

# BETHANY HIGH SCHOOL NAALYA

## S.2 BIOLOGY

### INSTRUCTIONS

*Answer all questions in this section. Write the letter representing the most correct answer to each Question in the box provided.*

### SECTION A :20 MARKS

- Which one of the following is a method of controlling tapeworms?  
 (a) Use of insecticide (b) Chlorination of water  
 (b) Draining of stagnant water (d) proper disposal of sewage
- Which of the following is a vector of yellow fever?  
 (a) Aedes mosquito (b) culex mosquito  
 (c) Anopheles mosquito (d) Slock fly
- A soil sample was heated at 100oC to a constant weight which component of the soil was being investigated ?  
 (a) Organic matter (b) Air (c) Microorganisms (d) water
- Which of the following is a characteristic of insect pollinated flowers?  
 (a) Produce large quantities of pollen grains (b) Are small and dull colored  
 (c) Have large featherly stigmas (d) Their anthers are firmly attached.
- Fungi are not classified as plants because they  
 (a) Do not have proper roots (b) Lack vascular tissue  
 (c) Lack chlorophyll (d) Have rigid all walls
- A housefly and a tick belong to the same phylum arthropoda because they both have  
 (a) Two body divisions (b) Jointed limbs  
 (c) Three pairs of legs (d) To pairs of antennae
- Which of the following is a difference between an adult and newly hatched nymph of a cockroach.

#### Adult

- Has three pairs of legs
- Has compound eyes
- Has wings
- Has a pair of antennae

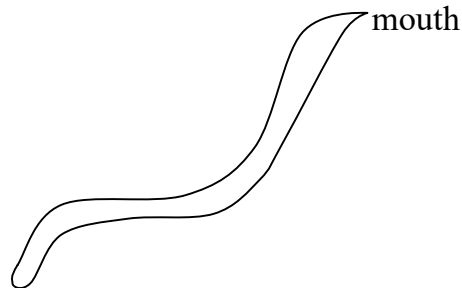
#### Nymph

- Has no legs
- Has no eyes
- Has no wings
- Has no antennae

7. Which of the following is a taxonomic class  
 (a) Anelida (b) Arthropoda (c) Arachnida (d) Platyhelminthes
8. Which of the following is a difference between an adult and new hatched nymph of a cockroach

Adult	Nymph
Has three pairs of legs	Has no legs
Has compound eyes	Has no eyes
Has wings	Has no wings
Has a pair of antennae	Has no antennae

9. A larva of a housefly moults a number of times before it pupates in order to  
 (a) Breathe more easily  
 (b) Pass out waste products  
 (c) Increase in size  
 (d) move faster
10. To which of the following phyla does the organism in figure 1 belong.



- (a) Annelida (b) Nematoda (c) Coelenterata (d) Platyhelminthes
11. Which of the following is a characteristic of Arachnids ?  
 (a) Lack antennae (b) Have compound eyes  
 Have many appendages (d) Have three body parts
12. Which of the following methods of controlling malaria does not harm the environment?  
 (a) Draining ponds (b) Use of insecticides like DDT  
 (c) Spraying oil top of water ponds (d) Introducing fish into ponds
13. Which of the following organisms reproduce by budding?

- (a) Bacteria      (b) Amoeba      (c) Spirogyra      (d) Fungi

14. Which of the following doesnot transport oxygen by blood.

- (a) Cockroach      (b) Frog      (c) Bird      (d) Fish

15. A sexual reproduction in a Rhizopus results into

- (a) Zygosporangia      (b) buds      (c) Fragments      (d) Spores

16. Which one of the following phylum consists of human parasites

- (a) Nematoda      (b) Mollusca      (c) Coelenterata      (d) Echinodermata

17. Which one of the following is not used for gaseous exchange in amphibians?

- (a) Lungs      (b) Skin      (c) Mouth      (d) Nostrils

18. Which of the following classes has the highest number of species?

- (a) Crustacea      (b) Arachnida      (c) Insecta      (d) Myriapoda

19. Which of the following features differentiate a housefly from spider

- (a) Segmented body      (b) jointed limbs  
(c) Number of body parts      (d) Possession of exoskeleton.

20. Which one of the following is a correct route taken by carbon dioxide from the body cells of an insect to the atmosphere.

- (a) Trachea → tracheoles → spiracles  
(b) Spiracles → Trachea → tracheoles  
(c) Tracheoles → trachea → spiracles  
(d) Spiracles → tracheoles → trachea

**SECTION B**

*Write answers in the spaces provided*

21. (a) Define the term metamorphosis (1mk)  
(b) Draw illustrations to show complete and incomplete metamorphosis

complete	incomplete

(b) Give an example of each type

(i) Complete metamorphosis

(ii) Incomplete metamorphosis

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22. (a) How are insects adapted to their mode of life in their habitats (5mks)

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(c) Identify the five orders of insects giving an example for each

Order	Example
(i) .....	(i) .....
(ii) .....	(ii) .....
(iii) .....	(iii) .....
(iv) .....	(iv) .....
(v) .....	(v) .....
(vi) .....	(vi) .....

**SECTION C**

*Choose only one question from this section*

- 23. (a) Describe the life cycle of a housefly. (2mks)
- (b) Mention any two diseases spread by a housefly. (2mks)
- (c) Mention any ways in which the above can be prevented.
- 24. (a) List down the primary functions of roots. (3mks)
- (b) Giving an example in each case, state modified function of roots. (7mks)

**End**