

\* Select the most appropriate options as answers and complete the following sentences : [10]

1. Where is the Valley of flowers located?

- (A) Uttarakhand (B) Himachal Pradesh  
(C) Sikkim (D) Arunachal Pradesh

**Ans.:** (A) Uttarakhand

2. The unique feature about the Living Root Bridges in Meghalaya is that they are :

- (A) Made using cement and stones (B) Built by modern machines  
(C) Made by guiding the roots of trees (D) Built using wood and nails

**Ans. :** (C) Made by guiding the roots of trees

3. Which organization has declared the Valley of Flowers a World Heritage Site?

- (A) WWF (B) UNEP (C) UNO (D) UNESCO

**Ans. :** (D) UNESCO

4. The longest living root bridge in Meghalaya is approximately \_\_\_\_\_

- (A) 50 feet (B) 100 feet (C) 175 feet (D) 200 feet

**Ans. :** (C) 175 feet

5. What caused the formation of the Lonar Crater Lake?

- (A) A volcanic eruption (B) An earthquake  
(C) A meteorite impact (D) Glacial activity

**Ans. :** (C) A meteorite impact

6. \_\_\_\_\_ living root bridges are approximately known across Meghalaya villages.

- (A) 50 (B) 75 (C) 100 (D) 150

**Ans. :** (C) 100

7. The Magnetic Hill in Ladakh is unique because :

- (A) Vehicles appear to move uphill due to an optical illusion  
(B) Vehicles move downhill automatically  
(C) It is the highest hill in India  
(D) It is made entirely of magnetic rocks

**Ans.:** (A) Vehicles appear to move uphill due to an optical illusion

8. The Magnetic Hill is \_\_\_\_\_ away from Leh.

- (A) 10 km (B) 20 km (C) 30 km (D) 50 km

**Ans. :** (C) 30 km

9. The glowing waters of Kerala are caused by :

- (A) Bioluminescence from micro-planktons
- (B) Artificial lights in the water
- (C) Chemical pollution
- (D) Reflection of moonlight

**Ans.:** (A) Bioluminescence from micro-planktons

10. The name 'Sundarbans' is derived from :

- (A) Sundari trees
- (B) Sundar river
- (C) A famous explorer
- (D) A local festival

**Ans.:** (A) Sundari trees

**\* Say whether the following sentences are true or false :** [5]

11. The Living Root Bridges in Meghalaya are built using concrete and metal.

**Ans. :** False

12. The Living Root Bridges of Meghalaya are built by intertwining roots of trees.

**Ans. :** True

13. The glowing waters of Kumbalangi are visible only during the day.

**Ans. :** False

14. The optical illusion at Magnetic Hill is due to the alignment of slopes and horizon.

**Ans. :** True

15. The estuarine crocodile is one of the threatened species in the Sundarbans.

**Ans. :** True

**\* Select the most appropriate words from the box and fill in the blanks in the text given below :** [5]

16. The Valley of Flowers National Park is located in the \_\_\_\_\_ district of Uttarakhand.

**Ans. :** Chamoli

17. The Lonar Crater Lake is located in the \_\_\_\_\_ district of Maharashtra.

**Ans. :** Buldhana

18. The yellow signboard at Magnetic Hill reads 'The Phenomenon That \_\_\_\_\_ Gravity'.

**Ans. :** Defies

19. Kumbalangi is located \_\_\_\_\_ kms from Kochi town in Kerala.

**Ans. :** 15



20. The unique feature of Chandipur Beach is that the sea water \_\_\_\_\_ and reappears daily.

**Ans. :** disappears

**\* Answer The Following Questions In One Sentence.**

**[11]**

21. How was the Lonar Crater Lake in Maharashtra formed?

**Ans. :** The Lonar Crater Lake in Maharashtra was formed thousands of years ago by the impact of a meteorite crashing into basaltic rock.

22. Name one rare animal found in the Valley of Flowers.

**Ans. :** One rare animal that is found in the Valley of Flowers is Snow Leopard.

23. Why were the Living Root Bridges built by the indigenous people of Meghalaya?

**Ans. :** The Living Root Bridges were built by the indigenous people of Meghalaya to cross waterways during monsoons without using conventional bridges.

24. What causes the Lonar Crater Lake to have a saline nature?

**Ans. :** The Lonar Crater Lake has a saline nature because it is formed by a meteorite impact. Due to which it was created as a unique saline lake.

25. Why were traditional bamboo or wooden bridges considered ineffective in Meghalaya?

**Ans. :** The traditional bamboo or wooden bridges were considered ineffective in Meghalaya because they could not last long due to heavy rains and strong waters.

26. What is the speed at which vehicles move when parked at the Magnetic Hill's indicated spot?

**Ans. :** The speed at which vehicles move when parked at the Magnetic Hill's indicated spot is almost 20 km/h.

27. What causes bioluminescence in Kumbalangi's backwaters?

**Ans. :** A high concentration of micro-planktons causes bioluminescence in Kumbalangi's backwaters.

28. Why is Kumbalangi called an eco-tourism village?

**Ans. :** Kumbalangi is called an eco-tourism village because of its natural beauty, bioluminescent waters, and cultural simplicity.

29. What makes Chandipur Beach in Odisha special?

**Ans. :** Chandipur Beach is special because the sea disappears during ebb tide and reappears at high tide, creating a rare natural wonder.

30. Name one river that forms the delta where the Sundarbans is located.

**Ans. :** The river that forms the delta where the Sundarbans is located is the Ganga.

31. Why do mangrove trees grow in low-oxygen soil?



**Ans. :** The mangrove trees grow in low-oxygen soil because their roots are adapted to take root under water in such condition.

\* Answer the following questions.

[18]

32. What might be the writer's purpose of highlighting the awe-inspiring natural wonders of India?

**Ans. :** The writer's purpose of highlighting the awe-inspiring natural wonders of India is to exhibit how India's landscapes are full of mystique beauty. The writer wants to show how India is blessed with amazing natural phenomena. It inspires readers to appreciate nature, feel proud of their country, and protect these wonders.

33. The writer uses descriptive language and introductory questions for some of the natural phenomena. What impact does it have on the readers?

**Ans. :** It captures the reader's attention, makes them curious, and creates excitement. The questions and vivid descriptions help readers imagine the scene and feel as if they are experiencing the wonder themselves.

34. Write a short note on the justification of the title 'Spectacular Wonders'.

**Ans. :** The title Spectacular Wonders is justified because the chapter describes India's most extraordinary and awe-inspiring natural phenomena. Each wonder, from glowing waters to vanishing seas, is truly "spectacular" in its uniqueness and amazement. The title captures both the scientific curiosity and the magical charm of these places, making it appealing and interesting.

35. Explain the significance of the living root bridges in Meghalaya.

**Ans. :** The living root bridges in Meghalaya are an innovative and indigenous solution to cross waterways. Made from intertwined tree roots, they represent the deep knowledge that local people have about their environment. These bridges last hundreds of years and symbolise the harmonious relationship between people and nature in the region.

36. Describe the experience at Magnetic Hill.

**Ans. :** Magnetic Hill in Ladakh is a fascinating place where vehicles appear to roll uphill when parked at a special spot. This optical illusion, caused by the alignment of slopes and the horizon, attracts curious tourists. It leaves visitors amazed and puzzled by the illusion of defying gravity.

37. Why do tourists love visiting Kumbalangi in Kerala?

**Ans. :** Tourists are attracted to Kumbalangi for its serene village atmosphere and glowing waters at night. The bioluminescence caused by micro-planktons creates a magical experience. Visitors also enjoy experiencing local culture, traditional cuisine, and the simple eco-friendly lifestyle of the village, making it a popular eco-tourism spot.

38. Why were bamboo or wooden bridges not successful in Meghalaya during monsoons?

**Ans. :** Bamboo or wooden bridges were not successful in Meghalaya during monsoons because they could not last long due to heavy rains and strong waters.

39. Why are the Sundarbans considered an important natural habitat for flora and fauna?

**Ans. :** The Sundarbans are considered an important natural habitat for flora and fauna because they consist of the world's largest mangrove forest, which supports unique biodiversity, including species like the Royal Bengal Tiger, and plays a crucial role in the ecological balance of the region.

40. What is bioluminescence? How does it create the glowing waters of Kerala's Kumbalangi village?

**Ans. :** Bioluminescence is the production and emission of light by a living organism. In Kerala's Kumbalangi village, the glowing waters are created by a high concentration of micro-planktons (tiny marine organisms) which emit light, often when disturbed by water movement or tides, creating a magical glowing effect at night.

\* Answer the following questions.

[27]

41. How are the living root bridges a boon for the local people of Meghalaya?

**Ans. :** Undoubtedly, the living root bridges are a boon for the local people of Meghalaya because these bridges provide a strong and lasting way to cross waterways when the season of heavy rains and monsoons continues. Its reason is that bamboo or wooden bridges could not last long because of the strong waters waves. On the contrary, these root bridges are strong and durable and serve the local people for centuries. These bridges are also symbols of the local people's knowledge and deep practical learning of their land. These bridges serve as a natural ecosystem of flora to the local people.

42. Why is the Lonar Crater Lake considered a remarkable and rare site?

**Ans. :** The Lonar Crater Lake is considered to be a remarkable and rare site because it was formed thousands of years ago when an extremely huge meteorite crashed and fell into the Earth. It is India's only site which has been formed in basaltic rock because of a meteorite impact. It is among the top five largest craters across the world. This lake is circular in shape. It holds saline water. The Crater Lake creates a striking view that blends celestial impact with terrestrial beauty. The people throng to the place to visit its unique beauty.

43. Which of these unusual phenomena did you find the most interesting and why?

**Ans. :** In my opinion, the most interesting and charming phenomenon is the Invisible Chandipur Beach in Odisha. It is marvelous and fascinating because the sea

not only disappears but reappears daily also. It moves back by 2-5 km during ebb tide and returns during high tide. This is a rare hide-and-seek game of the sea. It is both mysterious and exciting to imagine. It is a natural bounty and phenomenon that surprises visitors.

44. Explain the uniqueness of the Valley of Flowers and why it is considered a spectacular natural wonder.

**Ans. :** The Valley of Flowers, located in Uttarakhand, is a spectacular natural wonder known for its vibrant display of around 600 species of exotic flowers, including orchids, poppies, primulas, and marigolds. With breathtaking views of waterfalls and wild streams, the valley is set against the majestic Himalayan ranges. This place becomes a botanical wonderland from May to October, attracting nature lovers and trekkers. Its rare wildlife, including snow leopards and grey langurs, makes it a UNESCO World Heritage Site offering an unforgettable experience.

45. Write about the geological wonder of the Lonar Crater Lake, including its origin and global significance.

**Ans. :** The Lonar Crater Lake in Maharashtra is a rare geological wonder formed thousands of years ago by the impact of a meteorite crashing into basaltic rock. The crater's circular depression holds a unique saline lake, contrasting with rugged surroundings. It is the only meteorite crater in basaltic rock in India and ranks as the third largest in the world. Its scientific, natural, and visual significance makes it globally important.

46. What makes the Invisible Chandipur Beach in Odisha a mysterious natural wonder, and how does the phenomenon occur?

**Ans. :** Chandipur Beach in Odisha is a mysterious natural wonder where the sea appears to disappear and reappear daily. Located in the Balasore district, this unique phenomenon occurs due to the ebb tide, during which the sea retreats by 2-5 km from the shore. Later, at high tide, the sea returns. This hide-and-seek feature is caused by the natural movement of seawater and creates a marvelous sight for visitors. The daily retreat and return of the sea leave tourists mesmerized and curious.

47. Why is the Valley of Flowers considered to be a botanical wonderland?

**Ans. :** The Valley of Flowers is considered to be a botanical wonderland because it transforms into a colourful botanical paradise each year. It blooms with around 600 species of exotic flowers like orchids, poppies, and daisies between May and October. Its beauty, biodiversity, and breathtaking scenery make it one of the most celebrated natural wonders of India. The region has a stunning natural backdrop of the Himalayan ranges, beautiful waterfalls, and rare wildlife species, creating a spectacular and unforgettable experience for visitors.

48. What lesson can students learn from the chapter Spectacular Wonders?

**Ans. :** The students have brilliant minds to learn and understand. The lesson teaches them to appreciate and respect the beauty and power of nature. It reminds them that natural wonders are not only sources of wonder but also vital for ecological balance. These wonders provide them plenty of material to explore. Students learn the importance of conservation of nature's environment. They peep into the mysteries, and understand the need to protect such treasures for future generations.

49. Discuss the unique features of the Sundarbans mangrove forest and its ecological importance.

**Ans. :** The unique features of the Sundarbans mangrove forest include its vast expanse of mangrove trees (like the Sundari trees), the tidal mudflats, and the delta formed by rivers like the Ganga. Ecologically, it is important as the world's largest mangrove forest, providing a critical habitat for diverse flora and fauna, including endangered species like the Royal Bengal Tiger and various birds and reptiles. It also acts as a natural barrier protecting coastal areas from cyclones and erosion.

**\* Read the following prose extract carefully and answer the questions given below:** **[20]**

India is home to some of the most mystifying natural phenomena that surprise and spark our imagination

50. Replace the underlined phrase with one from the extract.

India is the birthplace of several rare species of flora and fauna that thrive in its diverse ecosystems.

51. What does the phrase 'nature's unusual side' suggest about the phenomena described?

52. Complete the similarity: spark : imagination \_\_\_\_\_.

A. inspiration; creativity

B. wonder; amazement

C. effort; reward

D. knowledge; books

53. Identify whether the following statement is true or false.

Some natural phenomena can surprise people.

**Ans. :** 1. "India is home to several rare species of flora and fauna that thrive in its diverse ecosystems."

2. The phrase 'nature's unusual side' suggests that the phenomena are rare, surprising, and extraordinary aspects of nature. Such phenomena are normally not seen anywhere.

3. Option : A. **inspiration : creativity** (Explanation : As a spark sets off imagination, in the same way inspiration sets off one's creativity.)

4. **True** (Explanation from the text : "that surprise and spark our imagination")

Have you seen things disappearing in front of your eyes? Well, such things happen at times, when we keep things at some place, and just forget where we have kept them. But, what if there's a sea that disappears?

This happens in Odisha. It is a beach in the Balasore district where one can witness the sea disappearing-mysteriously the Chandipur Beach which is known for its unique feature of playing hide-and-seek with its visitors.

54. Complete the following sentence with a suitable reason.

The writer's most likely purpose to introduce the information about the Chandipur Beach phenomenon with a question is to \_\_\_\_\_. (engage the reader's curiosity and create a sense of suspense/draw the reader to learn more about the unusual phenomenon/set the tone for the surprising nature of the content that follows)

55. Select the option that is correct for both Assertion (A) and Reason (R).

(A) : Chandipur Beach in Odisha is known for its unique feature of the sea disappearing.

(R) : The tides retreat drastically, exposing the Chandipur beach.

(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.

56. What does the term 'unique' suggest about the beach in Balasore?

(A) very popular

(B) one of its kind

(C) ancient place

(D) far from city

57. What does the writer want to convey with the use of the phrase 'playing hide-and-seek with its visitors'?

**Ans. :** 1. The writer's most likely purpose to introduce the information about the Chandipur Beach phenomenon with a question is to engage the reader's curiosity and create a sense of suspense.

2. (A) Both (A) and (R) are true, and (R) is the correct explanation of (A).

(Explanation from the text : "The sea water moves. It retreats by 2-5 km during ebb tide, and comes back at the time of high tide.")

3. (B) one of its kind

4. The writer wants to convey that the sea water disappears and reappears daily, retreating during ebb tide and returning during high tide.

The Valley of Flowers is an eye-catching spectacle with around 600 species of exotic flowers, including orchids, poppies, primulas, marigold, daisies, and anemones. It is a place where nature blooms in its full glory offering an attractive view. The trek to the valley offers spectacular views of beautiful waterfalls and wild streams. The valley is also home to rare wildlife species like the grey langur, flying squirrel, red fox, lime butterfly, and snow leopard, to name a few.

58. Find the synonym of the word 'exotic' from the passage.
59. How many species of exotic flowers are found in the Valley of Flowers?
60. Name two rare wildlife species found in the Valley of Flowers.
61. What natural features does the trek to the valley offer?

**Ans. :** 1. 'rare'

2. Around 600 species of exotic flowers are found in the Valley of Flowers.
3. Two rare wildlife species found in the Valley of Flowers are grey langur and snow leopard.
4. The trek to the valley offers the spectacular views of waterfalls and wild streams.

Lying at a distance of around 30 km from Leh, the Magnetic Hill is marked by a yellow signboard which reads 'The Phenomenon That Defies Gravity'. It also instructs visitors to park vehicles in the box marked with a white point on the road, which is known as the Magnetic Road. When the vehicles are parked at the indicated spot, they begin moving forward at a speed of almost 20 km/h. This unusual place creates an optical illusion where vehicles appear to roll uphill, a sight that has left tourists in disbelief for years, caused by the peculiar alignment of surrounding slopes and the horizon line.

62. Find the synonym of the word 'strange' from the passage.
63. How far is Magnetic Hill from Leh?
64. What speed do vehicles begin to move at when parked at the indicated spot?
65. What causes the optical illusion at Magnetic Hill?

**Ans. :** 1. 'unusual'

2. Magnetic Hill is Around 30 km from Leh.
3. The speed the vehicles begin to move at when parked at the indicated spot is almost 20 km/h.
4. Peculiar alignment of surrounding slopes and the horizon line cause the optical illusion at Magnetic Hill.

Can a forest exist in a coastal zone? Yes, they are called mangrove forests, where trees take root under water in the low-oxygen soil. The roots slow down the movement of tidal waters, stabilising the coastline and reducing erosion. The Sundarbans is one such mangrove forest spread over 1,400 kms in West Bengal, lying in the delta of rivers, such as the Ganga, the Brahmaputra, and the Meghna. The name is derived from sundari trees that are plentiful in the area.

The area is also populated by an extensive range of flora and fauna, including many bird species, the majestic Bengal tiger, and other threatened species, such as the estuarine crocodile and the Indian python.

66. Find the synonym of 'abundant' from the passage.
67. What type of forest exist in coastal zones?
68. Name two rivers whose delta is home to the Sundarbans.
69. Name one majestic animal found in the Sundarbans.



**Ans. :** 1. 'plentiful'

2. Mangrove forests exist in coastal zones.

3. Two rivers whose delta is home to the Sundarbans are the Ganga and the Brahmaputra.

4. The majestic animal found in the Sundarbans is Bengal tiger.

