

00054347

University of Mumbai

S.Y.B.Sc Zoology P-III (Elective 2) Semester-III (CBCSGC)

Q.P.Code: 00054347

Time: 03 Hours

Marks: 100

- Q.1] A) Fill in the blanks by choosing the correct options given in brackets: 05**
- i) Molly 01
 - ii) Biological 01
 - iii) Insecticidal solutions 01
 - iv) Komodo Dragon 01
 - v) Blue Mormon 01
- B) Match the columns I and II and rewrite (arranged answers): 05**
- | Column I | | Column II | |
|------------------|--------|--|----|
| a) Brine shrimps | : i) | Fish feed | 01 |
| b) Bed bug | : ii) | Household pests | 01 |
| c) Aphids | : iii) | Black mould on leaf | 01 |
| d) Black Drongo | : iv) | King Crow | 01 |
| e) Matilda Viper | : v) | Named after the daughter of researcher | 01 |
- C) State whether True or False**
- i) True 05
 - ii) True 01
 - iii) False 01
 - iv) True 01
 - v) False 01
- D) Define the following/answer in one sentence: 05**
- i) **Exotic species:** Exotic species are alien, non-native and nonindigenous or introduced species which occur in areas outside of their natural geographic range. 01
 - ii) **IPM:** Integrated pest management 01
 - iii) **Plant protection appliances:** Equipment's/instruments/machines those are used to apply the appropriate chemical formulation to control the pest. E.g. Knapsack sprayer/Rotary duster/Cyanogas pump 01
 - iv) Cheetah 01
 - v) Alfred Wallace 01
- Q.2] A) Answer any one from the following questions: 10**
- i) **Common characters and sexual dimorphism of butterfly fish** 10
 - 1. Introduction 02
 - 2. Definition of sexual dimorphism 02
 - 3. Description 06
 - ii) **Biology of goldfish** 10
 - 1. Introduction 02

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2. Habitat and distribution	02
3. Food and feeding	02
4. Spawning and reproduction	04
B) Explain <u>any two</u> from the following questions:	
i) Scope and maintenance of aquarium	05
1. Introduction	02
2. Description	03
ii) Live fish feed	05
1. Introduction	01
2. Examples	01
3. Description of examples	03
iii) Biology of Guppy	05
1. Introduction	01
2. Description	04
iv) Fish transport and its importance in aquarium context	05
1. Introduction	01
2. Importance of fish transport	04
Q.3] A) Answer <u>any one</u> of the following questions:	
i) Forestry pest	10
1. Definition & introduction of forestry pest	03
2. Examples of forestry pest	02
3. Explanation on type of damage and control measures	05
ii) Life cycle, nature of damage, control measures of Rice Weevil	10
1. Introduction of Rice Weevil in context with type of pest	02
2. Life cycle stages with illustrations	04
3. Nature of damage description	02
4. Control measures	02
B) Explain <u>any two</u> from the following questions:	
i) Chemical control of pests	05
1. Introduction to chemical control and pesticides	02
2. Description with examples of pesticides	03
ii) Snails and slugs as pests	05
1. Introduction of snails and slugs as non-insect/other pest	02
2. Type of damage	02
3. Any one example of snail/slug and control measure/s	01
iii) Rotary duster as plant protections appliances	05
1. Description with working and use	03

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2. Diagram	02
iv) Life cycle of Jowar stem borer	05
1. Stages of life cycle with brief explanation	03
2. Schematic representation/diagram of life cycle	02
Q.4] A) Answer <u>any one</u> of the following questions:	
i) Natural history of kingfisher and Drongo	10
1. Description of both	06
2. Natural history	04
ii) Amazing aspects of Lesser flamingo and Great white pelican	10
1. Introduction	02
2. Amazing aspects of both	08
B) Explain <u>any two</u> from the following questions:	
i) Mynamar snub nosed monkey as incredible animal	05
1. Introduction	03
2. incredible aspects of both	02
ii) Homing in Pacific Salmon	05
1. Homing introduction	01
2. Description of behavior	04
iii) Joker crab as incredible animal	05
1. Purple crab description	03
2. Characters	02
iv) Amazing aspects of strawberry poison frog	05
1. About name and description	02
2. Amazing aspects	03
Q.5] Write short notes on <u>any four</u> of the following questions:	20
i) Various example of endemic species for aquarium	05
1. Introduction	01
2. Examples	01
3. Description	03
ii) Handling of fish during transportation	05
1. Introduction	01
2. Description	04
iii) Birds as pests	05
1. Introduction as non-insect pests	01
2. Description with examples and type of damage	04

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iv) Parasitoids as pest	05
1. Introduction: definition of parasitoids	01
2. Importance of parasitoids as biological control of pest	02
3. Description with example	02
v) Stabbing shark as incredible animal	05
1. Introduction	01
2. Characters	02
3. Special facts	02
vi) Amazing aspects of Cheetah	05
1. Introduction	02
2. Reasons and amazing characters	03
