FIRST YEAR HIGHER SECONDARY EXAMINATION MARCH 2023
PART III GEOGRAPHY ANSWER KEY FY437

Qn No	Value Points	Split Score	Score
1	The study of landforms, their evolution and related processes	2	2
2	Erosional landforms - Gorge, V shape valley Depositional landforms - Alluvial Fans, Deltas	½+½ ½+½	2
3	• acts like a blanket allowing the earth neither to become too cold nor too hot • contributes to the stability and instability in the air	1 1	2
4	Cloud is a mass of minute water droplets or tiny crystals of ice. These are formed by the condensation of the water vapour in free air at considerable elevations. **OR** Dust and salt particles act as hygroscopic nuclei around which water vapour condenses to produce clouds	1 1	2
5	(a) 82°30' E (b) Tropic of Cancer(23 ½° N)	1 1	2
6	• Restriction on the construction and other developmental activities such as roads and dams • limiting agriculture to valleys and areas with moderate slopes • control on the development of large settlements in the high vulnerability zones • promoting large-scale afforestation programmes • construction of bunds to reduce the flow of water • Terrace farming **(Any 2 points)**	1+1	2
7	The number and variety of organisms found within a specified geographic region.	2	2
8	(a) Troposphere (b) Stratosphere	1 1	2
9	Temperature Precipitation	1 1	2

10	(a) the temperature of surface water decreases from the equator towards the poles (b) warm ocean currents raise the temperature in cold areas while the cold currents decrease the temperature in warm ocean areas	1 1	2
11	• Analysis of properties of matter (temperature, pressure, density) • Meteors • Gravitation • Magnetic field • Seismic activity	3	3
12	- The lava that cools within the crustal portions assumes different forms Batholith, Lacolith, Lapolith, Phacolith, Dyke, Sill and Sheet To write the names and one point each **(Any 2)**	1 1+1	3
13	Divergent boundaries Convergent boundaries Transform boundaries To identify To explain about any one	½×3=1½ 1½	3
14	• proposed by Hess (1961) • constant eruptions at the crest of oceanic ridges cause the rupture of the oceanic crust and the new lava wedges into it, pushing the oceanic crust on either side. The ocean floor, thus spreads.	3	3
15	Heat is transferred in the atmosphere in different ways such as (a) Conduction (b) Convection (c) Advection	1 1 1	3
16	(i) the rotation of earth on its axis; (ii) the angle of inclination of the sun's rays; (iii) the length of the day; (iv) the transparency of the atmosphere; (v) the configuration of land in terms of its aspect **(Any 3 points)**	1+1+1	3
17	The weight of a column of air contained in a unit area from the mean sea level to the top of the atmosphere is called the atmospheric pressure.	1	

	The variation in atmospheric pressure causes wind. **OR** wind moves from high pressure area to low pressure area	2	3
18	(i) The periodical rise and fall of the sea level, once or twice a day, mainly due to the attraction of the sun and the moon (ii) Waves are the energy which moves across the ocean surface due to wind (iii) Ocean currents are the continuous flow of huge amount of water in a definite direction	1 1 1	3
19	• found in the western slope of the Western Ghats, hills of the northeastern region and the Andaman and Nicobar Islands. • found in warm and humid areas with an annual precipitation of over 200 cm and mean annual temperature above 22^0 C • well stratified, with layers closer to the ground and are covered with shrubs and creepers, with short structured trees followed by tall variety of trees • trees reach great heights up to 60 m or above • There is no definite time for trees to shed their leaves, flowering and fruition. As such these forests appear green all the year round. • Species found in these forests include rosewood, mahogony, aini, ebony, etc. **(Any 3 points)**	1+1+1	3
20	The process of formation of the fronts is known as frontogenesis. (a) Cold front (b) Warm front (c) Stationary (d) Occluded	1 ½×4=2	3
21	(i) In the beginning, all matter forming the universe existed in one place in the form of a "tiny ball" (singular atom) with an unimaginably small volume, infinite temperature and infinite density. (ii) At the Big Bang the "tiny ball" exploded violently. This led to a huge expansion. It is now generally accepted that the event of big bang took place 13.7 billion years before the present. The expansion continues even to the present day. As it grew, some	2 2	4

	energy was converted into matter. There was particularly rapid expansion within fractions of a second after the bang. Thereafter, the expansion has slowed down. Within first three minutes from the Big Bang event, the first atom began to form.		
22	Weathering is defined as mechanical disintegration and chemical decomposition of rocks through the actions of various elements of weather and climate Erosion involves acquisition and transportation of rock debris. **OR** When massive rocks break into smaller fragments through weathering and any other process, erosional geomorphic agents like running water, groundwater, glaciers, wind and waves remove and transport it to other places depending upon the dynamics of each of these agents	2 2	4
23	A. Stalactites - hang as icicles of different diameters B. Stalagmites - rise up from the floor of the caves due to dripping water	1+1 1+1	4
24	West coastal plains: • submerged coastal plain • provides natural conditions for the development of ports and harbours. • Ports include Kandla, Mumbai, Kochi etc • Extending from the Gujarat coast in the north to the Kerala coast in the south, the western coast may be divided into following divisions – the Kachchh and Kathiawar coast in Gujarat, Konkan coast in Maharashtra, Goan coast and Malabar coast in Karnataka and Kerala respectively. • The western coastal plains are narrow in the middle and get broader towards north and south. • The rivers flowing through this coastal plain do not form any delta. • The Malabar coast has got certain distinguishing features in the form of 'Kayals' (backwaters), which are used for fishing, inland navigation and also due to its special attraction for tourists (**Any 2 points)** East coastal plains: • Emergent coast • There are well developed deltas here, formed by	 1+1	 4

	the rivers flowing eastward in to the Bay of Bengal. These include the deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri. • Because of its emergent nature, it has less number of ports and harbours. The continental shelf extends up to 500 km into the sea, which makes it difficult for the development of good ports and harbours. • Ports include Chennai, Vishakhapatnam, Paradeep, Kolkata etc **(Any 2 points)**	1+1	
25	Any relevant points related to Himalayan rivers	4	4
26	(i) the cold weather season (ii) the hot weather season (iii) the southwest monsoon season (iv) the retreating monsoon season. To explain about any one **(Any 4 points)**	½×4=2 ½×4=2	4
27	(a) Anaimudi (b) Barren Island (c) The Godavari river (d) Sunderbans To identify To locate	½×4=2 ½×4=2	4