

ENGLISH

THE LONAR CRATER LAKE, MAHARASHTRA

The Lonar Crater Lake is a geological wonder, nestled in the town of Lonar in Buldhana district, Maharashtra. It is believed to have been formed thousands of years ago. This ancient landform, consisting of a giant hole, came into existence when a colossal meteorite, blazing at an extremely high speed, crashed into the Earth, leaving behind a stunning mark. It is the only crater in India formed in basaltic rock by a meteorite impact and ranks as the third largest in the world, placing it among the top five largest craters globally. The crater's perfectly circular depression cradles a unique saline lake at its core, creating a striking visual contrast against the surrounding rugged terrain. This site is a rare and extraordinary blend of celestial impact and terrestrial beauty. The rim of the meteor crater offers a breathtaking spectacle of nature's power and the enduring allure of our planet's ancient past.

READ THE PASSAGE CAREFULLY AND ANSWER THE FOLLOWING QUESTIONS



1. What is unique about the Lonar Crater Lake?

- a) It was formed by volcanic eruption
- b) It was formed by a meteorite impact in basaltic rock
- c) It was formed due to an earthquake
- d) It was an artificial lake

A: b) It was formed by a meteorite impact in basaltic rock

2. In which district of Maharashtra is the Lonar Crater Lake located?

a) Pune

b) Buldhana

c) Nagpur

d) Nashik

A: b) Buldhana

3. If you were to promote tourism for Lonar Crater Lake, which feature would you highlight the most?points

a) Its man-made construction

b) Its ranking among the top five largest craters globally

c) Its use as a fishing spot

d) Its location near a desert

A: b) Its ranking among the top five largest craters globally

4. Why is Lonar Crater considered rare?

a) It is the deepest freshwater lake in the world

b) It is the only crater in India formed in basaltic rock

c) It was formed by volcanic eruption

d) It has medicinal plants growing around it

A: b) It is the only crater in India formed in basaltic rock

5. How does Lonar Crater Lake differ from lakes formed by rivers or glaciers?

- a) It is surrounded by forests
- b) It is a circular depression formed by a meteorite impact
- c) It has a man-made boundary
- d) It contains freshwater only

A: b) It is a circular depression formed by a meteorite impact

6. Why could Lonar Crater Lake be considered for world heritage status?

- a) Because it is used for agriculture
- b) Because it is among the largest meteorite craters in the world
- c) Because it is a freshwater source for villages
- d) Because it is used for boating

A: b) Because it is among the largest meteorite craters in the world

7. If you were a scientist, what study would be most relevant at Lonar Crater?

- a) The impact of meteorites on Earth's surface
- b) The history of agriculture in Maharashtra
- c) The construction of man-made lakes
- d) The growth of urban settlements

A: a) The impact of meteorites on Earth's surface

8. The study of Lonar Lake helps us connect:

- a) Geography and Literature

b) Astronomy and Geology

c) Biology and Music

d) Economics and Painting

A: b) Astronomy and Geology

9. What lesson does the formation of Lonar Crater Lake teach us?

a) Human beings can control natural disasters

b) Nature's power and its lasting impact on Earth

c) Technology is stronger than nature

d) Only rivers can create beautiful landscapes

A: b) Nature's power and its lasting impact on Earth

10. As a responsible visitor, how can you help conserve Lonar Crater Lake?

a) By littering during the trip

b) By disturbing wildlife around the lake

c) By spreading awareness about its importance

d) By ignoring conservation rules

A: c) By spreading awareness about its importance

HINDI

प्रश्न 1. निम्नलिखित अपठित गद्यांश को पढ़कर दिए गए प्रश्नों के लिए उचित विकल्प का चयन करें।

मानव जाति को अन्य जीवधारियों से अलग करके महत्व प्रदान करने वाला जो एकमात्र गुरु है, वह है उसकी विचार-शक्ति। मनुष्य के पास बुद्धि है, विवेक है, तर्कशक्ति है अर्थात् उसके पास विचारों की अमूल्य पूँजी है। अपने सुविचारों की नींव पर ही आज मानव ने अपनी श्रेष्ठता की स्थापना की है और मानव-सभ्यता का विशाल महल खड़ा किया है। यही कारण है कि विचारशील मनुष्य के पास जब सुविचारों का अभाव रहता है, तो उसका वह शून्य मानस कुविचारों से ग्रस्त होकर एक प्रकार से शैतान के वशीभूत हो जाता है। मानवी बुद्धि जब सद्भावों से प्रेरित होकर कल्याणकारी योजनाओं में प्रवृत्त रहती है, तो उसकी सदृशता का कोई अंत नहीं होता किंतु जब वहाँ कुविचार अपना घर बना लेते हैं, तो उसकी पाशविक प्रवृत्ति उस पर हावी हो उठती है। हिंसा और पापाचार का दानवी साम्राज्य इस बात का द्योतक है कि मानव की विचार-शक्ति, जो उसे पशु बनने से रोकती है, उसका साथ देती है।

(क) मानव जाति को महत्व देने में किसका योगदान है ?

(i) शारीरिक शक्ति का

(ii) परिश्रम और उत्साह का

(iii) विवेक और विचारों का

(iv) मानव सभ्यता का

A: (iii) विवेक और विचारों का

(ख) विचारों की पूँजी में शामिल नहीं है ।

(i) उत्साह

(ii) विवेक

(iii) तर्क

(iv) बुद्धि

A: (i) उत्साह

(ग) मानव में पाशविक प्रवृत्तियाँ क्यों जागृत होती हैं?

(i) हिंसा बुद्धि के कारण

(ii) असत्य बोलने के कारण

(iii) कुविचारों के कारण

(iv) स्वार्थ के कारण

A: (iii) कुविचारों के कारण

(घ) रिक्त स्थान की पूर्ति करें।

मानसहोकर एक प्रकार से शैतान के वशीभूत हो जाता है।

(i) बुद्धि जब सद्भावों

(ii) कुविचारों से ग्रस्त

(iii) सभ्यता का विशाल

(iv) विचार-शक्ति,

A: (ii) कुविचारों से ग्रस्त

(इ) ‘ विचारशील ’ शब्द में संज्ञा है।

(i) व्यक्तिवाचक

(ii) जातिवाचक

(iii) भाववाचक

(iv) इनमें से कई नहीं

A: (iii) भाववाचक

प्रश्न - 2 निम्नलिखित पठित काव्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर में सर्वाधिक सही विकल्प का चुनाव कीजिए ।

इन सपनों के पंख न काटो,

इन सपनों की गति मत बाँधो!

सौरभ उड़ जाता है नभ में,

फिर वह लौट कहाँ आता है?

बीज धूलि में गिर जाता जो,

वह नभ में कब उड़ पाता है?

अग्नि सदा धरती पर जलती,

धूम गगन में मँडराता है!

सपनों में दोनों ही गति हैं,

उड़ कर आँखों में आता है!

प्रश्न 1. कवि ने किससे कहा है कि 'सपनों के पंख न काटो'?

(i) बच्चों से

(ii) बड़ों से

(iii) समाज से

(iv) सभी से

A: (iv) सभी से

प्रश्न 2. कविता में 'अग्नि' और 'धूम' किसका प्रतीक हैं?

(i) धरती और गगन का

(ii) सत्य और असत्य का

(iii) जल और वायु का

(iv) मनुष्य और पशु का

A: (i) धरती और गगन का

प्रश्न 3. कवि के अनुसार जो बीज धूल में गिर जाता है, वह —

(i) पेड़ बन जाता है

(ii) उड़ जाता है

(iii) नभ में नहीं उड़ पाता

(iv) आकाश में चमकता है

A: (iii) नभ में नहीं उड़ पाता

प्रश्न 4. “सौरभ उड़ जाता है नभ में” — यहाँ ‘सौरभ’ का अर्थ क्या है?

(i) फूल

(ii) सुगंध

(iii) पक्षी

(iv) बीज

A: (ii) सुगंध

प्रश्न 5. कवि के अनुसार, यदि सपनों की गति बाँध दी जाए तो क्या होगा ?

(i). जीवन में ठहराव आ जाएगा

(ii). सपने समाप्त हो जाएँगे

(iii). व्यक्ति ऊँचाइयाँ नहीं छू पाएगा

(vi). उपरोक्त सभी

A: (vi). उपरोक्त सभी

MATHS

1. ABCD is a parallelogram. If angle A is equal to 45° , then find the measure of its adjacent angle.

A. 135°

B. 120°

C. 115°

D. 180°

A: A. 135°

2. A rhombus has a side length equal to 5 cm. Find its perimeter.

A. 25

B. 10

C. 20

D. 30

A: C. 20

3. The diagonals of a rectangle are $2x + 1$ and $3x - 1$, respectively. Find the value of x.

A. 1

B. 2

C. 3

D. 4

A: B. 2

4. The angles of a quadrilateral are in ratio 1:2:3:4. Which angle has the largest measure?

A. 120°

B. 144°

C. 98°

D. 36°

A: B. 144°

5. In a parallelogram ABCD, angle A and angle B are in the ratio 1:2. Find the angle A.

A. 30°

B. 45°

C. 60°

D. 90°

A: C. 60°

6. If the two angles of a triangle are 80° and 50° , respectively. Find the measure of the third angle.

A. 50°

B. 60°

C. 70°

D. 80°

A: A. 50°

7. ABCD is a rectangle and AC & BD are its diagonals. If AC = 10 cm, then BD is:

A. 10 cm

B. 5 cm

C. 15 cm

D. 20 cm

A: A. 10 cm

8. If $\angle A$ and $\angle B$ are two adjacent angles of a parallelogram. If $\angle A = 70^\circ$, then $\angle B =$?

A. 70°

B. 90°

C. 110°

D. 180°

A: C. 110°

9. The perimeter of a parallelogram whose parallel sides have lengths equal to 12 cm and 7 cm is:

A. 21 cm

B. 42 cm

C. 19 cm

D. 38 cm

A:D. 38 cm

10. Which one of the following is a regular quadrilateral?

A. Square

B. Trapezium

C. Kite

D. Rectangle

A: A. Square

SCIENCE

Read the given passage below and answer the question:

In a game of volleyball, players often push the moving ball to their teammates to make a winning move. Sometimes the ball is returned to the other side of the court by pushing or smashing it. In cricket, a batsman plays his or her shot by applying a force on the ball with the bat.



1. What kind of force is applied by a batsman on a ball while hitting it?

(a) Magnetic Force

(b) Muscular Force

(c) Frictional Force

(d) Gravitation Force

Feedback for correct answers

Option (b) is correct.

Explanation: While hitting a ball, the force is caused by the action of muscles in the batsman's body. The force resulting from the action of muscles is known as the muscular force

2. the given example of a volleyball game, what changes in force were brought about on the volleyball?(a) Change in direction of motion

(b) Change in shape

(c) Change in state of motion

(d) Both Option (a) and (c)

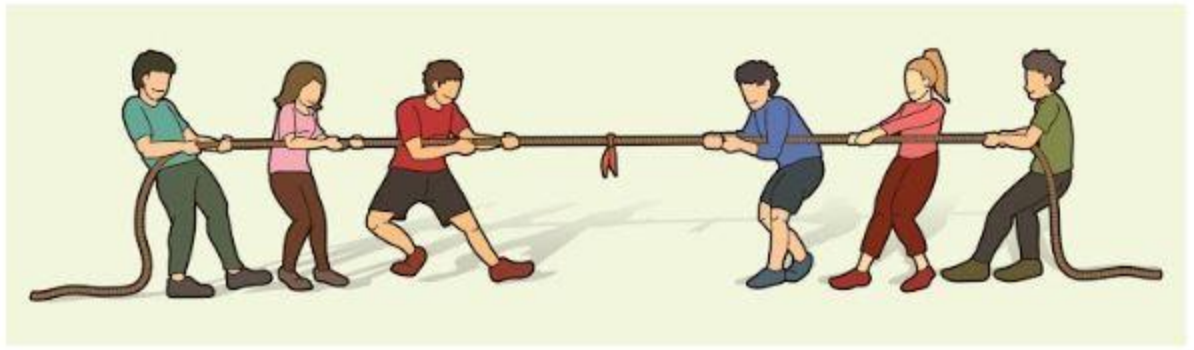
Feedback for correct answers

Option (a) and (c)

Explanation: When players hit the volleyball, its speed changes, and also the direction of its motion changes

3. Two teams, Team A and Team B, are playing a tug-of-war. The rope is not moving.

Which of the following statements is correct regarding the forces being applied?



- (A) The force applied by Team A is greater than the force applied by Team B.
- (B) The force applied by Team B is greater than the force applied by Team A.
- (C) The force applied by both teams is equal in magnitude and opposite in direction.
- (D) The forces are not balanced, which is why the rope is not moving.

Feedback for correct answers

Correct Answer: (C) The force applied by both teams is equal in magnitude and opposite in direction

4. A person (a porter) is shown carrying a very large, heavy load on their head. Between their head and the load is a round, ring-shaped piece of cloth. Why does the porter place the round cloth on their head?



- (A) To increase the force of the load.
- (B) To decrease the area of contact and increase the pressure.
- (C) To increase the area of contact and reduce the pressure.
- (D) To reduce the weight of the load.

Feedback for correct answers

Correct Answer: (C) To increase the area of contact and reduce the pressure

5. Which statement is correct?

- (a) Friction only acts on rough surfaces.
- (b) Friction can also act in air and water.
- (c) Friction always increases motion.
- (d) Friction is absent on smooth surfaces.

Feedback for correct answers

Correct Answer-(b)

EXPLANATION - A1. (b) Friction is greater on rough surfaces Sand increases resistance, so the ball stops quickly. A2. (b) Opposite to motion Friction always resists movement. A3. (b) To reduce air or water resistance Streamlining lowers fluid friction.

A4. (b) Friction can also act in air and water Known as drag or fluid resistance.

Read the passage given below carefully and answer the following questions.

The particles are too small to be seen with the naked eye. Matter, the substance of everything around us, is composed of countless tiny particles. These particles are in constant motion, and their behaviour can be observed in everyday phenomena. One such process is diffusion, where particles of different substances intermix on their own, like the fragrance of a perfume or incense stick spreading through a room. The state of matter changes with alterations in temperature, affecting particle energy and movement. For example, when a solid is heated, its particles vibrate more vigorously until, at a specific melting point, they gain enough energy to break free and move past one another, forming a liquid, just like ice melting in a glass. Further heating of the liquid increases particle kinetic energy, leading to even faster movement. At the boiling point, particles have enough energy to overcome all intermolecular forces, escaping as a gas and causing the liquid to bubble vigorously, like water boiling in a pot.

6. Why can you smell food being cooked in the kitchen even if you are in another room?points

- a) The food particles are melting.
- b) The food particles are boiling.
- c) The smell particles from the food are diffusing through the air.
- d) The air particles are getting smaller.

Feedback for correct answers

Correct Answer: c) The smell particles from the food are diffusing through the air.

7.Assertion (A): The rate of evaporation is higher when the surface area of the liquid is increased.

Reason (R): Evaporation is a bulk phenomenon, occurring from the entire body of the liquid.

- a) Both A and R are true, and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) A is true, but R is false.
- d) A is false, but R is true.

8. When you leave an ice cream cone outside on a hot day, it melts because:

- a) It is losing heat to the air.
- b) The particles in the ice cream are slowing down.
- c) The particles are gaining heat from the surroundings and moving more freely.
- d) The sun is making the ice cream evaporate.

9. The boiling point is the temperature at which a liquid, like water in a kettle:

- a) Freezes into a solid.
- b) Begins to evaporate slowly.
- c) Turns into vapor throughout its volume, making bubbles.
- d) Becomes denser.

10. Why does the total volume not increase significantly when sugar dissolves in water?

- a) Sugar and water particles repel each other.
- b) The sugar particles are smaller than water particles.
- c) Sugar particles fit into the empty spaces between water particles.
- d) Water evaporates during the process.

SOCIAL SCIENCE

Q.1 The main purpose of the Battle of Plassey (1757) for the British was —

- A) To defeat French
- B) To gain control over Bengal's revenue
- C) To conquer the Indian Subcontinent
- D) To abolish Mughal rule

Feedback for incorrect answers

- b) To gain control over Bengal's revenue

Q.2 Which of the following is a challenge faced by legislatures in India ?

- A) Excessive separation from the executive
- B) Too many Houses of Parliament in a state
- C) Executive having no role in law-making
- D) Frequent disruptions and low productivity in sessions.

Feedback for incorrect answers

- d) Frequent disruptions and low productivity in sessions.

Q.3 The British encouraged the cultivation of indigo in Bengal mainly because —

A) It was used for textile dyeing in European industries

B) It was a staple food crop

C) It was used in gunpowder production

D) It was cheaper to grow than cotton

Feedback for incorrect answers

a) It was used for textile dyeing in European industries

Q.4 Which of these accurately reflects economic condition of India before European colonization ?

A) India was economically insignificant in world trade

B) India contributed a large share to world GDP, had vibrant textile and spice industries

C) India had only subsistence agriculture and no craft industries

D) India was entirely closed to foreign trade

Feedback for incorrect answers

b)India contributed a large share to world GDP, had vibrant textile and spice industries

Q.5 The introduction of railways in India primarily helped the British to —

A) Promote tourism

B) Spread Indian culture

C) Transport raw materials and goods efficiently

D) Reduce regional inequalities

Feedback for incorrect answers

c) Transport raw materials and goods efficiently

Q.6 What was the major impact of colonial education in India ?

A) Revival of traditional learning systems

B) Spread of scientific knowledge in rural areas

C) Rise of a new educated middle class

D) Decline of English language

Feedback for incorrect answers

c) Rise of a new educated middle class

Q.7 The two Houses of Parliament at the Union level are:

A) Lok Sabha and Vidhan Sabha

B) Rajya Sabha and Vidhan Parishad

C) Lok Sabha and Rajya Sabha

D) President and Lok Sabha

Feedback for incorrect answers

c) Lok Sabha and Rajya Sabha

Q.8 What is the minimum relation between the Executive and the Legislature in India ?

A) The legislature controls the executive; the executive has no role in the legislature.

B) The executive controls the legislature; the legislature can do nothing about it

C) The legislature and executive are inter-dependent; the executive is accountable to the legislature.

D) The legislature and executive are merged into one and the same.

Feedback for incorrect answers

c) The legislature and executive are inter-dependent; the executive is accountable to the legislature.

Q.9 In India, a bill becomes law after:

A) being passed by the Lok Sabha only

B) being passed by both Houses and receiving the President's assent

C) being implemented by the Executive

D) being passed by the Rajya Sabha only

Feedback for incorrect answers

b) being passed by both Houses and receiving the President's assent.

Q.10 At the State level (in India) which of the following statements is correct ?

A) All states must have a bicameral legislature.

B) The state executive is completely independent of the state legislature.

C) Some states have unicameral legislatures, and the state executive is accountable to the legislature.

D) The President appoints the Chief Minister directly for every state.

Feedback for incorrect answers

c) Some states have unicameral legislatures, and the state executive is accountable to the legislature.

