Reg. No										

AY - 23

GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR

(GIET UNIVERSITY)

M. Sc. (Third Semester) Regular Examinations, December – 2024

22ASPE305 – Ethology and Development 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. Define primary organiser.	CO3	K1
b. Explain nuclear cloning.	CO4	K4
c. Distinguish between courtship and mating with suitable example.	CO1	K3
d. Explain pluripotency.	CO3	K4
e. Distinguish between endocrine and exocrine glands?	CO1	K3
f. Write the use of liquid nitrogen.	CO3	K4
g. Define biological clock.	CO2	K2
h. Explain artificial insemination.	CO4	K2
i. Explain regeneration.	CO4	K3
j. Define pheromone.	CO2	K2

PART – B **(10 x 5 = 50 Marks)**

Answer ***ANY FIVE*** questions	Marks	CO #	Blooms Level
2. a. Discuss about the morphogenetic movements involved in gastrulation and significance of gastrulation	5	CO3	K3
b. Write a note on migration in birds.	5	CO4	K3
3.a. Write a note on pheromone with suitable examples.	5	CO3	K4
b. Mention the hormones involved during menstrual cycle with appropriate diagram.	5	CO3	K3
4. a. Write the types of cleavage.	5	CO4	K4
b. Write a note on the social behaviour of insects.	5	CO2	K3
5.a. Write a note on learning.	5	CO1	K4
b. Write a note on the foetal membrane and its development.	5	CO4	K3
6. a. Elaborate about fertilization and significance of fertilization for development.	5	CO3	K3
b. Write a note on Placenta.	5	CO4	K2

7.a.	Discuss about birth control and its importance in day today life.	5	CO4	K3
b.	Describe about IVF with suitable diagram.	5	CO4	K2
8. a.	Write a note on social behaviour on primates.	5	CO2	K3
b.	Discuss with suitable examples about courtship and mating in vertebrates.	5	CO2	K3