

ANSWER KEY

SECOND YEAR HIGHER SECONDARY EXAMINATION MARCH 2022

PART-I/II/III

SUBJECT: GEOLOGY

CODE NO: 847/847A 5429

VERSION: P

60 SCORES

2 HOURS

Qn. No	Sub Qns	Answer Key/Value Points	Score	Total Score
PART - I				
A 1		Granite	1	1
2		Hematite	1	1
3		Anthracite	1	1
4		methane	1	1
5		Focus	1	1
6		Risk	1	1
7		Limestone	1	1
8		Seismogram	1	1
9		Epicerter	1	1
B 10		contact metamorphism	1	1
11		Hydrothermal process	1	1
12		Mumbai High	1	1
13		Hinge	1	1
PART - II				
A 14		Ore - A mineral from which metal is extracted.	1	2
		Garigue - worthless non metallic mineral associated with ore	1	
15	a)	Calorific value - Amount of heat produced by the burning of standard unit of coal	1	2
	b)	Coalification - conversion of peat into coal	1	

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16		Large ^{mineral} crystal surrounded by small mineral grains, large mineral grain is called phenocryst	2	2
17	a)	Hazard - a situation that poses a level of threat to life, health, property, services, socio economic disruption or environmental damage Disaster - serious disruption to the functioning of the community causing wide spread material economic or environmental losses	1 1	2
18		<u>B</u> * Keep calm and quickly move to higher ground away from the coast * prepare for a tsunami emergency * Never go down beach at the time of tsunami * Stay out of danger until an ALL-CLEAR is issued by authority * Give full cooperation to government rescue agencies * Do not stay in houses located in low lying areas	2	2
19		1) Circum pacific Belt 2) The mediterranean and Trans-Asian Himalayas belt.	2	2
20		primary effect - occur as a result of the Earth process itself eg: damage due to flood; collapse building due to earthquake Secondary effects - occur only because of primary effect eg Fire due to earthquake.	2	2

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21		<u>A. PART II</u> Mud cracks - Sedimentary structure formed drying out of wet sediments Rain drop markings - small and shallow pit created by the impact of rain drops Ripple marks - series of parallel or sub parallel ridges caused by the directional movement of wind and water	1 1 1	3
22		Heat / Temperature Pressure Chemically active fluids	3	3
23		India's Rare Earths Ltd channarayana monazite Kollam Malabar Cements Ltd Wadaya Limestone Palakkad Excel Gases Industry Alapuzha Quartz Sand	3	3
24		deepening of river channel, river bank erosion, subsidence of river bank, lowering of groundwater table, saltwater intrusion, damage to bridges and aquatic life.	3	3
25		The flow of crude petroleum from the source rock to reservoir rock. until they should be trapped by suitable trap / cap rock	3	3
26		a) Fossilization - process of formation of fossils from the remains of organisms b) i) organisms must have preservable hard parts like bones, and teeth. ii) organisms must be buried rapidly by sediments.	1 2	3

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27		Normal fault - hanging wall moves up relative to foot wall Reverse fault - hanging wall moves down relative to foot wall	3	3
		<u>PART IV</u>		
		<u>A.</u>		
28		Groundwater pollution - chemicals and Fertilizers at leakage from septic system, dumping of hazardous waste, leakage from storage tanks and landfills	4	4
29		Causes of flooding Excessive heavy rainfall, less infiltration, melting of snow Consequences - damage bridges, collapse of building, destruction of livestock, pet and agriculture land, concentration of garbage, toxic pollutants, cause damage to human life and properties. out break of epidemic, disruption transportation and communication system	2	4
30		Preparedness } Explanation Response Recovery mitigation	4	4
31		Ceramic Industry - making potteries, bath tubs Sanitaries utensils, electric insulating material, tiles, bricks, refractory products Jiller is paint, rubber, paper, rubber cement, tooth paste, deodorant powder medicine and making idols	4	4

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32.		<u>B</u> Recycling - collecting and processing the used items Substitution - Replacement of a 'very scarce mineral with more abundant one eg. Aluminium is used instead of copper	4	4
33		Shallow focus earthquake - depths 0-70km Intermediate focus earthquake depths 70-350km deep focus earthquake - depth 350-700km	4	
34.		Peat - Carbon content. 55-64 Lignite - 72-95 Bituminous coal - 84-94 Anthracite. - 93-98 (plus explanation)	6	6
35		Rock cycle - Over the course of time rocks can transform one type into another. It shows how the earth's rocks are changed again and again proper diagram	2 4	6
36		Effects on Lithosphere Deforestation, land degradation, land subsidence, land slide, accumulation of quarry waste Effects on Hydrosphere water pollution Dead river drainage, lowering of groundwater table Effects of Atmosphere - Air, noise and sound pollution Effects on Biosphere - damage to habitats and biodiversity.		