


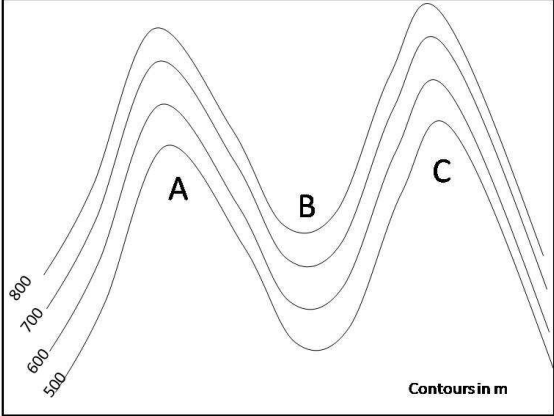
Answers to the questions are given in the file” QUESTION PAPER-2010 WITH ANSWERS”.

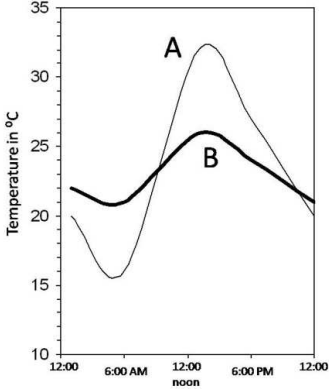
ALL QUESTIONS CARRY EQUAL WEIGHTAGE.

Q. No.	Questions	Answers
1.	The age of the Earth is _____ million years. (A) 3900; (B) 4200; (C) 4600; (D). 4800	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
2.	Which is the most abundant element in the Earth’s crust? (A) silica; (B) iron; (C) oxygen; (D) aluminium	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
3.	Which is the most common mineral in the Earth’s crust? (A) quartz; (B) mica; (C) amphibole; (D) feldspar	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
4.	_____ is commonly referred to as “fool’s gold”. (A) pyrite; (B) chalcopyrite; (C) pyrrhotite; (D) none of these – It is a joke!	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
5.	What is emery powder used as? (A) A filler in ceramic material; (B) For the manufacture of fine crystal glass (C) As abrasive (D) A mixture in paints	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
6.	The general process by which rocks and minerals are broken down at or near the Earth’s surface is called _____. (A) weathering; (B) denudation; (C) erosion; (D) corrosion	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
7.	Which is the most widespread mineral group distributed in sedimentary, igneous and metamorphic rocks? (A) quartz; (B) feldspars; (C) clay minerals; (D) carbonates	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
8.	_____ rocks form at great depths inside the earth. (A) volcanic; (B) plutonic; (C) hypabyssal; (D) hypogene	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
9.	_____ is the principal raw material for manufacturing steel. (A) Pyrite; (B) Magnetite; (C) Bauxite; (D) A and B	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
10.	Limestone is used for manufacturing _____. (A) bricks; (B) cement; (C) glass; (D) A and C	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
11.	India is an exporter of _____. (A) Diamonds; (B) Gold; (C) Copper ore; (D) Iron ore	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
12.	An igneous rock containing coarse mineral grains indicates _____. (A) Slow cooling; (B) Fast cooling; (C) Not related to cooling rate; (D) magma composition	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

13.	Sedimentary rocks form because of _____. (A) chemical precipitation; (B) sediment deposition; (C) A and B; (D) Weathering	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
14.	Metamorphic rocks form due to the action of _____. (A) Water; (B) Pressure; (C) Temperature; (D) B and C	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
15.	The fossils recovered from a sedimentary rock are shown below.  These are, A) Brachiopod and Ammonite; C) Coral and Lamellibranch; B) Ammonite and Coral; D) Lamellibranch and Ammonite	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
16.	The possible depositional environment of the rock containing fossils shown above was A) Fluvial; B) Aeolian; C) Glacial; D) Marine	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
17.	Which of the following is a non-clastic sedimentary rock? A) Conglomerate; B) Chalk; C) Sandstone; D) Shale	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
18.	During which geological period did most of the coal deposits form? A) Ordovician; B) Carboniferous; C) Jurassic; D) Pleistocene	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
19.	The oldest fossil recorded on the earth is about _____ billion years old. A) 3; B) 2; C) 1; D) 0.5	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
20.	The clasts of a sedimentary rock are between 5 mm and 10 mm in size. So, the rock will be named as _____. A) Shale; B) Sandstone; C) Conglomerate; D) Siltstone	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
21.	The Deccan volcanism in India took place _____ million years ago. A) 55; B) 65; C) 75; D) 85	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
22.	A typical sedimentary rock indicating glaciation in the past is A) Shale; B) Tillite; C) Limestone; D) Lignite	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

23.	A large number of animals got extinct at the end of the Cretaceous time. This extinction was caused by _____. A) Meteorite impact; B) Tsunami; C) Volcanism; D) A and C	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
24.	If a piece of rock is crushed into very fine particles, it leads to _____. A) An increase in surface area; B) A decrease in surface area; C) An increase in the volume of rock; D) A decrease in the volume of rock	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
25.	Rocks containing fossils of _____ would be the oldest. A) Dinosaur bones; B) Trilobites; C) Bird bones; D) Woolly mammoth bones	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
26.	Which of the following can form in the shortest length of time? A) Soil profile; B) Coral reef; C) Volcano; D) River valley	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
27.	Which of the following statements about transpiration and river runoff in India is correct? A) The amount of water that is lost through vegetation is greater than the amount of water carried away by rivers; B) The amount of water carried away by rivers is at least three orders of magnitude higher than the amount of water that is lost through vegetation; C) The amount in each case is approximately the same; D) The amount of water that escapes through vegetation is insignificant compared to the amount of water carried away by rivers.	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
28.	On an eroded sedimentary dome, the drainage pattern is usually _____. A) Dendritic; B) Trellis; C) Annular; D) Parallel	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
29.	Marine influence upon climate is responsible for A) an increase in the annual temperature range B) an increase in the annual rainfall totals C) a decrease in the annual temperature range D) a decrease in the annual rainfall totals	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
30.	Most tropical cyclones originate _____. A) between 0° and 5° north and south of the equator B) in the centers of sub-tropical highs C) between 10° and 20° D) to the west of westerly winds	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
31.	Rain-shadow zone occurs on the lee (or leeward side) of a mountain because _____. A) adiabatic warming lowers the relative humidity B) air forced to rise is warmed by the adiabatic process C) condensation has a drying effect upon the air D) no water vapour remains in the descending air.	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

<p>32.</p>	<p>The temperature is minimum typically _____.</p> <p>A) just after sunset; B) around midnight; C) about 2:00 to 3:00 am; D) just before sunrise</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>33.</p>	<p>The following diagram shows the contour pattern of an area. Identify the features labeled A, B and C.</p>  <p>P) A, B and C represent valleys. Q) A, B and C represent spurs. R) A and C represent valleys and B is a spur. S) B is a valley and A and C are spurs.</p>	<p>P Q R S</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>34.</p>	<p>Which lawn would need more frequent watering?</p> <p>A) One with clayey soil; C) One with silty soil; B) One with sandy-silty loam soil; D) One with sandy soil</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>35.</p>	<p>Movement of groundwater is most rapid _____.</p> <p>A) Within aquicludes B) Beneath streams in valley bottoms C) Where the land surface is highest D) Where the water table is highest</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>36.</p>	<p>Crevasse splays are associated with</p> <p>A) Glaciers; B) Waterfalls; C) Natural levees; D) Moraines</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>37.</p>	<p>Which of the following statements about tides is FALSE?</p> <p>A) Most places on Earth experience two high and two low tides each day B) Most places on Earth experience one high tide and one low tide each day C) Each month there are two spring tides and two neap tides D) The primary body that influences the tides is the Moon</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>

<p>38.</p>	<p>The following graph shows the daily temperature cycle at a station for two days.</p>  <p>Which of the following statements is correct?</p> <p>P) Graphs A and B represent the temperature cycle of an overcast day Q) Graphs A and B represent the temperature cycle of a clear day R) Graph A represents the temperature cycle of a clear day and graph B represents the temperature cycle of an overcast day S) Graph A represents the temperature cycle of an overcast day and Graph B represents the temperature cycle of a clear day</p>	<p>P Q R S</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>39.</p>	<p>Which of the following criteria is NOT used to establish marine life zones?</p> <p>A) Availability of sunlight; B) Distance from shore; C) Seawater depth; D) Seawater salinity</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>40.</p>	<p>Adiabatic cooling occurs when a parcel of air</p> <p>A) Rises without exchanging heat with the surroundings B) Rises on exchanging heat with the surroundings C) Rises from equator to poles D) Rises from ground to mountain top</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>41.</p>	<p>Psychrometer is an instrument to measure</p> <p>A) Rainfall; B) Humidity; C) Pressure; D) Wind direction</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>42.</p>	<p>Albedo is the fraction of</p> <p>A) Greenhouse gas in the atmosphere B) Moisture content of the atmosphere C) Radiation reflected by the earth D) Momentum received by the atmosphere</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
<p>43.</p>	<p>Which of the following is not a tropical storm?</p> <p>A) Cyclone; B) Hurricane; C) Typhoon; D) Tornado</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>

44.	Radiation fog occurs during a _____. A) Long night with clear sky B) Long night with cloudy sky C) Long day with clear sky D) Long day with cloudy sky	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
45.	Dynes / cm ² is the unit of _____. A) Force; B) Acceleration; C) Momentum; D) Pressure	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
46.	A northerly wind means a _____. A) Wind coming from the north B) Wind going towards the north C) Wind in the northern hemisphere D) Wind in northern India	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
47.	The most abundant gas in the atmosphere is _____. A) Oxygen; B) Hydrogen; C) Nitrogen; D) Carbon dioxide	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
48.	The temperature of a dry air parcel at a hill top is 30°C. If the adiabatic lapse rate of dry air is 1°C/100 m, what will be the temperature of the air at 1 km height from the top of the hill? A) 20°C; B) 25°C; C) 30°C; D) 40°C	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
49.	For a black body radiation, which of the following relations is correct? (E is the energy and T the temperature). A) $E \propto T$; B) $E \propto T^2$; C) $E \propto T^3$; D) $E \propto T^4$	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
50.	Troposphere is that part of the atmosphere where temperature _____. A) Increases with height B) Increases with height in the day but decreases with height in the night C) Decreases with height D) Remains constant	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
51.	Trade winds occur in the _____. A) Polar region; B) Tropical region; C) Extra-tropical region; D) Southern Ocean	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
52.	Isobaric surface refers to a surface of equal _____. A) Humidity; B) Temperature; C) Pressure; D) Wind	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
53.	To track the movement of cyclone we need _____. A) An aircraft with meteorological sensors B) A polar orbiting satellite C) A lunar orbiting satellite D) A geostationary satellite	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
54.	An anemometer is used for measuring _____. A) Humidity; B) Rainfall; C) Wind; D) Radiation	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

55.	Which of the following states receives northeast monsoon rainfall? A) Goa; B) Maharashtra; C) Karnataka; D) Tamil Nadu	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
56.	El Nino refers to _____. A) Cooling of the eastern Pacific Ocean B) Warming of the eastern Pacific Ocean C) Warming of the western Pacific Ocean D) Warming of the Indian Ocean	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
57.	Which of the following is NOT associated with global warming? A) Melting of polar ice caps; B) Increase in CO ₂ concentration; C) Acid rain; D) Sea level rise	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
58.	Depletion of ozone in the atmosphere will lead to _____. A) Increase in atmospheric temperature B) Decrease in atmospheric temperature C) Increase in the earth's UV radiation D) Decrease in the earth's UV radiation	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
59.	During precipitation, the atmosphere _____. A) Gains heat through sensible heat B) Loses heat through sensible heat C) Gains heat through latent heat D) Loses heat through latent heat	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
60.	With increasing depth the ocean temperature _____. A) Increases; B) Decreases; C) Remains constant; D) First increases and then decreases	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
61.	The speed of sound in the oceans is close to _____. A) 1.5 m/s; B) 15 m/s; C) 150 m/s; D) 1500 m/s	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
62.	Tides in the ocean are the result of balance of force between A) Gravitational force and centrifugal force B) Gravitational force and centripetal force C) Gravitational force and frictional force D) Gravitational force and buoyancy force	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
63.	Neap tide occurs when the _____. A) Earth is between the Sun and the Moon B) Moon is between the Earth and the Sun C) Sun is between the Earth and the Moon D) Earth is at right angles to the Sun and the Moon	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
64.	A semi-diurnal tide refers to _____. A) One high and one low water in a month B) Two high and two low waters in a month C) One high and one low water in 24 hours D) Two high and two low waters in 24 hours	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

65.	In the oceans, the concentration of oxygen is highest in _____. A) Bottom water; B) Intermediate water; C) Surface water; D) Sediment	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
66.	Remote sensing the sea surface height makes use of _____. A) An altimeter; B) A scatterometer; C) A radiometer; D) A current meter	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
67.	Which of the following equipment can be used to determine the depth of the ocean? A) Radar; B) Sonar; C) Magnetometer; D) Echosounder	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
68.	When rain adds fresh water to the ocean, the surface density A) Increases; B) Decreases; C) Remains constant; D) Initially increases but ultimately decreases	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
69.	Which of the following processes will NOT change the salinity of ocean water? A) Sensible heat loss; B) Wind-mixing; C) Evaporation; D) Precipitation	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
70.	Thermohaline circulation is driven by _____. A) Heat flux; B) Fresh water flux; C) Momentum flux; D) Density	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
71.	A geostrophic current is a balance between _____. A) Pressure gradient force and frictional force B) Pressure gradient force and Coriolis force C) Pressure gradient force and centripetal force D) Pressure gradient force and centrifugal force	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
72.	Which of the following is INCORRECT about tsunami? A) Occurs only in the ocean B) Very long wave length C) Very high amplitude in the open ocean D) Is propagated very fast	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
73.	With increasing ocean water depth, light intensity _____. A) Diminishes exponentially B) Diminishes linearly C) Diminishes quadratically D) Remains constant	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
74.	Sound speed in the oceans does not depend on _____. A) Temperature B) Salinity C) Pressure D) Suspended sediment	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
75.	Which of the following DOES NOT form a part of the hydrological cycle? A) Evaporation B) Precipitation C) Mixing D) River runoff	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

76.	When the ocean water is green, it contains a large amount of _____. A) Suspended matter B) Phytoplankton C) Zooplankton D) Bacteria	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
77.	Knowing the sea water density and height, pressure can be calculated using _____. A) Continuity equation B) Conservation of mass equation C) Hydrostatic equation D) Conservation of energy equation	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
78.	Which of the following travels a long distance in the oceans without much attenuation? A) Microwave B) Acoustic wave C) Gamma-ray D) X-ray	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
79.	Planet Venus cannot be seen at mid-night in Bangalore's sky because A) Venus is very faint when it is away from the Sun. B) Venus is an inner planet of the solar system C) Venus is in 'new moon' phase at midnight D) Venus is hidden behind the moon late at night.	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
80.	A block of silver of 107g weight is kept in contact with a 1000 W power source in an otherwise completely isolated system. How long will it take for the silver to melt starting from 0°C ? (Melting point of silver is 960°C; its specific heat is 25 J/ mol C; Molecular weight is 107 g/mole; 1 Watt sec = 1 Joule) A) 1 sec; B) 12 sec; C) 24 sec; D) 960 min	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
81.	Calculate the angular size of India at the centre of the earth in an east – west direction. A) 19.5°; B) 14.5°; C) 20°; D) 29°	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
82.	In a sudden release of pressure, a volcano throws up a 1 tonne cubical stone (each side measuring 1 m) 1 km into the atmosphere. What was the pressure inside the volcano just when it exploded? A) 10 ⁵ N; B) 10 ⁷ N; C) 10 ⁹ N; D) 10 ¹¹ N	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>
83.	A person looking at the sky at sunset sees a pattern of stars setting in the sky. At a later date, he notices that the same set of stars are now rising at sunset. What is the time difference between the two observations? A) 14 days; B) 88 days; C) 182 days; D) 274 days	A B C D <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>

84.	Two observatories on earth about 6000 km apart claim to have seen the <i>Chandrayaan</i> (which is still circling the moon) to be occulting two different stars at the same time. What is the angular separation of the stars, assuming them to be at infinity? A) 0.5° ; B) 0.05° ; C) 0.005° ; D) 5.0°	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A	B	C	D							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
85.	A hole is dug through the centre of the earth and a ball is thrown in. What is the expected behaviour exhibited by the ball? A) It will fall to the centre of the earth B) It will oscillate from surface to surface C) It will come out at the other end and stay there D) The problem is not fully defined	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
86.	India's first moon mission, <i>Chandrayaan 1</i> , found that we can get 0.2 litre of water from 5 tons of soil. What is the total useful volume of water collected over an area of 1 km^2 on the Moon assuming that this dampness penetrates up to 1m and further assuming a lunar soil density of 5 g/cc ? A) 5×10^4 litres; B) 5×10^5 litres; C) 2×10^4 litres; D) 2×10^5 litres	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A	B	C	D							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
87.	Rajesh weighing 100 kg and Iqbal weighing 50 kg climb up the Mount Everest (9000 m) and return to find that their weights are still the same. Calculate the <i>minimum</i> difference in the energy consumed by Rajesh and Iqbal. A) 4.5×10^3 ; B) 4.5×10^4 ; C) 4.5×10^5 ; D) 4.5×10^6	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A	B	C	D							
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88.	In the next Moon Mission, it is planned to take a seismograph to record quakes on the moon. If the mission is successful, then a quake on the moon can be recorded using a seismograph installed _____. A) At the space station on the earth B) On board the satellite orbiting the moon C) On the moon D) On the moon, the orbiting satellite and the earth	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A	B	C	D							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							
89.	<p>Earthquakes are caused due to sudden displacement along a fault zone, releasing energy. In the diagram below which is the most stressed block?</p> <p style="text-align: center;">(1) (2) (3)</p> <p>A) 1 and 3 B) 2 only C) 3 only D) 1 and 2</p>	<table border="0"> <tr><td>A</td><td>B</td><td>C</td><td>D</td></tr> <tr><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td><td><input type="radio"/></td></tr> </table>	A	B	C	D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A	B	C	D							
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>							

	<p>Study the diagram below and answer the following questions.</p> <p style="text-align: center;">Time (seconds)</p>	
90.	<p>i) Which is the shear wave in the above diagram? A) X; B) Z; C)Y</p>	<p>A B C</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/></p>
91.	<p>ii) The fastest waves recorded on the seismogram will have the largest amplitude. A) False; B) True</p>	<p>A B</p> <p><input type="radio"/> <input type="radio"/></p>
92.	<p>Sometimes you hear sounds when an earthquake occurs. If there was vacuum on the surface of the earth, can you hear the sound? A) Yes B) Yes, if close to the earthquake epicenter C) No</p>	<p>A B C</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/></p>
93.	<p>Which of the following earthquakes will cause a tsunami? A) Magnitude 8.7 in Himalaya B) Magnitude 8.6 in Shillong C) Magnitude 8.2 in Burma D) Magnitude 7.5 in Java</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
94.	<p>Where do you find island arcs? A) The Himalaya B) The Alps C) Japan</p>	<p>A B C</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/></p>
95	<p>What is the epicenter of an earthquake? A) place of origin of the earthquake inside the earth B) a point on the fault on which the earthquake occurs C) a point on the surface of the earth D) place at which the earthquake is recorded</p>	<p>A B C D</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/></p>
96	<p>Which law defines the relationship between stress and strain? A) Boyle's law B) Snell's law C) Hooke's law</p>	<p>A B C</p> <p><input type="radio"/> <input type="radio"/> <input type="radio"/></p>

97.	Primary (P) waves and Love (L) waves are: A) body waves B) surface waves C) body and surface waves D) shear waves	A B C D ○ ○ ○ ○
98.	_____ waves cannot travel through fluids. A) P waves B) S waves C) sound waves	A B C ○ ○ ○
99.	The main greenhouse gas is _____. A) CFC's; B) CO ₂ ; C) N; D) Ar	A B C D ○ ○ ○ ○
100.	Dissolved salt can be removed by _____. A) Using a sieve; B) Using UV light; C) Using water jets; D) Using reverse osmosis	A B C D ○ ○ ○ ○

Dear Student

We appreciate your interest in the International Earth Science Olympiad. Please spend a minute to let us know how you learnt about the IESO-Entrance Test.

- From newspapers
- From my school / college
- From a friend

Please send your comments on the question paper by email (rshankar_1@yahoo.com) or by regular mail to:

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