QP Code: RM22MSC123 | Reg. No | | | | | | | | | | | AY 22

GIET UNIVERSITY, GUNUPUR – 765022

M. Sc. (Fourth Semester) Examinations, May – 2024

20LSASPC403 – Ethology and Developmental Biology

(Life Science – Animal Science)

Time: 3 hrs | Maximum: 70 Marks

(The figures in the right hand margin indicate marks.)

PART – A **(2 x 10 = 20 Marks)**

Q.1. Answer ***ALL*** questions	CO #	Blooms Level
a. What is orientation?	CO1	K1
b. What do you mean by Kinesis?	CO1	K1
c. What is Telotaxis?	CO1	K1
d. What is Courtship display?	CO1	K1
e. What is Holoblastic cleavage?	CO1	K1
f. What is Isolecithal egg?	CO1	K1
g. What is Totipotency?	CO1	K1
h. What is Placenta?	CO1	K1
i. What is *in vitro* fertilization?	CO1	K1
j. Briefly explain the Rhythm method of contraception with reference to safe and danger period in mensrual calender.	CO1	K2

PART – B **(10 x 5 = 50 Marks)**

Answer ***ANY FIVE*** questions	Marks	CO #	Blooms Level
2. a. Explain Flexible learning.	5	CO1	K2
b. Explain Pavlov experiment on classical conditioning.	5	CO1	K2
3.a. Explain different type of positive orientation with examples.	5	CO2	K2
b. Differentiate between Positional Orientation and Zonal Orientation.	5	CO2	K4
4. a. What do you mean by courtship?	5	CO2	K1
b. What are the different advantages of courtship Behaviour?	5	CO3	K1
5.a. What is Biological clock?	5	CO3	K1
b. How does a biological clock work?	5	CO4	K1
6. a. What do you mean by fertilization?	5	CO4	K1
b. Explain mechanism of fertilization.	5	CO1	K1
7.a. Explain anterior-posterior polarity in terms of differential gene expression in Drosophila.	5	CO1	K1

b.	Explain the role and regulation of bicoid, hunchback, nanos and caudal gene during development of Drosophila.	5	CO1	K1
8. a.	Explain Menstrual cycle.	5	CO1	K1
b.	Discuss Infertility in male and Females.	5	CO1	K1