Total number of printed pages-4

3 (Sem-3/CBCS) GLG HC 3

2021

(Held in 2022)

GEOLOGY

(Honours)

Paper: GLG-HC-3036

(Palaeontology)

Full Marks: 60

Time: Three hours

The figures in the margin indicate full marks for the questions.

- 1. Choose the correct option: 1×7=7
 - (a) Taphonomy is the study of:
 - (i) environmental process when the specimen was living
 - (ii) post-morten processes that influenced the sediment
 - (iii) chemical composition of the fossil
 - (iv) internal structure of the fossil

(b)		ich of the following shows sinistral
	(i)	Trochus
(c)	(ii)	Murex
	(iii)	Physa
	(iv)	Natica
	Wh	ich is known as blind trilobite?
	(i)	
	(ii)	Microdiscus
		Harpelida
		Proetida
	The	organism that can be divided into equal halves is
(e)		Brachiopoda
	(ii)	Pelecypoda
	(iii)	Gastropoda
	(iv)	Cephalopod
	Whi	ch of the following is a primate
	(i)	Hipparian
	(ii)	Ramapithecus
	(iii)	Eqque
	(iv)	Stegolophodon
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	(f)	Fossil ammonite indicates age.
		(i) Cretaceous
		(ii) Tertiary
		(iii) Carboniferous
		(iv) Cambrian
	(g)	The appearance of dinosaur started in
		(i) Cretaceous period
		(ii) Triassic period
		(iii) Jurassic period
		(iv) Carboniferous period
2.	Wri	te brief notes on the following: 2×4=8
	(a)	Index
	(b)	Taxonomy
	(c)	Sauropod
	(d)	Pedicle opening
3.	Wri	te short notes on any three: 5×3=15
	(a)	Extinction of dinosaurs
	(b)	Functional adaptation in trilobites
		Species concept
	(d)	Altered mode of preservation of fossil
	(e)	
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- 4. Answer the following questions: 10×3=30
 - (a) What is orthogenesis? Describe the evolutionary history of Eqqus with respect to intercontinental migration and write the proper phylogeny in a tabular format. 2+(6+2)=10

Or

Describe the significance of ammonites in Mesozoic biostratigraphy and their paleobiogeographic implications.

8+2=10

(b) What is organic evolution? Describe different theories of organic evolution. Write a note on paleontological evidences of organic evolution.

2+3+5=10

Or

Write a note on paleo-environmental and evolutionary importance of fossil.

10

(c) With neat sketch, describe the morphological characteristics of Bivalves and add a note on their biostratigraphic significance. 8+2=10

Or

Explain paleobiogeography, dispersal and geographic barrier. What are the factors controlling dispersal of organism?

6+4=10