

Name. _____		Printed Pages:01		
Student Admn. No.: _____				
School of _____ Summer Term Examination – July - August 2024 [Programme: B.Sc. Biomed. Sc] [Semester: V) [Batch:]				
Course Title: Evolutionary & Development Biology			Max Marks: 100	
Course Code: C2UA503T			Time: 3 Hrs.	
Instructions:	1. All questions are compulsory. 2. Assume missing data suitably, if any.			
			K Level	COs
SECTION-A (15 Marks)			5 Marks each	
1.	Explain the theory of evolution proposed by Lamarck with suitable example?			5
2.	Differentiate between analogous and homologous structures			5
3.	How do palaeontological evidences support evolution of organisms on earth			5
SECTION-B (40 Marks)			10 Marks each	
4.	How can Hardy-Weinberg equilibrium be affected? Explain giving three reasons.			10
5.	How do homologous organs represent divergent evolution? Explain with the help of a suitable example.			10
6.	Explain natural selection with help of example.			10
7.	Discuss the components of the Modern Synthetic Theory of Evolution			10
SECTION-C (45 Marks)			15 Marks each	
8.	Discuss the concepts of "Deme," "gene pool," "gene frequency," and "genotype frequency" as they relate to population genetics.			15
9.	Compare and contrast the processes of cleavage and gastrulation in early embryogenesis,			15
10	Discuss the concept of k-adaptation and r-adaptation strategies and how they relate to the life history and reproductive patterns of species.			15