

Crust, Core, Mantle of Earth, Lunar and Solar Eclipse, Tides

1. When Lunar Eclipse occur?
 - A. When Moon is between Earth and Sun
 - B. When Sun is between Earth and Moon
 - C. When Earth is between Sun and Moon
 - D. When Earth is between Sun and other celestial bodies
2. When did Lunar Eclipse happen?
 - A. Half Moon
 - B. Full Moon
 - C. Equinox
 - D. None of the above
3. Select the correct option matching together about Earth shadows:
 1. Umbra – darker, central part
 2. Penumbra – the outer part
 3. Antumbra – partly shaded area beyond the umbra

Correct Options are:

- A. Only 1 and 2
 - B. Only 2 and 3
 - C. Only 1
 - D. All 1, 2 and 3
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4. What is Solar Eclipse?
 - A. When moon comes in between Earth and Sun
 - B. When Earth comes in between Moon and Sun
 - C. When Sun comes in between Earth and Moon
 - D. When Sun rays does not reach Earth.
 5. When the same pattern of solar eclipse repeats every 18 years 11 days 8 hours are known as:
 - A. Nodes cycle
 - B. Saros cycle
 - C. Saras cycle
 - D. Payan cycle

6. What do you mean by Blood Moon?

- A. It is total solar eclipse.
- B. It is partial lunar eclipse with red glow
- C. It is total lunar eclipse with deep red glow
- D. None of the above

7. During lunar eclipse, the visible red colour is because of:

- A. Dust in space
- B. Dust in moon's atmosphere
- C. Dust in earth's atmosphere
- D. None of the above

8. During a calendar year, the maximum numbers of lunar eclipse that can occur are:

- A. 2
- B. 3
- C. 4
- D. 5

9. What do you understand by an eclipse?

- A. Partial or total blocking of light of one celestial object by another.
- B. Partial or total blocking of light by Moon.
- C. Partial or total blocking of light by Earth.
- D. Partial or total blocking of light by Sun.

10. Diamond ring occurs in which type of solar eclipse?

- A. Total Solar eclipse
- B. Partial Solar eclipse
- C. Annular Solar eclipse
- D. None of the above

11. Which place in India has the potential for generation of tidal energy:

- 1) Gulf of Cambay
- 2) Gulf of Kutch
- 3) Gulf of Mannar

Choose the correct code:

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2 and 3

12. Which of the following statement is true regarding the ebb and flow of tides?
- A. The time between the high tide and low tide, when the water level is falling, is called the flow
 - B. The time between the low tide and high tide, when the tide is rising, is called the ebb.
 - C. Both (a) and (b)
 - D. None of the above

13. Consider the followings statements regarding the spring tides:
- 1) During spring tide, the sun, the moon and the earth are in a straight line.
 - 2) The height of the tide will be higher during spring tide.
 - 3) Spring tides occur once a month.

Which of the above statements is true?

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2 and 3

14. Which of the following names of the positions moon, sun and earth are correctly matched?

- 1) Perihelion- When the earth is closest to the sun
- 2) Perigee- when the moon's orbit is closest to the earth
- 3) Apogee- When the earth is farthest from the sun

Which of the above statements is true?

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2 and 3

15. The height of rising water varies depending upon the position of sun and moon with respect to the earth. Which of the following statements is true in this regard:

- A. When the moon's orbit is closest to the earth, unusually high and low tides occur.
- B. During perigee, the tidal range is much less than normal.
- C. When the earth is farthest to the sun, tidal ranges are also much greater.

D. All of the above

16. Consider the following statements regarding Tidal Energy generation:

- 1) The difference in water height from low tide and high tide is potential energy.
- 2) Tidal water is captured in a barrage across an estuary during Low tide and forced through a hydro-turbine during high tide.
- 3) To capture sufficient power from the tidal energy potential, the height of high tide must be at least five meters (16 feet) greater than low tide.

Which of the above statements is true?

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2 and 3

17. The _____ is responsible for Earth's magnetic field.

- A. Mantle
- B. Crust
- C. Outer core
- D. Inner core

18. How temperature varies towards the centre from the earth's surface?

- A. Increases
- B. Decreases
- C. Remains same
- D. None of these

19. India is divided into how many earthquake zones (seismic zones)?

- A. 4
- B. 2
- C. 6
- D. 5

20. Which of the following part of the earth's interior is composed mainly of Silica and Aluminium as its major constituents?

- A. Crust
- B. Mantle
- C. Core
- D. All of these

21. Which of the following is an example of the most explosive type of volcano?

- A. Shield volcanoes
- B. Flood basalt volcanoes
- C. Calderas volcanoes
- D. Cinder cones volcanoes

22. Consider the following statement with reference to Earth's crust.

- 1. The continental crust is formed from Basaltic rocks.
- 2. The ocean floors are formed from Granitic rocks.
- 3. It is the outer thin layer with a thickness of up to 200 km.

Which of the following statements given above is/are *not* correct?

- A. 1 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. 1, 2 and 3

23. The most abundant metal in the earth crust is

- A. Sodium
- B. Aluminium
- C. Calcium
- D. Iron

24. The boundary between the crust and mantle is called as:

- A. Lithosphere
- B. Benioff zone
- C. Bedrock
- D. Moho

25. The innermost layer of the Earth is mainly made up of

- A. Silica and Iron
- B. Nickel and Alumina
- C. Silica and Alumina
- D. Nickel and Iron

26. Which is the second most abundant metal in the earth's crust?

- A. Zinc
- B. Iron
- C. Aluminium
- D. Copper

27. The Gutenberg Discontinuity separates:

- A. Mantle and core
- B. The outer core and lower mantle
- C. The inner core and outer core

D. The lower crust and upper mantle

28. Which part of the interior of the Earth constitutes of asthenosphere?

A. Crust

B. Mantle

C. Core

D. All of the above

Answers key

1.(C)	2.(B)	3.(D)	4.(A)	5.(B)	6.(C)	7.(C)
8.(B)	9.(A)	10.(A)	11.(A)	12.(D)	13.(B)	14.(B)
15.(A)	16.(C)	17.(C)	18.(A)	19.(A)	20.(A)	21.(C)
22.(D)	23.(B)	24.(D)	25.(D)	26.(B)	27.(B)	28.(B)