

Reg. No.:



Name:

University of Kerala

U8923

Second Semester FYUGP Degree Examination, April 2025

Discipline Specific Core Course

GEOLOGY

UK2DSCGLY170 - A brief history of 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	Mention the group of plants believed to be the ancestors of land plants?	RE	3
2	State the atmospheric layer closest to Earth's surface	RE	1
3	Assertion (A): The Earth is approximately 4.6 billion years old. Reason (R):Radiometric dating of meteorites and the oldest Earth rocks provides evidence for this age Options : A)Both A and R is incorrect. B)Both A and R is correct. C)Both A and R are true, and R is the correct explanation of A. D)Both A and R are true, and R is not the correct explanation of A	UN	2
4	Recall the name of the spores that provide the first evidence of plants on land from the mid-Ordovician age.	UN	3
5	Name the frozen water regions of Earth	UN	1
6	Assertion (A): Carbon-14 dating is used to determine the age of ancient rocks. Reason (R): Carbon-14 has a half-life of 5,730 years and is used for dating recent materials. Options : A)A is true ,but R is false B)A is false, but R is true. C)Both A and R are true D)Both A and R are false	UN	2

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	Write any two conditions for fossilization.	UN	3
8	Match the following layers of the Earth atmosphere and its Features a) Troposphere i) Ionosphere is part of this layer. b) Stratosphere ii) Meteorites burn up in this layer on entering from the space. c) Mesosphere iii) It contains a layer of ozone gas.	UN	2

Qn No.	Question	CL	CO
	d) Thermosphere iv) Almost all the weather phenomena occur in this		
9	Describe two important roles of the atmosphere	AP	3
10	Differentiate between Gymnosperms and Angiosperms with an example.	AP	3

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) Write a brief account on the various discontinuities inside the Earth OR B) Compare the different methods used to determine the age of the Earth, highlighting their advantages and limitations.	AP	4, 4
12	A) Discuss the evolution of the layered structure of the Earth along with the formation of the lithosphere, hydrosphere and atmosphere. OR B) Briefly explain about the Precambrian life.	AN	4, 3
13	A) Beyond the primary cause, other factors might have contributed to the dinosaur extinction. Justify your answer. OR B) Evaluate the importance of the hydrosphere in supporting life on Earth. 1. How does the hydrosphere regulate Earth's temperature? 2. What role does the hydrosphere play in the water cycle? 3. How do human activities impact the hydrosphere	EV	3, 1
14	A)	CR	4, 3

Qn No.	Question	CL	CO
	Construct a simplified geological time scale, highlighting the major biological and geological events in Earth's history. OR B) Create the timeline of early land plant evolution from algae to vascular plants.		