



**GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY,  
ODISHA, GUNUPUR  
(GIET UNIVERSITY)**

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

**22ASPE302– Biology of Chordata**

(M.Sc.- Life Science (AS))

Time: 3 hrs

Maximum: 60 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. Classify Chordata up to class with one example of each class.	1	3
b. What are the different Era and their respective Periods in Phenozoic Eon?	1	2
c. What is foam nest in fish?	2	1
d. What is mermaid purse in sea?	2	2
e. Classify Reptilia up to the order with an example from each.	3	3
f. Differentiate between Anapsid and Diapsid skull pattern in Reptilia.	3	3
g. Write the name of two completely aquatic mammals.	4	1
h. What are different types of teeth according to their attachment to the jaw bone?	4	1
i. Who are the ancestors of Amphibia and why do they need to exhibit amphibious life?	2	2
j. What are different types of walking modification in mammals?	4	2

**PART – B**

**(10 x 5 = 50 Marks)**

Answer **ANY FIVE** questions

	Marks	CO #	Blooms Level
2. a. How do geological time scale is prepared?	3	1	3
b. Make the geological time scale and show different major events in the animal worlds.	7	1	2
3.a. Make an outline classification of Chordata.	5	1	2
b. Describe the origin and ancestry of Chordata.	5	1	2
4. a. Classify Amphibia and describe general characteristics of Amphibians.	5	2	3
b. Discuss the origin and evolution of Amphibia?	5	2	2
5.a. Diagrammatically show the structural peculiarities of Gymnophiona with examples.	4	2	3
b. Describe the general characteristics of Gymnophiona.	6	2	2
6. a. Classify reptiles with different skull pattern.	3	3	3

b.	Describe evolution and adaptive radiation in reptiles.	7	3	2
7.a.	Write an essay on distribution and structure of Sphenodon.	5	3	2
b.	Discuss the affinities of Sphenodon with other groups of reptiles.	5	3	2
8. a.	Write the general characteristics of mammals.	4	4	1
b.	Give an essay on aquatic mammals.	6	4	2