

**M.Sc. ZOOLOGY  
FOURTH SEMESTER  
ECONOMIC ZOOLOGY  
MSZ-406 (MDC)**

[USE OMR SHEET FOR OBJECTIVE PART]

**SET  
B**

Duration: 3 hrs.

Full Marks: 70

Time: 30 mins.

Marks: 20

(Objective)

Choose the correct answer from the following:

$1 \times 20 = 20$

1. The droppings of chicks that would fertilise fish ponds are rich in:  
a. Nitrogen  
b. Ammonia  
c. Sulphate  
d. Silicate
2. The normal doses of lime desired in composite fish culture ranges from:  
a. 200 to 250 Kg/ha  
b. 6000 to 7000 Kg/ha  
c. 600 to 6000 Kg/ha  
d. 777 to 888 Kg/ha
3. Which one of the following stages of Pulse beetle *Callosobruchus chinensis* feeds on stored products?  
a. Egg  
b. Larva  
c. Pupa  
d. Adult
4. Which one of the following is a pest of Sal (*Shorea robusta*) tree?  
a. *Hoplocerambyx spinicornis*  
b. *Hyblaea puera*  
c. *Andraca bipunctata*  
d. *Dinoderus minutus*
5. Defoliator group of pests feed on:  
a. Fruit  
b. Root  
c. Seed  
d. Leaf
6. Which of the following is/are bee product?  
a. Honey  
b. Wax  
c. Propolis  
d. All of the above
7. Fibroin and Sericin are:  
a. Sugars  
b. Lipids  
c. Proteins  
d. None of the above
8. The phenomenon of limiting the body limit of the tapeworm is known as:  
a. Apoptosis  
b. Apolysis  
c. Apostylis  
d. Apoptosis
9. Which among this parasite category does mosquito fall into?  
a. Facultative  
b. Permanent  
c. Obligatory  
d. Temporary
10. The most common amplifying host of Japanese encephalitis virus is:  
a. Pig  
b. Bat  
c. Birds  
d. None of the above

11. Most commonly used breed for IFS in the duck-cum fish farming in India are:
  - a. Indian eagle
  - b. Indian runner
  - c. Indian rippler
  - d. None of the above
12. Ideal rice species for paddy-cum fish culture which has strong root system is:
  - a. Tulsi
  - b. Rajarajan
  - c. Panidhan
  - d. All of the above
13. A fish is of good market value if it weighs:
  - a. 9 gm. and above
  - b. 70 gm. and above
  - c. 750 gm. and above
  - d. 11 gm.
14. Soil fertility decreases in the pesticide-treated crop field due to:
  - a. Healthy growth of plant
  - b. Disappearance of pests
  - c. Disappearance of soil inhabiting microbes
  - d. Increase of yield
15. Polyphagous pest takes food from plants of:
  - a. Any one species
  - b. Any one family
  - c. Both a and b
  - d. Almost all plant families
16. Sting apparatus of honey bee is the modification of:
  - a. Ovipositor
  - b. Prothoracic leg
  - c. Mesothoracic leg
  - d. Metathoracic leg
17. Which of the following silk is known as "Ahimsa Silk"?
  - a. Muga Silk
  - b. Eri Silk
  - c. Mulberry Silk
  - d. Tasar Silk
18. Silkworms are included in the order:
  - a. Hemiptera
  - b. Diptera
  - c. Coleoptera
  - d. Lepidoptera
19. How many total pairs of anal papillae are present in male Ascaris?
  - a. 30
  - b. 40
  - c. 50
  - d. 70
20. Which among these diseases causes hemorrhagic fever?
  - a. Japanese encephalitis
  - b. Dengue
  - c. Malaria
  - d. All of the above

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**( Descriptive )**

Time : 2 hr. 30 mins.

Marks : 50

[ Answer question no.1 & any four (4) from the rest ]

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|---|----------|
| 1. What is integrated fish farming? Mention some of the different types of integrated fish farming practiced in India.  | 2+8=10   |
| 2. What is composite fish culture? Outline some of the objectives and principles of composite fish culture and highlight some important aspects of composite fish culture in India. | 1+2+7=10 |
| 3. Describe the life cycle of any one of paddy pest. Write the types of damage they do in the paddy field.  | 8+2=10   |
| 4. Why bamboo pests attack the bamboo only after harvesting? Write a note on life cycle of any one of bamboo pest.  | 2+8=10   |
| 5. Briefly describe about honey bee society. Write about bee products.  | 5+5=10   |
| 6. Name two host plants of <i>Antheraea assama</i> . Explain about rearing process of Muga silkworm.  | 2+8=10   |
| 7. Write a detailed note about the morphological feature and life history traits of <i>Taenia solium</i> .  | 10       |
| 8. Write in detail about various vectors of malaria and classification based upon various fever consequences.   | 10       |

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