

Reg. No.:



Name:

University of Kerala

U8921

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

GEOLOGY

UK2DSCGLY150 - Evolution of life on earth

Academic Level: 100-199

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	What is the branch that studies ancient climates based on geological records?	RE	1
2	The extinction event that marked the end of the Paleozoic Era is known as: Options : A)Permian-Triassic Extinction B)Devonian Extinction C)Cretaceous-Paleogene Extinction D)Ordovician Extinction	RE	2
3	Which principle suggests that layers of rock extend in all directions unless they encounter a barrier?	UN	2
4	Which media preserve soft body parts as part of fossilisation	UN	1
5	What is the term for the abrupt extinction of species at the end of the Permian?	UN	2
6	The progression of suture complexity in ammonites reflects: Options : A)Evolutionary adaptation B)Change in body size C)Reduction in chamber size D)Decrease in shell material density	UN	3

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	Explain the suture patterns in ammonoids	UN	3
8	What factors are believed to contribute to mass extinctions?	UN	1
9	Sketch the Thorax of a trilobite	AP	3
10	What type of organisms are responsible for the formation of stromatolites?	AP	2

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer.7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A)	AP	1, 3

Qn No.	Question	CL	CO
	Explain the major branches of palaeontology and their contributions to understanding the history of life on Earth. OR B) Which plant fossils would you find in Lower and Upper Gondwana rocks? Describe the morphology of these plants with diagram.		
12	A) Analyze stratigraphy and justify its importance in geology? OR B) Deduce the conditions favourable for the preservation of fossils and discuss the different methods of fossilization.	AN	1, 3
13	A) Evaluate the principle of faunal succession and its contribution to biostratigraphy? OR B) Justify the difference between a period and an epoch in the geologic time scale. Explain the major life record in the geological time scale	EV	1, 1
14	A) Create a diagram of the geological time scale, highlighting key divisions such as eons, eras, periods, and epochs. Illustrate the major mass extinction events and their significance in marking boundaries in the time scale. OR B) Create a diagram of Ammonite and discuss its distinct morphological features in detail	CR	1, 3