3 (Sem–3/CBCS) ZOO SE 1/SE 2

2021

(Held in 2022)

ZOOLOGY

(Skill Enhancement Course)

Answer questions ***either*** *from* ***SE–3014*** *or from* ***SE–3024***

Paper : ZOO–SE–3014

(Ornamental Fish and Fisheries)

Full Marks : 50

Time : Two hours

The figures in the margin indicate full marks for the questions.

Choose the correct answers : ***(any four)*** 1×4=4

(a) *Xenentodon cancila* is an example of

(i) classified ornamental fish

(ii) carp

(iii) non-classified ornamental fish

(iv) barb

(b) The chromatophores responsible for imparting yellow colour to fishes is

(i) iridophores

(ii) xanthophores

(iii) erythrophores

(iv) melanophores

(c) Trade name of ornamental fish *Chela laubuca* is

(i) Indian glass barb

(ii) mola carplet

(iii) rosy barb

(iv) silver hatchet

(d) Fin and tail rot disease in aquarium fishes is caused by

(i) bacteria

(ii) fungus

(iii) protozoa

(iv) helminth worm

(e) Commercially *Chara* sp is known as

(i) tape grass

(ii) stonewort

(iii) milfoil

(iv) fanwort

(f) *Colisa fasciata* is an ornamental fish of the fish group

(i) carp

(ii) barb

(iii) glass fish

(iv) gourami

2. Answer the following questions : ***(any three)*** 2×3=6

(a) Define classified ornamental fish. Give *one* example. 1+1=2

(b) What is sexual dimorphism ? 2

(c) What are carotenoids ? Name *one* natural source of carotenoid. 1+1=2

(d) What are planktons ? Mention *one* significance of planktons in an aquarium. 1+1=2

3. Write short notes on : ***(any two)*** 5×2=10

(a) Biological filters

(b) Ornamental fish diversity of North-Eastern India

(c) Feed formulation

(d) Lighting devices in an aquarium

4. Answer the following questions : ***(any three)*** 10×3=30

(a) Describe briefly the management practices in an aquarium. 10

(b) What is fecundity ? Write a brief note on natural breeding of *Trichogaster* species. 2+8=10

(c) Give an account on non-infectous disease found among ornamental fishes. Mention *three* preventive measures for spread of diseases in an aquarium. 7+3=10

(d) Describe in brief the natural food of ornamental fish. 10

(e) What is wetland ? Give an account of ornamental plant diversity found in wetlands. Mention *two* significances of plants in an aquarium. 1+7+2=10

(f) What are chromatophores ? Describe the strategies for maintenance of natural colour of ornamental fish. 2+8=10

Paper : ZOO–SE–3024

(Apiculture)

Full Marks : 50

Time : Two hours

The figures in the margin indicate full marks for the questions.

1. Fill in the blanks : ***(any four)*** 1×4=4

   (a) The class of honey bee is _____.

   (b) The most prevalent contagious disease among bee is _____.

   (c) _____ season is suitable for bee population.

   (d) Generally the queen takes _____ days to complete the life cycle.

   (e) The main constituents of honey is _____.

   (f) The basal part of modern hive is known as _____.

2. Write briefly on the following : ***(any three)*** 2×3=6

   (a) Functions of worker bee

   (b) Langstroth frame of hive

(c) Apimondia

(d) Blood of bee

3. Write short notes on the following : ***(any two)*** 5×2=10

(a) Beehive

(b) Bee dance

(c) Apiculture as cottage industry

(d) Newton model of hive

4. Answer the following questions : ***(any three)*** 10×3=30

(a) Elaborate social organization in honey bee. 10

(b) What are different castes of honey bee? Write about the life history of honey bee with suitable diagram. 2+8=10

(c) What are different diseases of honey bee ? Mention the preventive measures of these diseases in a beehive. 4+6=10

(d) Why is artificial bee rearing required? Illustrate your answer with different models of hive. 2+8=10

(e) Write about different tools required to start a beehive. 10

(f) Describe the indigenous and modern methods of extraction of honey. 5+5=10
