FIRST YEAR HIGHER SECONDARY EXAMINATION – **MARCH 2024**

GEOGRAPHY – ANSWER KEY

FY-455

VERSION - C

Q.No.	Sub. Qn	Value Points	Split Score	Total Score
1		A. Nilgiri Hills		1
2		A. Diastrophism		1
3		D. Water spouts		1
4		B. Bhabar		1
5		B. Tropical Thorn Forests		1
6		a- nimbus b- cirrus c-cumulus d-stratus	1/2 * 4	2
7		= latitude = unequal distribution of land and water = Prevailing wind = ocean currents	1/2 * 4	2
8		1. genetic diversity 2. species diversity	1* 2	2
9		= cocos plate = Nazca plate = Arabian plate = Philippine plate = Carolin plate = Fuji plate (Any 4 plates)	1/2 * 4	2
10		1. heating by solar energy 2. wind 3. gravity 4. coriolis force	1/2 * 4	2
11		**VALLEY BREEZE** In mountainous regions, during the day the slopes get heated up and the air from the valley blows up the valley. This is known as the valley breeze. **MOUNTAIN BREEZE** During the night the slopes get cooled and the dense air descends into the valley as the mountain wind	1 + 1	2
12		1. Temperature 2. Precipitation	1 + 1	2
13		**Meteorological Drought** : It is a situation when there is a prolonged period of inadequate rainfall marked with mal-distribution of the same over time and space. **Hydrological Drought** : It results when the	1 + 1	2

		availability of water in different storages and reservoirs like aquifers, lakes, reservoirs, etc.falls below what the precipitation can replenish.		
14		1. spring tide 2. neap tide	1 +1	2
15		b- regional development d- regional planning f- meso regional studies h- rural planning / country	1/2 * 4	2
16		Western ghats - local names =comparatively higher elevation = continuous range of hills = highest peak is Anamudi = average height is 1500 mtr. (Or any other relevant points)	1+1+ 1	3
17		**1. Conduction** (1/2) When two bodies of unequal temperature are in contact with one another, there is a flow of energy from the warmer to cooler body. This process is called conduction **2. Convection** (1/2) The process of vertical heating of atmosphere is known as Convection. **3. Advection** (1/2) The processes of the transfer of heat through horizontal movement of air is called advection	1+ 1+ 1	3
18		i. some specific areas where the seismic waves are not recorded ii. P waves iii. 145°	1+ 1+ 1	3
19		**1. Pressure gradient force** (1/2) The rate of change of pressure with respect to distance is the pressure gradient force and this produce a force **2. Frictional force** (1/2) It affect the speed of the wind and it influence generally up to an elevation of 1-3 km. **3. Coriolis force** (1/2) Coriolis force deflects the wind to the right direction in the northern hemisphere and to the left in the southern hemisphere.	1+ 1+ 1	3
20		= Glacier – cirque – morain = Running water – 'V' shaped valley – meander = Wind – mushroom rock - barchan	1 (1/2+1/2) 1 (") 1 (")	3
21		(i) Monsoon is that axis around which		

		revolves the entire agricultural cycle of India. ii) Except Himalayas all the parts of the country have temperature above the threashold level to grow the crops or plants throughout the year. (iii) Regional variations in monsoon climate help in growing various types of crops. (iv) Variability of rainfall brings droughts or floods every year in some parts of the country. v) Agricultural prosperity of India depends very much on timely and adequately distributed rainfall vi) Sudden monsoon burst creates problem of soil erosion over large areas in India. vii) Winter rainfall in north India is highly beneficial for rabi crops. viii) Regional climatic variation in India is reflected in the vast variety of food, clothes and house types. (Any 3 points given above)	1+ 1+ 1	3
22		Direct and indirect sources **Direct sources** – Mining,ocean drilling project,volcanic eruption (any 2) **Indirect sources** - Analysis of properties of matter, Meteors, Gravitation, Magnetic field, Seismic activity(any 2)	1 (1/2 each) 1 (1/2 each) 1 (1/2 each)	3
23		Tropical deciduous forests **characteristics** = also known as monsoon forests = spread over the regions receive rainfall between 70 – 200 cm. = two types- moist deciduous forests and dry deciduous forests = main species – teak,sal,tendu, palas etc. (any 2 relevant points)	1 1+ 1	3
24		**Insolation-** The energy received by the earth from sun in the form of short waves **Terrestrial radiation** – The earth radiates energy to the atmosphere in the form of long waves **Albedo of the earth** – The reflected amount of radiation	1+ 1+ 1	3
25		**Soil forming factors** 1.parent material 2. topography 3. climate 4. biological activity 5. time	1+ 1+ 1	3

		(To explain any 3 of them)		
26		Drumlin – smooth oval shaped ridge like feature composed of glacial till Plunge pools – large and deep holes at the base of waterfall Barchans – crescent shaped dunes	1+ 1+ 1	3
27		**Spreading sites** = The sites where the plates move away from each other are called spreading sites = related to the divergent plate boundaries = new crust is generated = eg- Mid Atlantic Ridge (Answer any 2 points from the above) **Subduction zone** = The location where sinking of a plate occurs is called a subduction zone = related to convergent plate boundaries = Area where the crust is destroyed as one plate dived under another = There are three ways in which convergence can occur. (Answer any 2 points from the above)	2 + 2	4
28	a b	Edwin Hubble **Stage 1** 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 **Stage 2** At the Big Bang the "tiny ball" exploded violently and led to huge expansion which took place 13.7 billion years before the present **Stage 3** Within 300,000 years from the Big Bang, temperature dropped to 4,500 K (Kelvin) and gave rise to atomic matter	1 1 1 1	4
29		- largest river basin of the world - also known as Sindhu - western most of the Himalayan rivers - origin from Bokhar Chu glacier - in Tibet it is known as "Singi Khamban" - flows in India only through Jammu and Kashmir - tributories- Satlaj, Beas, Ravi, Jhelum, Khurram, Gomal etc (Any 4 points from the above)	1* 4	4
30	a	Troposphere,stratosphere,mesosphere,thermosphere	2	

	b	- The troposphere is the lowermost layer of the atmosphere - Its average height is 13 km - All changes in climate and weather take place in this layer - The temperature in this layer decreases at the rate of 1°C for every 165m of height (Normal lapse rate) - This is the most important layer for all biological activity (Any 2 characteristics from the above points)	2	4
31	a	Tropic of Cancer		1
	b	Sundarban delta		1
	c	Lakshadweep islands		1
	d	Anamudi		1

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