereistoxin is a compound having origin

a. Plant b. Animal

c. Natural organic d. None

558. Rotenone is a compound having origin

a. Plant b. Animal

c. Natural organic d. None

559. Strobane belong to group

a. Organo chlorine b. Organophosphate

c. Carbamate d. None

560. Acetphate belong to group

a. Organochlorine b. Organophosphate

c. Carbamate d. None

561. Aldicarb belong to group

a. Organochlorine b. Organophosphate

c. Carbamate d. None

562. Diafenthuron belongs to group

a. Organochlorine b. Thiourea

c. Pyrethriods d. Carbamate

563. Imidacloprid is a

a. Fumigante b. Nicotinyl insecticides

c. Ropellent d. None

564. Methyl bromide is a

a. Fumigant b. Repellent

c. Attractant d. None

565. Fenvalerate belongs to family

a. Pyrethroid b. Carbamate

c. Thiourea d. None

566. Dicofol is a

a. Insecticide b. Acaricides

c. Rotentiicda d. Fungicides

567. Benzyl benzoate repel the

a. Flies b. mosquitoes

c. Mites d. All

568. Carbamates have same mode of action as

a. Organochlorine b. Organophosphate

c. Pyrethroids d. None

569. Reduction is a phase metabolism

a. I b. II

c. I & II d. None

570. Carboxylesterares is metabolism of class

a. I b. II

c. I & II d. None

571. Extent of toxicity depends on

a. Time of exposure b. Concentration

c. Route of administration d. All

572. Toxin is produced by

a. Living organisms b. Only plants

c. Only microbes d. Only animals

573. Toxin produced by microbes

a. Endotoxin b. Mycotoxin

c. Aphlatoxin d. Phytotoxin

574. Toxin is injected by sting/bite is

a. Zootoxin b. Venom

c. Bacterial toxin d. None

575. Branch of toxicology that is hybrid of analytic chemistry and fundamental toxicological principles

a. Chemical toxicology b. Forensic toxicology

c. Environmental toxicology d. None

576. Ethyl alcohol have LD_{50} value (mg/kg)

a. 1 b. 5

c. 1,000 d. 10,000

577. The chemical is more toxic if LD_{50} is

a. Low b. High

c. Moderate d. None

578. Nephrotoxic is chemical toxic to

a. Liver b. Kidney

c. Blood d. Eyes

579. Ototoxic is chemical toxic to

a. Liver b. Ear

c. Eyes d. Kidney

580.Exposure of chemical refers to repeated exposure to chemical for 1 month or less is

a. Sub-chronic b. Sub acute

c. Chronic d. Acute

581. The compounds with ability to cause birth deformities

a. Carcinogenic b. Mutagenic

c. Teratogenic

582. Have more half life

a. Pyrethroids b. Carbamates

c. Organophosphate d. Organochlorine

583. When two chemical control balance each other by producing opposite effect on the same physiological function is

a. Chemical antagonism b. Inactivation

c. Functional antagonism d. None

584. Which formulation has less active ingredient quantity

a. EC b. Sc

c. Dusts d. wP

585. Methyl Eugenol is

a. Attractant b. Repellent

c. Insecticide d. Sex pheromone

586. Chemical used in the treatment in moth and timber proofing against a. Impreganting material b. Poisons bait

c. Slow released insecticide d. None

587. The minimal effective dose of any chemical that evopres a stated all or none response is called

a. TD b. ED

c. LD d. None

588. Ability to give maximum response of a chemical is

a. Potency b. Efficacy

c. Concentration d. Effective dose

589. Highly extracted chemical have clearance between

a. 0.7-1 b. 0.5-0.7

c. 0.1-0.5 d. Zero

590. Kairomone have utility for

a. Emitter b. Receiver

c. Both d. None

591. The study of insects is called

a. Entomology b. Anthropology

c. Zoology d. Pathology

e. Parasitology

592. Any organism which harms or causes damage to man directly or indirectly is called

a. Pest b. Insect

c. Insect Pest d. Agriculture Pest

e. None of above

593. Insects belong to the class

a. Insecta b. Pauropoda

c. Symplyla d. Crustacea

e. Octapoda

594. The practice of dining one's own species

a. Cannabolism b. parasitism

c. Diapause d. Aestivation

e. Mortality

595. Insects in which young ones pass through complex or complete metamorphosis are said to be:

a. Holometabola b. Ametabola

c. Hemimetabola d. Hyper metamorphosis

e. None of the above

596. The young ones of holometabolus insects are called

a. Larvae b. Nymph

c. Naiad d. Maggots

e. All above

597. Insects which develop their wings externally belong to the class

a. Exopterygota b. Endopterygota

c. Apterygota d. None of them

e. All above

598. The resting stage of Endopterygot insects is

a. Pupa b. Larva

c. Adult d. Nymph

e. Naiad

599. The young ones of hemimetabola those are terrestrial in habitat are

a. Nymphs b. Naiads

c. Larvae d. Pupae

e. Adult

600. Larvae of beetles are known as

a. Grubs b. Maggots

c. Imago d. Instars

e. None of the above

601. Young ones of fly are

a. Maggots b. Grubs

c. Imago d. All above

602. The form of insect after complete metamorphosis

a. Imago b. Puparium

c. Stadium d. Pupa e. Wriggler

603. The type of diapause which occur in winter

a. Hibernation b. Aestivation

c. Dormancy d. Starvation

e. Quiescence

604. Suffering caused in insect due to lack of food

a. Starvation b. Aestivation

c. Dormancy d. Diapause

e. Hibernation

605. Insects that feed on one type of food

a. Monophagous b. Oligophagous

c. Omnivorous d. Phytophagous

606. Insects which feed other insects are to be known as

a. Entomophagous b. Cannibalism

c. Parasitism d. Predatism

607. Aphids is an example of

a. Viviparous b. Oviparous

c. Parthenogenesis d. All above

608. Insects that active at might are

a. Nocturnal b. Diurnal

c. Crepuscular d. None of them

e. All above

609. Insects which are active during morning or evening twilight

a. Crepuscular b. Diurnal

c. Nocturnal d. Predator

e. Scavenger

610. In insect ganglion is a part of

a. Nervous system b. Respiratory System

c. Reproductive System d. Muscular system

611. Insects that found everywhere are

a. Cosmopolitan insects b. Household insects

c. Stored grain insects d. None of above

612. Male, female mosquitoes have antennae

a. Plumose, Pilose b. Aristase, Plumose

c. Pectinate, Plumose d. Pectinate pilose

613. House flies antennae are

a. Aristate b. Stylate

c. Ensiform d. Capitate

e. Geniculate

614. The dorsal sclerotized region of insect body is

a. Tergum b. Pleuron

c. Sternum d. None of above

e. All above

615. The lateral sclerotized portion is

a. Pleuron b. Tergum

c. Sternum d. All above

616. The main body region of insects are

a. Tagmosis b. Antecosta

c. Acrotergite d. Symphyta

617. Grasshopper and cricket have mouth parts

a. Biting chewing type b. Piercing sucking

c. Chewing lapping d. Biting and sponging

e. None of above

618. Costal margin of wing of insect is

a. Frontal margin b. Anal margin

c. Outer margin d. Inner margin

619. Campodeiform is type of

a. Larva b. Egg

c. Naiad d. Nymph

620. Type of pupae with appendages are free and not glued to the body is

a. Exarate b. Obtect

c. Coarctate d. Vermiform

621. Hind wings of true flies are modified into tiny knobbed structure

a. Halteres b. Pseudohaltere

c. Filohaltere d. Membranous

622. Beetles & weevils have fore wing very thick and hard

a. Elytra b. Hemelytra

c. Strippy d. Filohaltere

623. Dragonfly and damselfly have type of legs

a. Basket forming b. Fossorial

c. Cursorial d. Netatorial

e. Silk secreting

624. Tentorium is

a. Endoskeleton of head b. Exoskeleton of head

c. All above d. None of above

625.Function of exo-cuticle is

a. Rigidity of body parts b. Impermeability of water

c. Prevention d. Toughness

626. Insect body divided into external grooves called as

a. Suture b. Sclerite

c. Somites d. Acron

627. Which hormone cause moulting

a. Ecdysome b. Ecdysis

c. Exuvium d. Moulting

628. What enzymes break protein

a. Protease b. CH_2O

c. Lipases d. Amylase

629. Type of reproduction in which young ones produced from unfertilized eggs

a. Parthenogenesis b. Viviparity

c. Polyembryony d. Oviparity

630. The hearing organ in grasshopper is

a. Tympanal organ b. Johastan organ

c. Chorodontonal organ d. All of above

631. Locomotion in response to odour

a. Stereokinesis b. Chemokinesis

c. Taxis d. Kinesis

632. Fast acting pheromones

a. Releasers b. Primers

c. Somio chemical d. Allelo chemical

633. Social behaviour is present in

a. Termites
b. Butterflies
c. Moths
d. Flies

634. The ability of plant by which it is less damaged by insect

a. Tolerance
b. Avoidance
c. Immunity
d. Resistance

635. Complete resistance against adverse conditions is

a. Immunity
b. Resistance
c. Tolerance
d. Avoidance

636. The identical food of queen is

a. Royal jelly
b Water
c. Honey
d. Nectar

637. Lac is produced by insect

a. *Laccifer lacca*
b. *Bombyx mori*
c. *Apis cerana*
d. *Apis dorsata*

638. Commercial rearing of honey is

a. Apiculture
b. Sericulture
c. Lac culture
d. All above

639. Silk is produced by insect

a. *Bombyx mori*
b. Gryllus sp.
c. *Apis cerana*
d. *Apis mellifera*

640. Fire flies are

a. Beetles
b. Flies
c. Fleas
d. Wasps

641. The largest insect of the world is

a. Elephant beetle
b. Winged beetle
c. Locust
d. Grasshopper

642. Where the insects are abundant

a. Tropical region
b. Sub-tropical region
c. Temperate region
d. None of the above

643. Which insect cut the root of the plant

a. Mole Cricket
b. Ground beetle
c. Pyrilla
d. Grylloblatid

644. The rapid reappearance of the pest population in injurious number is

a. Pest resurgence
b. Pest outbreak
c. Pest resistance
d. IPM

645. The amount of pest induced injury level to the crop which will justify the cost of artificial control measure

a. Economic damage
b. Economic threshold
c. Economic injury level
d. None of the above

646. Proventriculus is a part of

a. Digestive system
b. Reproductive System
c. Respiratory System
d. Nervous System

647. The family of desert locust is

a. Acrididae
b. Gryllidae
c. Tetrigidae
d. Gryllotelpidae

648. Curclionidae is the family of

a. Weevils
b. Beetles
c. Flies
d. Borers

649. Subimaginal moulting occure in

a. Mayflies
b. Stoneflies
c. Fireflies
d. Scorpionflies

650. Secondary Male genitalia present in

a. Odonata
b. Plecoptera
c. Blatteria
d. Mentodia

651. Anal fold in the wing developed for the first time in

a. Plecoptera
b. Orthoptera
c. Lepidoptera
d. Hemiptera

652. Tegmina presents in

a. Orthoptera
b. Diptera
c. Homoptera
d. Collembola

653. Telson tail present in

a. Protura
b. Diplura

c. Thysanura d. Strepsiptra

654. Six segmented abdomen present in

a. Collembola b. Diplura
c. Dictyoptera d. Coleoptera

655. Mouth parts Asymmetrical in

a. Thysanoptera b. Neuroptera
c. Mecoptera d. Hymenoptera

656. Division of labor present in

a. Honeybees b. Flies
c. Cockroaches d. Lice

657. Sexual dimorphism occur in

a. Mango mealybug b. Grasshopper
c. Human louse d. Cricket

658. When the immature ones capable to produce young ones called

a. Paedogensis b. Parthenogensis
c. Anamorphism d. Oviparity

659. When all spiracles are functional in insect respiration called

a. Holopneustic b. Apneustic
c. Oligopneistic d. Amphipneustic

660. Nodus and pterostigma present in the wing of

a. Odonates b. Fire brates
c. Ants d. Stylopids

661. All members are parasitic in nature in the insect order

a. Strepsiptera b. Hymenoptera
c. Lepidoptera d. Coleoptera

662. Jugum in insect is a part of

a. Wing b. Leg
c. Antenna d. Abdomen

663. Hamuli on the wing present in

a. Hymenopterous insects
b. Lepidopterous insects
c. Dipterous insects
d. Mecopterous insects

664. Egg laying capability in insect is known as

a. Fecundity
b. Reproductive potential
c. Biological potential
d. Natality

665. Utilization of all the resources in the present area by an insect species community called

a. Niche
b. Habitat
c. Agro-eco-system
d. Ecological race

666. A living place of an insect population is known as

a. Habitat
b. Environment
c. Ecology
d. Niche

667. Branching of food chain into various directions

a. Food web
b. Food links
c. Trophic association
d. Energy pyramid

668. Halteres present in the insect order

a. Diptera
b. Embioptera
c. Hemiptera
d. Mallophaga

669. Cerci asymmetrical in

a. Web spinner
b. Ear wig
c. Grouse locust
d. Thrips

6670. Binomial nomenclature introduced by

a. Linnaeus
b. Fabricious
c. Uvarov
d. Kirby

271. Ontogeny repeats phylogeny deals to

a. Biogenetic Law
b. Darwin law
c. Law of priority
d. Law of segregation

672. Systema Naturae is a publication of

a. Linnaeus b. Darwin

c. Aristotle d. Lamarck

673. Flacheri is a disease of

a. Silkworm b. Honeybees

c. Grasshoppers d. Beetles

674. American foul brood is a disease of

a. Honeybees b. Lac insects

c. Bombyx mori *d. Embia spp*

675. On the land mounds are formed by

a. Termite b. Ants

c. Psocids d. Wasps

676. Antennae are absent in

a. Telson tail insects b. Spring tail insects

c. Double tail insects d. None of above

678. Raptorial type of legs are found in

a. Praying mantis b. Dragonflies

c. Crickets d. Flies

678. Dead hearts in sugarcane is caused by

a. Borers b. Pyrilla

c. Black Bug d. Mole cricket

679. Bunchy top in sugarcane is found due to

a. Top borers b. Stem borers

c. Root borers d. Gurdaspur borer

680. Roset flowers in cotton are found due to

a. Ptnk bollworm b. Spotted bollworm

c. American bollworm d. Army worm

681. Parasite of maize borere is

a. Epipyrops *b. Apenteles*
c. Cotesia *d. Trichogramma*

682. Aphid lion is called

a. Chrysopa *b.* Ladybird beetle
c. Assassin bug d. Pirate bug

683. Cornicles are presents in

a. Aphids b. Whiteflies
c. Jassids d. Scale insects

684. Acaricides are the chemicals used to kill

a. Mites b. Insects
c. Scorpion d. Mice

685. Myiasis is a disease caused by

a. Flies b. Mites
c. Ticks d. Caterpillar

686. Scabies is the problem caused by

a. Mites b. Ticks
c. Flies d. Maggots

687. Leishmaniasis is disease caused by

a. Sand flies b. Stoneflies
c. House flies d. Horse flies

688. Sleeping sickness is caused by

a. Tsetse flies b. Black flies
c. Flash flies d. Face flies

689. Dengue fever is transmitted by

a. Mosquito b. Flies
c. Caterpillar d. Ants

690. Epidemic Typhus is transmitted by

a. Human Louse b. Chicken louse
c. Mite d. Tick

691. *Trogoderma granarium* (Everts) belongs to family----------

a. Dermestidae b. Bostrichidae

c. Curculionidae d. Gelichidae

692. ---------- normally attacks on upper layer of stored wheat.

a. Khapra beetle b. *Tribolium castaneum*

c. Lesser grain borer d. Rice Weevil

693. Damage is only caused by only grub stage of the ----------

a. Red flour beetle b. Khapra beetle

c. Saw toothed beetle d. Dhora beetle

694. *Sitophilus oryzae* belongs to family ----------

a. Gelichidae b. Curculionidae

c. Tenebrionidae d. None of all

695. Reddish hair are present on the body of the larvae of ----------

a. *Rhyzopertha dominica* b. *Tribolium castaneum*
c. *Sitotroga cerealella* d. *Trogoderma granarium*

696. ---------- is shown by the Khapra beetle

a. Phototropism b. Geotropism

c. Thigmotropism d. None of all

697. Benzequinone is secreted by the dermal glands of ----------

a. *Rhyzopertha dominica* b. *Tribolium castaneum*
c. *Sitotroga cerealella* d. *Trogoderma granarium*

698. Prothorax of *Oryzophilus surinamensis* L. has----------toothed like projection along each side

a. 9 b. 5

c. 6 d. 3

699. *Oryzophilus surinamensis* L. overwinter as ----------

a. Adult b. Larvae

c. Pupa d. Egg

700. Pectinate antennae are present in adult of ----------

a. Khapra beetle b. Red flour beetle

c. Dhora beetle d. Lesser grain borer

701. *Sitotroga cerealella* is commonly known as Angoumois Grain moth as it was first described from the ----------Province Angoumois in 1736.

a. French b. German

c. Brazilian d. Dutch

702. *Corcyra cephalonica* is a serious pest of stored ----------

a. Wheat b. Rice

c. Gram d. Oat

703. Optimum temperature require for the best growth of stored insect pests is ----------

a. 36-40 °C b. 28-32 °C

c. 20-25 °C d. 16-20 °C

704. Before storage, moisture contents of the commodity should be----------

a. 15-20% b. 20%

c. 10% d. 14%

705. ---------- attack the whole grains both before and after harvest.

a. Secondary Pests b. Primary Pest

c. Tertiary Pest d. None of All

706. ----------attack the damaged or broken grain or flour

a. Secondary Pests b. Primary Pest

c. Tertiary Pest d. None of All

707. ---------- is a period in the life cycle when metabolism is reduced to a minimum due to unfavorable conditions.

a. Diapause b. Thigmotropism

c. Resistance d. Metamorphosis

708. At ---------- moisture contents the rates of development of stored grain insect populations are slow

a. High b. Optimum

c. Low d. All of them

709. Family of Indian meal moth is ----------

a. Pyralidae b. Gelichidae

c. Dermestidae d. None of all

710. Pygidium is not covered by the elytra of ----------

a. Kharpa b. Red flour beetle

c. Dhora d. None of all

711. Eggs of ----------are used for the rearing of various biological control agents

a. Indian meal moth b. Dhora

c. Angoumois grain moth d. Rice Moth

712. ----------diapause is only expressed when conditions are unfavorable.

a. Obligate b. Facultative

c. Temporary d. None of all

713. Unavoidable diapause is ----------

a. Facultative b. Obligate

c. Temporary d. All of them

714. If there is more moisture contents in the stored commodity, ----------will grow on it

a. Fungi b. Nematodes

c. Algae d. Bacteria

715. Adult of ----------have well developed rostrum

a. *Callosbruchus chinensis* b. *Tribolium castaneum*

c. *Sitophilus oryzae* d. *Trogoderma granarium*

716. Maximum of stored grain insect pests belong to order----------

a. Homoptera b. Coleoptera

c. Diptera d. Lepidoptera

717. Irregular wholes present in the damaged grains is the identification mark of the damage of ----------

a. Khapra beetle b. Lesser grain borer

c. Rice weevil d. Angoumois grain moth

718. ----------gas is produced from agtoxin® tablets

a. Ethylene b. Methane

c. Phosphine d. None of all

719. Deltamethrin is a ----------

a. Grain fumigant b. Grain Protectant

c. Repellent d. All of them

720. Recommended dose of deltamethrin to be applied in a storage structure is a. 50 L per 100 L of water b. 1 L per 100 L of water

c. 5 L per 50 L of water d. 10 L. per 100 L of water

721. Recommended dose of Aluminum phosphide to be applied per tone is

a. 10 tablets b. 2-3 tablets

c. 5 tablets e. 20 tablets

722. Bostrichidae is the family of

a. Lesser grain borer b. Red flour beetle

c. Rice Weevil d. Angoumois grain moth

723. *Azadirachtin* is found in

a. Motia b. Citrus

c. Neem d. Sweet flag

724. Botanical name of Sweet Flag is

a. *Acorus calamus* b. *Azadirachta indica*

c. *Mangefera indica* d. None of all

725. A secondary pest is a

a. Khapra beetle b. Red Flour Beetle

c. Rice Weevil d. Lesser Grain Weevil

726. The outer most layer of pericarp or fruit coat is ----------

a. Endodermis b. Epidermis

c. Mesodermis d. None of all

727. Method of Expressing moisture in grain:

a. Wet Weight basis b. Dry weight basis

c. Both a and b d. None of all

728. A high polymer with non-identical repeating units of amino acids:

a. Carbohydrates b. Proteins

c. Lipids d. Vitamins

729. A curve describing the equilibrium relationship of sorbed water and vapor pressure (or relative humidity) at a given temperature is

a. Isotherm b. Parabola

c. Both a. and b. d. None of All

730. The power of insects to reproduce is

a. Diapause b. Fecundity

c. Natality d. None of all

731. In insects, the organ involved in fertilization to receive & store the sperms after copulation

a. Accessory gland b. Spermatheca

c. Oviduct d. Pedicel

732. Formula of Phosphine is

a. PH_4 b. PH_3

c. PH_2 d. None of all

733. Concentration of phosphine to be maintained in a storage structure:

a. 600 ppm b. 800 ppm

c. 100 ppm d. 200 ppm

734. Plant characteristics that lead insects away from a particular host:

a. Preference b. Non preference

c. Antibiotics d. None of all

735. Antixenosis is a ----------word means against or expelling guest

a. Greek b. Japanese

c. Italian d. French

736. Semiochemicals which promote communication between members of the same species:

a. Allelochemicals b. Kairomones

c. Pheromones d. None of all

737. Defensive chemicals producing negative responses in insects are

a. Pheromones b. Allomones

c. Kairomones d. Allelochemicals

738. ----------are advantageous to an insect, promoting host finding, oviposition and feeding

a. Pheromones b. Allomones

c. Allelochemicals d. Kairomones

739. Type of non preference present in spotted cucumber beetle is

a. Allelochemical nonpreference b. Morphological nonpreference

c. Both a. and b. d. None of all

740. Factors involved in antibiosis are related to:

a. Plants b. Insects

c. Both plants and insects d. All of them

741. DIMBOA, a cyclic hydroxamic acid is an allelochemic associated with antibiosis is found in

a. Cotton b. Wheat

c. Corn d. Sugarcane

742. Gossypols are present in

a. Wheat b. Cotton

c. Maize d. None of all

743. Larry P. Pedigo is author of famous book

a. Introductory Entomology b. Applied Entomology

c. Entomology and Pest Management d. None of All

744. Lack of insect infestation, or injury to the host plant because of transitory circumstances such as incomplete infestation is referred as

a. Host Evasion b. Escape

c. Induced Resistance d. None of all

745. Under some circumstances a host may pass through the most susceptible stage

quickly or at a time when insect numbers are reduced. Such type of psuedoresistance is known as:

a. Escape b. Host Evasion

c. Susceptibility d. All of them

746. The term used for temporary increased resistance resulting from some condition of plant or environment is known as:

a. Induced Resistance b. Escape

c. Host evasion d. None of all

747. A variety which a specific insect never consume or injure under any known condition is a ----------variety

a. Resistant b. Immune

c. Susceptible d. Highly resistant

748. Level of resistance which cause a variety to show less damage or infestation by an insect than the average for the crop under consideration is:

a. High Level of resistance
b. Low level of resistance
c. Moderate Resistance
d. None of all

749. A variety which shows average or more than average damage by an insect is a ----------variety.

a. Immune
b. Susceptible
c. Resistant
d. None of all

750. The relative amount of heritable qualities possessed by the plant which influence the ultimate degree of damage done by the insect is known as

a. Immunity
b. Resistance
c. Susceptibility
d. None of All

751. ----------is a basis of resistance in which the plant shows an ability to grow and reproduce itself or to repair injury to a marked degree in spite of supporting a population approximately equal to that damaging a susceptible host.

a. Tolerance
b. Preference
c. Nonpreference
d. Resistance

752. Death of young immatures, reduced growth rate, shortened adult life span etc. are the symptoms of insect affected by ----------

a. Antibiosis
b. Tolerance
c. Non preference
d. All of them

753. Phenolic compounds produced by plants when they become diseased or are attacked by insects:

a. Phytoalexins
b. Semiochemicals
c. Allomones
d. Kairomones

754. The resistance which depends on environmental conditions is

a. Host Evasion
b. Enviromental resistance

c. Morphological resistance d. None of all

755. Different populations of an insect specie that vary in their virulence to a cultivar are referred to as:

a. Pathotype b. Biotype

c. Paratype d. All of them

756. A gene which allows a pest species to overcome resistance and once more attack a plant is

a. Virulent gene b. Resistant gene

c. Susceptible gene d. All of them

757. ---------- recognize two types of resistance vertical and horizontal resistance.

a. J.E. Van der Plank b. Pedigo

c. Atwal d. None of all

758. The type of resistance which describes cultivars that express resistance against a broad range of genotypes of insects is

a. Vertical resistance b. Horizontal resistance

c. Morphological resistance d. None of all

759. The type of resistance which describes cultivars that express resistance against a one or a few genotypes of insects is

a. Vertical resistance b. Horizontal resistance

c. Morphological resistance d. None of all

760. Oligogenic resistance is also called ----------

a. Major gene resistance b. Minor gene resistance

c. Both (a and b) d. None of all

761. The resistance which is conferred by one or only a few gene is a. Polygenic resistance b. Oligogenic resistance

c. Both (a and b) d. None of all

762. Polygenic resistance is also called----------

a. Major gene resistance b. Minor gene resistance

c. Both (a and b) d. None of all

763. The resistance which is conferred by many genes, each contributing to the resistance effect is

a. Polygenic resistance b. Oligogenic resistance

c. Both (a and b) d. None of all

764. Resistance which is conferred by mutable substances in cell cytoplasm is

a. Oligogenic resistance b. Polygenic

c. Cytoplasmic resistance d. All of them

765. Cytoplasmic inheritance is due to the cytoplasm of the zygote comes from the ------

a. Sperms b. Ovum

c. Both (a and b) c. None of All

766. Any technique that utilizes living organisms, or substances from those organisms to make or modify a product to improve plants or animals or to develop microorganisms for specific uses is known as

a. Biotechnology b. Molecular technology

c. Both a and b d. None of all

767. The dose of a toxicant that will kill 50 percent of the test to whish it is administered

a. LC_{50} b. LD_{50}

c. LT_{50} d. None of All

768. Economic threshold level of insect pest in IPM of stored grains is

a. 5 b. 0

c. 4 d. All of them

769. *Callosobruchus chinensis* L. is the zoological name of :

a. Gram Dhora b. Moong Dhora

c. Saw toothe beetle d. None of all

770. *Oryzophilus surinamensis* L. belongs to family:

a. Bruchidae b. Silvanidae

c. Curculionidae d. Tenebrionidae

771. Rodents damage to stored food is of

a. Three fold b. Five fold

c. Seven fold c. Two fold

772. Life span of rodents is

a. 4-5 years b. 1-2 years

c. 6-7 years d. None of all

773. Breeding season in rodents is ----------

a. Jan-April b. May- August

c. Through out the year d. Septemer-December

774. Warfarin is an

a. Anticoagulant b. Acute Poison

c. Chronic poison d. None of all

775. *Rattus meltada* is

a. Soft furred field rat b. Indian Gerbil

c. House rat d. Norway Rat

776. *Lepisma sacharina* is the zoological name of

a. Silverfish b. Firebrat

c. House cricket d. None of all

777. Adult of silverfish has ----------caudal filaments.

a. 5 b. 7

c. 3 d. 4

778. ----------feeds on glue and starchy materials with its chewing mouthparts.

a. Cockroach b. Mosquito

c. crickets d. Silverfish

779. House cricket belong to family-----

a. Grylidae b. Lepismatidae

c. Blattidae d. None of all

780. American cockroach is known as--------

a. *Periplanata Americana* b. *Acheta domestica*

c. *Lepisma sacharina* *d. None of all*

781. Soldier caste is present in

a. Honey bee b. Termites

c. House fly d. None of all

782. *Psocus lineatus* is

a. Bird louse b. Book louse

c. Mammal louse d. None of all

783. Liposcelidae is the family of ---
---

a. Bird louse b. Book louse

c. Mammal louse d. None of all

784. There are ----------nymphal instars

a. 2 b. 7

c. 5 d. 3

785. Carpet beetle belongs to family:

a. Dermestidae b. Cimicidae

c. Pediculidae d. None of all

786. *Lyctus africanus* is the zoological name of

a. Carpet beetle b. Powder Post Beetle

c. Bed Bug d. Human Louse

787. Human flea belongs to order

a. Siphonaptera b. Coleoptera

c. Diptera d. None of all

788. *Aspergillus flavipus* produces ----------

a. Sterigmatocystin b. Aflatoxin

c. Ochratoxin d. None of all

789. A type of apparent host plant resistance in which a particular plant condition or environmental state makes a plant more resistant to pests thatn under other circumstances.

a. Induced resistance b. True resistance

c. Susceptibility d. None of all

790. Asexual life cycle of plasmodium is called

a. Schizogony b. Sporogony

c. Both a and b d. None of all

791. Erythrocytic cycle of plasmodium occurs inside the

a. White Blood Cell b. Red Blood Cell

c. Platelets d. None of all

792. *Musca domestica*'s larvae are known as

a. Grubs b. Maggots

c. Caterpillars d. All of them

793. *Tinea pellionella* is commonly known as

a. Cloth Moth b. Carpet Moth

c. House fly d. Bed Bug

794. Ants belong to family:

a. Formicidae b. Dermestidae

c. Antidae d. None of all

795. Sperms enters the egg through an opening in the egg covering called as

a. Micropyle b. Hypocotile

c. Endoderm d. None of all

796. Three layered embryo is called---------

a. Blastula b. Gastrula

c. Morula d. All of them

797. In parasitic Hymenoptera, more than one embryo are formed through asexual division. The process is know as

a. Polyendry b. Polyembryony

c. Polyploidy d. None of them

798. The act of the larvae leaving the egg is called----------

a. Eclosion b. Enclosion

c. Ecdyson d. None of all

799. Juvinle Hormone is produced by glands accessory to brain known as

a. Corpora cardiaca b. Corpora allata

b. Prothoracic gland d. None of all

800. The ----------cycle refers to a single generation each year

a. Univoltine b. only voltine

c. Monovoltine d. None of all

801. The orientation of head where the mouthparts are in a continuous series with legs

a. Prognathous b. Hypognathous

c. Opisthognathous d. None of above

802. The orientation of head where the mouthparts are projected forward along the horizontal axis of body

a. Prognathous b. Hypognathous

c. Opisthognathous d. Opisthosynchous

803. The orientation of head where the mouthparts are projected backward

a. Prognathous b. Opisthosynchous

c. Hypognathous d. None of above

804. Groove making the line of fusion b/w distinct plates of the head capsule

a. Sulcus b. Suture

c. Furca d. Ostia

805. A ridge giving strength against the strain imposed on the head capsule

a. Sulcus b. Furca

c. Suture d. None of above

806. Internal skelton of head for the attachment of Muscle

a. Tentorial pits b. Furca

c. Epiproct d. Suture

807. The roots of the tentorial arms which appear as depressions

a. Tentorium b. Tentorium pits

c. Funca d. Suture

808. Just after harvesting the silkworm cocoon having living pupa

a. Blue cocoon b. White cocoon

c. Green cocoon d. Yellow cocoon

809. The phenomenon where the pest is repeatedly parasitised by the same species of parasite

a. Super parasitism b. Hyper parasitism

c. Multi parasitism d. None of above

810. The phenomenon where a pest is parasitized by another parasite

a. Hyper parasitism b. Multi parasitism

c. Super parasitism d. None of above

811. Leaving the pest below the Economic threshold level for survival of natural enemies during insecticidal application

a. Terminal residue b. Residue

c. Pest residue d. None of above

812. The density of pest at which control measure should be applied to prevent it form reaching the Economic injury level

a. Economic threshold level b. General equilibrium level

c. Toxicity level d. None of above

813. The average population density of an insect population over a long period of time.

a. Toxicity level b. Economic threshold level

c. Economic injury level d. None of above

814. The Muscle which are directly associated with the wing but more the wings as a result of distortion which they produce in the shape of thorax

a. Direct Muscle b. Control Muscle

c. Depress Muscles d. Indirect Muscle

a.

c. d.

815. The 11th abdominal segment is often represented by a dorsal triangular or shield shaped Fergal plate

a. Epiproct b. Apolysis

c. Suture d. Sulcus

816. The outerlayer of insect body comprising epidermis and cutie

a. Ecdysis b. Integument

c. Apolysis d. Hydrolysis

817. Separation of old cuticle from underlying epidermis

a. Hydrolysis b. Ecdysis

c. Apolysis d. None of above

818. The shedding of remnants of the old cuticle

a. Endocytosis b. Apolysis

c. Diastasis d. Ecdysis

819. Endosulfan Insecticide belongs to the group

a. Phenolic b. Organophosphate

c. Carbamate d. Chlorinated hydrocarbons

820. Aldicarb belongs to the group.

a. Phenolic b. Organophosphate

c. Carbamate d. Chlorinated hydrocarbon

821. Poisoning symptoms of parathian.

Inactiveness b. Restlessness

Fanning movement Jitters

822. Poisoning symptoms of Rotenone.

a. Inactiveness b. Restlessness

c. Fanning movement d. Jitters

a.

c. d.

823. Poisoning symptoms of BHC insecticides.

a. Inactiveness b. Restlessness

c. Fanning movement d. Jitters

824. Poisoning symptoms of DDT insecticide

a. Inactiveness b. Restlessness

c. Fanning movement d. Jitters

825. Site of action of organophosphate insecticide

a. Post synaptic membrane b. Axonic membrane

c. Synaptic junction d. Pre synaptic membrane

826. Site of action of Nicotine insecticide

a. Post synaptic membrane b. Axonic membrane

c. Post synaptic membrane d. Pre synaptic membrane

827. Site of action of cylodines insecticide

a. Post synaptic membrane b. Axonic membrane

c. Synaptic junction d. Pre synaptic membrane

828. Common name of the *Chilo sacchariphagous*

a. Internode bores b. Gurdaspur bores

c. Root borer d. Top borer

829. Nature of action of Phostoxin insecticides

a. Chitin inhibitor b. Fumigant

c. Contact d. Systemic

830. Nature of action of Diflubenzuron insecticide

a. Chitin inhibitor b. Fumigant

c. Contact d. Systemic

a.

c. d.

831. Nature of action of Chlorthion insecticide.

a. Chitin inhibitor b. Fumigant

c. Contact d. Systemic

832. Nature of action of Thiodemeton insecticide

a. Chitin inhibitor b. Fumigant

c. Contact d. Systemic

833. Mechanoreceptors gives response

a. Light b. Humidity

c. Body movements d. Pressure

834. In mantids the pincers are formed by apposition of tibia and _____ to catch hold the prey

a. Tibia b. Coxa

c. Tarsus d. Femur

835. The peritrophic membrane is absent in Hemiptera and adult

a. Lepidoptera b. Coleoptra

c. Hymenoptera d. Diptera

836. The _____ are the opening in the wall of the heat

Femur b. Tibia

Ostia Coxa

837. In nymp/larvae maximum sclerotization is found in

a. Maxilla b. Labrum

c. Labium d. Mandible

838. Maximum sclerotization is found in _____of adult indect.

a. Mesonstum b. Metanolum

a.

c. d.

c. Pronotum d. None of above

839. The _____ of caterpillars are hollow, cylindrical outgrowth of the body wall the lumen of which id continuous with hacmocoel.

a. Hypopharynt b. Thorax

c. Abdomen d. Prolog

840. The johnstons organ is situated in the _____ segment of the antenna

a. First b. Second

c. Third d. Fourth

841. Most of infect excrete 80 to 90 % of their nitrogen waste in the form of

a. Uric acid b. Ammonia

c. Urea d. None of above

842. Insect living in fresh water or extremely moist environment excrete their nitrogen waste in the form of

a. Nitric Acid b. Ammonia

c. Nitrogen d. Uric acid

843. Sclerotization is a process by which the cuticle become

a. Soft b. Dark

c. Hard d. None of above

844. Melanization is process by which the cuticle become

a. Black & White b. Hard

c. Soft d. Dark

845. Normally nersc axons have a resting potential of about

a. - 60 mv b. - 65 mv

c. - 75 mv d. -70 mv

a.

c. d.

846. Damage symptoms of the Bissetia steniellus

a. Bunchy top b. Dead harts pulled easily

c. Spiral galleries d. Dead hearts can not pulled easily

847. Damage symptoms of the Scirpophaga nivilla

a. Bunchy top b. Dead hearts pulled easily

c. Spiral galleries d. Dead hearts can not pulled easily

848. Damage symptoms of the Chilo infuscatellus

a. Bunchy top b. Dead hearts pulled easily

c. Spiral galleries d. Dead hearts can not pulled easily

849. Causal organism of the maggot disease

a. Virus b. Bacillus thuringiensis

c. Nosema bombycis d. Trichlyga sorbillans

850. Causal organism of the Bacterial intoxication

a. Virus b. Bacillus thuringiensis

c. Nosema bombycis d. Trichlyga sorbillans

851. Host plant of the Mulberry silkworm

Ricinus communis b. Morus sp.

Terminalia arjuna Machilus bombyciana

a.

c. d.

852. Host of the Entomophthora muscae

a. Lepidopterous caterpillars b. Husefly

c. Grasshoppers d. Aphid

853. Serratia marcessens belongs to the group

a. Fungi b. Bacteria

c. Virus d. Nematode

854. NPV pathogen belongs to the group

a. Fungi b. Bacteria

c. Virus d. Nematode

855. Neoplectana pathogen belongs to the group

a. Fungi b. Bacteria

c. Virus d. Nematode

856. Menochilus belongs to the family

a. Coccinellidae b. Pentatomidae

c. Reduviidae d. Chrysopidae

857. Chysoperla predator belongs to the family

a. Coccinellidae b. Pentatomidae

c. Reduviidae d. Chrysopide

858. Antennae of the moth

a. Aristate
b. Pectinate
c. Serrate
d. Monilform

859. Antennae of the Thrips
a. Aristate
b. Pectinate
c. Serrate
d. Monilform

860. Antennae of the Housefly
a. Aristate
b. Pectinate
c. Serrate
d. Monilform

861. Bi-pectinate antennae is found in
a. Mosquito
b. Silkworm
c. Butterfly
d. Honeybee

862. Plumose antennae is found in
a. Mosquito
b. Silkworm
c. Butterfly
d. Honeybee

863. Geniculate antennae is found in
a. Mosquito
b. Silkworm
c. Butterfly
d. Honeybee

864. Clavate antennae is found in
a. Mosquito
b. Silkworm
c. Butterfly
d. Honeybee

865. Thrips tabaci have mouth parts
a. Biting and chewing
b. Piercing and sucking
c. Rasping and Sucking
d. Sponging

866. Musca domestica have mouthparts

a. Biting and chewing b. Piercing and sucking

c. Rasping and Sucking d. Sponging

867. What type of legs found in mantid

a. Jumping b. Grooming

c. Grasping d. Digging

868. What type of legs found in Honeybee

a. Jumping b. Grooming

c. Grasping d. Digging

869. Pro-preoreceptros give response

a. Light b. Humidity

c. Body movement d. Pressure

870. Hygroreceptors give response

a. Light b. Humidity

c. Body movement d. Pressure

871. Photoreceptors give response

a. Light b. Humidity

c. Body movement d. Pressure

872. If the description of new species is based on single specimen of type series.

a. Holotype b. Paratype

c. Syntype d. Hetrotype

873. All the specimen of the series, when there id no holotype
a. Holotype b. Paratype

c. Syntype d. Hetrotype

874. After the holotypc is labeled , Each specimen of the remaining of the types
a. Paratype b. Holotype

c. Syntpe d. Hetrotype

875. Phytophayous insects feeding on plants of one or few closely related species with in a genus
a. Oligophayous b. Moniphagous

c. Polyphayous d. Diphagous

876. Phytophaus insects feeding on plants of several genra with in a family
a. Monophayous b. Polyphagous

c. Oligophagous d. Diphagous

877. Biodiversity of insects depends upon the_____ conditions of the environment. a. Geographical & Physical. b. Chemical & Biological
c. None of above. d. All of above.

878. Adult insects are categorized with the response of light are foll.
a. The diurnal species. b. The nocturnal species

c. The crepuscular species d. All of above. e. None of above.

879. The sweep net consists of a nylon cloth with a mouth about _____cm in diameter.

a. 20 cm. b. 30 cm

c. 40 cm d. None of above.

880. Pit-fall tray contains a container such as a _____.

a. Jar. b. Tube

c. Funnel d. None

881. In Berles's funnel, the top of the funnel extends into a jar of _____% alcohol.

a. 60 % b. 70%

c. 80% d. None

882. The adults of Aphidoidea are preserved in _____ tubes.

a. 75% alcohol. b. 85% alcohol.

c. 95% alcohol. d. None

883. The class insecta is divided into _____subclasses.

a. 2. b. 3

c. 4 d. None

884. The subclass Ametabola is divided into _____ orders.

a. 2. b. 3

c. 4 d. None

885. The family lepismatidae belongs to the suborder _____.

a. Microcoryphia. b. Zygentoma

c. Dicellurata. d. None

886. The *japyx* sp. belongs to the order _____

a. Thysanura b. Protura

c. Diplura d. None

887. Acerentomidae is the important family of order _____

a. Thysanura b. Diplura

c. Protura d. None.

888. The process of increasing 3 abdominal segments during the post embryonic development is called _____

a. Metamorphosis b. Anamarphosis

c. Mitosis d. None

889. In Protura, first pair of _____ perform the function of antemae.

a. Wings b. Legs.

c. Abdomen d. None

890. In Collembola, abdomen is _____ segmented.

a. 5 b. 6

c. 7 d. None

891. In Collembola, hook like structure is present on abdominal segment 3 that is known as.

a. Collophore b. Retinaculum

c. Furcula d. None

892. The family Neelidae belongs to the sub-order _____ of the order Collembola.

a. Arthropleona b. Symphyleona

c. Filipalpia d. None

893. In _____ the mouthparts are of chewing type but vestigial.

a. House fly b. Butterfly

c. Mayfly d. None

894. In Ephemeroptera the sub-imaginal moulting is _____

a. Present b. Absent

c. Present or absent d. None.

895. Ephemeros means _____

a. Short lived b. Long lived

c. Short or long lived d. None.

896. The nymphs of _____ are aquatic and called naiads.

a. Drangonflies b. Damselflies

c. Mayflies d. None

897. The family caenidae belongs to the super family _____

a. Ephemeroibea b. Baetoidea

c. Heptagenioidea d. None

898. The family _____ belongs to the super family Baetoidea.

a. Ephemerellidae b. Ephemeridae

c. Heptageniidae. d. None

899. O*dontos* means _____

a. Bristle b. Hook

c. Tooth d. None

900. The members of Odonata are commonly called _____

a. Mayflies and damselflies. b. Mayflies and dragonflies.

c. Dragonflies and damselflies d. None.

901. An elongate nodus is present on _____in Odonata.

a. Wings. b. Legs.

c. Abdomen. d. None.

902. Dragonflies belong to the suborder _____

a. Anisoptera b. Zygoptera

c. Anisozygoptera d. None.

903. *Pantala* spp. belong to the family_____

a. Libellulidae b. Aeshnidae

c. Gomphidae d. None

904. _____are the families of suborder Zygoptera.

a. Gomphidae and Aeshnidae b. Litbellulidae and Cordulgasteridae

c. Coenagrionidae and Agrionidae d. None.

905. Damselflies belong to the suborder _____

a. Anisoptera b. Zygoptera

c. Anisozygoptera d. None.

906. In plecoptera, the anal lobe of the hind wing is folded on the wing during _____

a. Flight b. Rest

c. Flight & rest d. None

907. Plecoptra is divided into _____ sub-orders

a. 2 b. 3

c. 4 d. None

908. In _____ the maxillary palpi are seta like.

a. *Perla* sp. b. *Anex* sp.

c. *Podorous* sp. d. None

909. Locusts belong to the order

a. Plecoptera b. Orthoptera

c. Embioptera d. None

910. In orthoptera, speialized _____ organs are present.

a. Auditory b. Stridulatory

c. Auditory and stridulatory d. None

911. Orthoptera is divided into suborder.

a. 2 b. 3

c. 4 d. None

912. Suborder ensifera belongs to the order _____

a. Plecoptera b. Orthoptera

c. Homoptera d. None

913. Mole cricket belongs to the family _____

a. Gryllidae b. Gryllotalpidae

c. Tridactylidae d. Trigonidiidae

914. Acrididae belongs to the suborder _____

a. Ensifera b. Caelifera

c. Blattaria. d. None.

915. Ak grasshopper belongs to the family _____

a. Acrididae b. Tetrigidae

c. Pamphigidae d. Pyrogomorphidae.

916. Phasma means _____

a. A host b. A ghost

c. A host and ghost d. None.

917. Leaf insects and stick insects belong to the order _____

a. Grylloblatodea. b.Phasmida

c. Grylloblatodea and Phasmida d. None

918. Leaf insects belong to the family_____

a. Phasmidae b. Phylliidea

c. Neelidae d. Agrionidae

919. *Derma* means _____

a. Dress b. Wool

c. Skin d. None.

920. Earwig belongs to the order _____

a. Zoraptera b. Dermaptera

c. Phasmida d. None.

921. Forficulidae belongs to the order _____

a. Zoraptera b.Orthoptera

c. Dermaptera d. None.

922. Labiidae belongs to the order_____

a. Grylloblattodea b. Orthoptera

c. Dermaptera d. None.

923. *Embios* means _____

a. Lively b. Deadly

c. Lively and deadly d. None.

924. The members of the order _____ are commonly called cockroaches and preying mentids.

a. Ephemeroptera b. Plecoptera

c. Embioptera d. Dictyoptera

925. Dictyoptera is divided into _____ suborders

a.2 b.3

c.4 d.5

926. In_____ head is concealed under the pronotal shield

a. Orthoptera b. Homoptera

c. Dictyoptera d. Neuroptera

927. *Periplanata americana* belongs to the suborder_____

a. Blattaria b. Mantodea

c. Caelifera d. None

928. In Isoptera, *iso* means _____

a. Unequal b. Equal

c. Larger d. Smaller

929. Termitorium is a _____ where all members of the colony exist

a. Room b. Loan

c. House d. None.

930. *Odontotermis obesus* belongs to the family_____

a.Rhinotermitidae b. Termitidae

c. Kalotermitidae d. Hodotermitidae

931. Termites can be collected from the _____

a. Soil b. Water

c. Paper d. Wood

932. "*zor*" means _____

a. Lively b. Deadly

c. Purely d. None.

933. "*psoco*" means _____

a. To eat b. To gnaw

c. To drink d. None.

934. Liposcelidae family belongs to the order_____

a. Orthoptera b. Zoraptera

c. Psocoptera d. Lepidoptera

935. *Liposcelis* sp. belongs to the order_____ a. Lepidoptera b. Neuroptera

c. Coleoptera d. Psocoptera

936. Chicken louse belongs to the order_____

a. Siphunculata b. Dermaptera

c. Mallophaga d. None.

937. Philopteridae belongs to the order_____

a.Phasmida b. Siphunculata

c. Mallophaga d. None

938. "*siphunos*" means _____

a. Glass b. Rubber

c. Tube d. Jar

939. In _____ head is broader than prothorax.

a. Chicken louse b. Human louse

c. Chicken louse and human louse d. None.

940. Phthiriidae family belongs to the order_____

a. Phasmida b. Protura

c. Thysanoptera d. Siphunculata

941. Sucking lice of horses belong to the family _____

a. Pediculidae b. Phthiriidae

c. Haematopinidae d. Monoponidae

942. "*hemi*" means _____

a. Hole b. Half

c. Hear d. Hair

943. Bugs belong to the order _____

a. Homoptera b. Hemiptera

c. Hymenoptera d. None

944. Terrestrial bugs belong to the suborder_____

a. Cryptocerata b. Gymnocerata

c. Adephaga d. None

945. Water bugs belong to the sub order _____

a. Cryptocerata b. Gymnocerata

c. Adephaga g. None

946. Shield bugs belong to the family _____

a. Lygaeidae b. Pentatomidae

c. Cimicidae d. Tingidae

947. Giant water bugs belong to the family _____

a. Corixidae b. Nepidae

c. Hydrometridae d. Belostomatidae

948. Sugarcane leafhopper belongs to the order _____

a. Hemiptera b. Homoptera

c. Hymenoptera d. None

949. In whiteflies the last nymphal instars is very inactive and look like a pupa. It is to be called _____ pupal stage.

a. True b. False

c. complete d. Incomplete.

950. Mango mealy bugs belong to the order _____.

a. Mallophaga b. Hemiptera

c. Homoptera d. Hymenoptera

951. Homoptera is divided into _____suborders.

a. 2 b. 3

c. 4 d. 5

952. Lanternflies belong to the order _____

a. Diptera b Lepidoptera

c. Homoptera d. Hemiptera

953. *Pyrilla perpusilla* belongs to the family _____

a. Psyllidae b. Lophopidae

c. Pentatomidae d. Peridae.

954. Diaspididae family belongs to the order _____.

a. Dermaptera b. Hemiptera

c. Homoptera d. Lepidoptera.

955. Lac insects belong to the order _____

a. Lepidoptera b. Hymenoptera

c. Homoptera d. None

956. Lacciferidae belongs to the order _____

a. Lepidoptera b. Coleoptera

c. Homoptera d. Hymenoptera

957. In Thysanoptera, the mouthparts are _____

a. Symmetrical b. Asymmetrical

c. Chewing d. None

958. Thysanoptera is further divided into _____ suborders.

a. 2 b. 3

c. 4 d. 5

959. In terebrantia the end of abdomen is _____

a. Tube like b. Blumtly roumded

c. Elongate d. None

960. Tubulifera belongs to the order _____

a. Trichoptera b. Thysanura

c. Thysanoptera d. None

961. Family Thripidae belongs to the order _____

a. Thysanura b. Thysanoptera

c. Trichoptera d. None

962. Holometabola is also known as _____

a. Hemimetabola b. Exopterygota

c. Endopterygota d. None

963. "*neuro*" means _____

a. A neck b. A net

c. A nerve d. A needle

964. Green lacewing belongs to the family

a. Nemapteridae b. Gomphidae

c. Ascalaphidae d. Chrysopidae

965. Antlion belongs to the order _____

a. Hymenoptera b. Neuroptera

c. Isoptera d. Thysanoptera

966. Antlion belongs to the family _____

a. Ascalaphidae b. Myrmeleontidae.

c. Nemopteridae d. None

967. Rove beetle belongs to the family _____

a. Geotrupidae b. Silphidae

c. Stephylinidae d. None

968. Firefly belongs to the family _____

a. Silphidae b. Lampyridae

c. Histeridae d. None

969. Powder post beetle belongs to the family _____

a. Anobiidae b. Bostrichidae

c. Lyctidae d. None

970. Human flea belongs to the order _____

a. Mallophaga b. Siphunculata

c. Siphonaptera d. Strepsiptera

971. Horse flies belong to the order _____

a. Dermaptera b. Diptera

c. Lepidoptera d. None

972. Robber flies belong to the family _____

a. Asilidae b. Tabanidae

c. Culicidae d. None

973. Cabbage butterflies belong to the family _____

a. Muscidae b. Cecidomyiidae

c. Pieridae d. Pyralidae.

974. Wood wasps belong to the family _____

a. Vespidae b. xiphydriidae

c. Tenthredinidae d. None

975. Honey bees belong to the family _____

a. Apidae b. Vespidae

c. Formicidae d. Scoliidae

976. Butterflies belong to the order _____

a. Diptera b. Lepidoptera

c. Hymenoptera d. None

977. Insect whose larvae are quite unlike the adult along with the presence of pupul instar

a. Hopometabolous b. Hemi-metabolus

c. Hemimetaboluos d. Hetrometabolous

978. Insects having no metamorphosis

a. Hopometabolous b. Ametabolous

c. Hemimetabolous d. Hetrometabolous

979. Self sufficient and self regulated habit where biotic and abiotic components intract together for exchange of energy in a continous cycle

a. Community b. Ecosystem

c. Habitat d. Environment

980. A complex unit formed by all the population of that area

a. Community b. Ecosystem

c. Environment d. Habitat

981. The transfer of food energy from the plants through a series of organisms with repeated eating and being eaten

a. Food Chain b. Food web

c. Biotic Potential d. None of above

982. The interlocking pattern of food chain with all sorts of short aa cuits & connections

a. Food chain b. Food web

c. Biotic potential d. Antibiosis

983. Conversion of 6-carbon chain glucose molecule into two molecules of 3-carban chain pyrusic acid

a. Glycolysis b. Kerbcycle

c. Transition d. Antibiosis

984. Series of reaction in mitochondrion that brings about oxidation of actyle residues to CO_2 liberating H_2 and forming wafer

a. Glyclysis b. Kerbscycle

c. Transition d. Antibiosis

985. Organelles where protein synthesis take place

a. Mitochondia b. Aibosome

c. Cell membrane d. DNA

986. Chemical which give adaptive advantage to the producer

a. Allomones b. Kiaromones

c. Attractants d. Repellents

987. Chemical which give adaptive advantage to the reseiver

a. Allomones b. Kairomones

c. Attractants d. Repellents

988. Chemcials which inhibit feeding or piercing

a. Supressants b. Deterrents

c. Attractants d. Repellents

989. Chemicals which prevent maintenance of feeding or ovi position

a. Supressants b. Deterrents

c. Attractants d. Repellents

990. Chemical which orient insects towards the host

a. Attractants b. Repellents

c. Supressants d. Deterrents

991. Chemical which orient insects away from the host

a. Attractants b. Repellent

c. Supressants d. Deterrents

992. The study of economic poisons, their effects, mechanism of action and metabolism of toxicant

a. Entomology b. Embryology

c. Toxicology d. Botany

993. Abilit of a chemical to bring about changes in the biological system of the target animal

a. Acute toxicity b. Chronic toxicity

c. Toxicity d. Poisoning

994. Acute stage of poisoning due to the application of a single dose

a. Toxicity b. Acute toxicity

c. Chronic toxicity d. None of above

995. Condition of toxicity which lasts for the entire life of the target animal and has the accumulating effect of small repeated doses.

a. Toxicity b. Acute toxicity c. Chronic toxicity d. Hazards

996. The probability of being harmed due to the use exposon/handling of the toxic substances

a. Hazard b. Toxicity c. Risk d. Acute toxicity

997. The concentration of a toxicant residue in or on a food when first offered for consumption.

a. Acceptable daily intake b. Maximum residual limit

c. Biomagnification d. None of above

998. The amount of initially laid down insecticidal chemical on the surface

a. Biomagnification b. Acceptable daily intake

c. Maximum residul limit d. Toxicity deposit

999. Family of ht echilo partellus

a. Muscidae b. Scarabaeidae c. Arctiidae d. Crambidae

1000. Family of the Sitotroga cerelalella

a. Coccidae b. Aleurodidae c. Aphididae d. Pyralidae

1001. The word thysanura is derived from thysan and ura in which the ura means.

a. Bristle b. Tail c. Tube d. None

1002. Which common name is incorrectly written?

a. Horsefly b. Honey bee c. Ground beetle d. Lightningbug

ANSWERS

1. e	2. a	3. e
4. d	5. d	6. a
7. b	8. c	9. a
10. c	11. a	12. a
13. e	14. e	15. e
16. d	17. c	18. e
19. b	20. d	21. c
22. e	23. e	24. c
25. e	26. a	27. d
28. b	29. d	30. c
31. d	32. b	33. e
34. b	35. b	36. c
37. a	38. d	39. e

40. e	41. d	42. c
43. e	44. d	45. b
46. a	47. b	48. a
49. d	50. a	51. a
52. d	53. a	54. c
55. c	56. a	57. a
58. a	59. a	60. a
61. a	62. d	63. d
64. b	65. d	66. b
67. d	68. a	69. d
70. d	71. a	72. b
73. a	74. c	75. c
76. c	77. c	78. a
79. c	80. b	81. d
82. c	83. a	84. d
85. a	86. a	87. b
88. a	89. a	90. b
91. d	92. d	93. d
94. c	95. b	96. c
97. a	98. d	99. d
100. d	101. c	102. d
103. c	104. c	105. c
106. c	107. a	108. b
109. b	110. a	111. d
112. a	113. b	114. d
115. c	116. d	117. b
118. c	119. c	120. a
121.	122. b	123. c
124. a	125. b	126. b
127. b	128. b	129. c
130. b	131. d	132. d
133. c	134. c	135. a

136. a	137. a	138. a
139. c	140. b	141. c
142. b	143. a	144. c
145. d	146. b	147. b
148. a	149. b	150. d
151. a	152. d	153. c
154. a	155. c	156. a
157. b	158. a	159. d
160. a	161. a	162. d
163. a	164. c	165. c
166. a	167. d	168. d
169. b	170. b	171. c

172. a	173. a	174. c
175. a	176. c	177. a
178. a	179. b	180. d
181. d	182. d	183. a
184. d	185. d	186. d
187. b	188. d	189. d
190. a	191. d	192. b
193. d	194. a	195. c
196. b	197. c	198. d
199. c	200. a	201. d
202. b	203. c	204. b
205. b	206. a	207. b
208. a	209. a	210. c
211. d	212. a	213. d
214. a	215. c	216. b
217. c	218. d	219. d
220. d	221. b	222. c
223. c	224. c	225. d
226. a	227. a	228. c

229. d	230. d	231. b
232. c	233. c	234. c
235. d	236. a	237. b
238. c	239. d	240. b
241. c	242. b	243. c
244. b	245. a	246. a
247. d	248. b	249. c
250. b	251. d	252. b
253. c	254. b	255. b
256. c	257. c	258. c
259. a	260. a	261. b
262. b	263. a	264. b
265. a	266. b	267. a
268. a	269. c	270. a
271. b	272. c	273. d
274. c	275. b	276. c
277. b	278. b	279. a
280. b	281. b	282. c
283. b	284. b	285. b
286. d	287. b	288. c
289. c	290. b	291. b
292. c	293. c	294. c
295. a	296. a	297. b
298. b	299. a	300. a
301. c	302. c	303. a
304. c	305. b	306. d
307. d	308. c	309. c
310. a	311. d	312. a
313. d	314. d	315. c
316. b	317. b	318. a
319. a	320. a	321. b
322. b	323. d	324. b

325. b	326. b	327. b
328. a	329. d	330. c
331. d	332. d	333. d
334. a	335. b	336. b
337. b	338. b	339. b
340. c	341. d	342. a
343. b	344. a	345. a
346. d	347. d	348. a
349. a	350. a	351. b

352. a	353. b	354. b
355. a	356. c	357. a
358. a	359. b	360. c
361. a	362. a	363. c
364. a	365. a	366. a
367. a	368. b	369. a
370. b	371. b	372. a
373. d	374. a	375. a
376. c	377. a	378. b
379. a	380. b	381. a
382. c	383. b	384. c
385. c	386. c	387. b
388. d	389. b	390. b
391. b	392. b	393. b
394. a	395. a	396. a
397. a	398. c	399. a
400. a	401. c	402. b
403. a	404. b	405. a
406. b	407. c	408. a
409. b	410. d	411. a
412. a	413. a	414. a
415. d	416. b	417. a

418. b	419. a	420. a
421. a	422. a	423. a
424. a	425. b	426. c
427. b	428. a	429. a
430. b	431. a	432. a
433. a	434. a	435. c
436. d	437. a	438. a
439. a	440. b	441. d
442. a	443. c	444. d
445. a	446. a	447. a
448. a	449. a	450. b
451. a	452. a	453. a
454. c	455. a	456. b
457. d	458. a	459. b
460. a	461. a	462. a
463. a	464. a	465. c
466. a	467. a	468. b
469. b	470. b	471. a
472. a	473. b	474. a
475. c	476. b	477. b
478. b	479. a	480. a
481. a	482. b	483. b
484. a	485. b	486. b
487. c	488. a	489. a
490. a	491. a	492. c
493. a	494. b	495. a
496. d	497. a	498. b
499. b	500. a	501. a
502. b	503. c	504. a
505. b	506. c	507. b
508. c	509. a	510. a
511. b	512. c	513. a

514. a	515. b	516. a
517. b	518. c	519. c
520. a	521. c	522. a
523. b	524. d	525. c
526. b	527. c	528. a
529. b	530. b	531. c

532. c	533. b	534. a
535. c	536. c	537. b
538. b	539. b	540. b
541. b	542. a	543. d
544. a	545. a	546. b
547. a	548. a	549. c
550. c	551. a	552. b
553. b	554. b	555. b
556. a	557. b	558. a
559. a	560. b	561. c
562. b	563. b	564. a
565. a	566. b	567. b
568. b	569. a	570. a
571. d	572. a	573. a
574. b	575. b	576. d
577. a	578. b	579. b
580. b	581. c	582. d
583. c	584. c	585. d
586. a	587. a	588. b
589. a	590. b	591. a
592. a	593. a	594. a
595. a	596. a	597. a
598. a	599. a	600. a
601. a	602. a	603. a
604. a	605. a	606. a

607. a	608. a	609. a
610. a	611. a	612. a
613. a	614. a	615. a
616. a	617. a	618. a
619. a	620. a	621. a
622. a	623. a	624. a
625. a	626. a	627. a
628. a	629. a	630. a
631. a	632. a	633. a
634. a	635. a	636. a
637. a	638. a	639. a
640. a	641. a	642. a
643. a	644. a	645. a
646. a	647. a	648. a
649. a	650. a	651. a
652. a	653. a	654. a
655. a	656. a	657. a
658. a	659. a	660. a
661. a	662. a	663. a
664. a	665. a	666. a
667. a	668. a	669. a
670. a	671. a	672. a
673. a	674. a	675. a
676. a	677. a	678. a
679. a	680. a	681. a
682. a	683. a	684. a
685. a	686. a	687. a
688. a	689. a	690. a
691. a	692. a	693. b
694. b	695. d	696. c
697. b	698. c	699. b
700. d	701. a	702. b

703. b	704. c	705. b
706. a	707. a	708. c
709. a	710. c	711. c

712. b	713. b	714. a
715. c	716. b	717. b
718. c	719. b	720. b
721. b	722. a	723. c
724. a	725. b	726. b
727. c	728. b	729. a
730. b	731. b	732. b
733. d	734. b	735. a
736. c	737. b	738. d
739. a	740. c	741. d
742. b	743. c	744. b
745. b	746. a	747. b
748. b	749. b	750. b
751. a	752. a	753. a
754. c	755. b	756. a
757. a	758. b	759. b
760. a	761. b	762. b
763. a	764. c	765. b
766. a	767. b	768. b
769. a	770. b	771. a
772. b	773. c	774. a
775. a	776. a	777. c
778. d	779. a	780. a
781. b	782. b	783. b
784. a	785. a	786. b
787. a	788. b	789. a
790. a	791. a	792. b
793. a	794. a	795. a

796. b	797. b	798. a
799. b	800. a	801. b
802. a	803. b	804. b
805. a	806. d	807. b
808. c	809. a	810. a
811. c	812. a	813. d
814. d	815. a	816. b
817. c	818. d	819. d
820. c	821. b	822. a
823. c	824. d	825. c
826. a	827. d	828. a
829. b	830. a	831. c
832. d	833. c	834. d
835. a	836. c	837. d
838. a	839. d	840. b
841. a	842. b	843. c
844. c	845. d	846. c
847. a	848. b	849. d
850. b	851. b	852. b
853. b	854. c	855. d
856. a	857. d	858. b
859. d	860. a	861. b
862. a	863. d	864. c
865. c	866. d	867. c
868. b	869. d	870. d
871. a	872. a	873. d
874. a	875. b	876. c
877. d	878. d	879. b
880. a	881. b	882. c
883. a	884. c	885. b
886. c	887. c	888. b
889. b	890. b	891. b

892. b	893. c	894. a
895. a	896. c	897. b
898. a	899. c	900. c
901. a	902. a	903. a
904. c	905. b	906. b
907. b	908. a	909. b
910. c	911. a	912. b
913. b	914. b	915. d
916. b	917. b	918. b
919. c	920. b	921. c
922. c	923. a	924. d
925. a	926. c	927. a
928. b	929. c	930. b
931. d	932. c	933. b
934. c	935. d	936. c
937. c	938. c	939. a
940. d	941. c	942. b
943. b	944. b	945. a
946. b	947. d	948. b
949. b	950. c	951. a
952. c	953. b	954. c
955. c	956. c	957. b
958. a	959. b	960. c
961. b	962. c	963. c
964. d	965. b	966. b
967. c	968. b	969. c
970. c	971. b	972. a
973. c	974. b	975. a
976. b	977. a	978. b
979. b	980. a	981. a
982. b	983. a	984. b
985. b	986. a	987. b

988. a	989. b	990. a
991. b	992. c	993. c
994. b	995. c	996. a
997. b	998. d	999. d
1000. b	1001. b	1002. a