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**UPSC-Civil Services Prelims Examinations**

# **GENERAL STUDIES**

**Topic-wise Solved Papers with Detailed Explanations**

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UPSC-Civil Services Prelims Examinations

# **GENERAL STUDIES**

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## ABOUT THIS BOOK

The second edition of '28 Years Topic-wise Solution of General Studies (Paper-I) of UPSC Civil Services Preliminary Examination' is based on the concept 'Test to Text' i.e. "solve first, and then read".

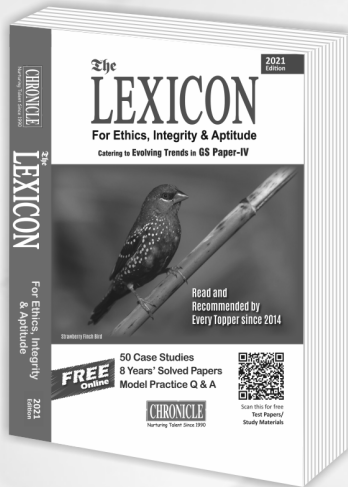
With this unique concept, the book is further segregated to different sections and 100+ topics that will give the reader an interdisciplinary approach to reading.

Further, the emphasis of the answers in this book is not only the correct option and its explanation but also discussion on other given options. The changing nature/pattern of questions being asked in the Civil Services Examinations demands that you understand the trend of the examination and accordingly prepare your own strategy about the question/topic to be asked in future examinations. Hence, with detailed solutions to the questions, other aspects of the topic from which questions may be asked in future are also given in the explanation.

Though a little diluted, the trend or pattern of the questions being asked in UPSC are now a days being followed by many other examinations. Most of the questions in State Public Service Commission examinations are being asked from the background and periphery of UPSC Civil Services examination questions. You can use the given explanations as study material for General Studies also. So, preparing with these sets of questions and explanations is very much helpful for other competitive examinations also.

You can also avail free E-content (online) - 5000 MCQs based on Union and State Civil Services examination syllabus, and 10 Mock Test Papers on our website. You will also get 'Rs. 100 Cash Back' while subscribing online content through the scratch Coupon code on this book. You can purchase any content/ editions and subscription of our monthly magazines (Civil Services Chronicle), Test Series, Study Material, etc. and the same value 'Rs. 100 Cash Back' will be credited in your 'My Account' section at [chronicleindia.in](http://chronicleindia.in).

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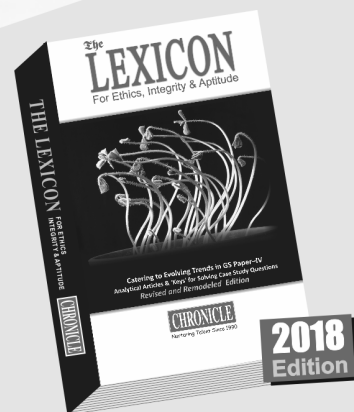
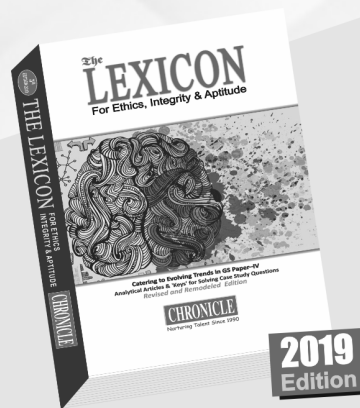
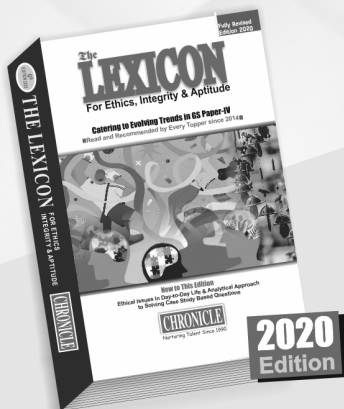


**99% OF QUESTIONS FROM PAPER -IV  
COULD BE ANSWERED FROM THIS BOOK**

**Catering to Evolving  
Trends in GS Paper-IV**

**Analytical Articles & 'Keys' for  
Solving Case Study Questions**

**A Comprehensive  
Dictionary For GS Paper-IV**



**Questions were asked  
from 2020 edition**

Question No.1.(a) From **Page No: 328**  
 Question No.1. (b) From **Page No: 502**  
 Question No.2.(b) From **Page No: 167**  
 and 188  
 Question No 3. (a) From **Page No: 239**  
 and 539  
 Question No. 3 (b) From **Page No: 328**  
 Question No 4. (a) From **Page No: 304**  
 Question No. 4(b) From **Page No: 132**  
 Question No. 5. (a) From **Page No: 256**  
 and 301  
 Question No. 5(b) From **Page No: 327**

**Questions were asked from  
2019 edition**

Question No.1 (a) From **Page no. 355**  
 Question No.1 (b) From **Page no. 197**  
 Question No.2 (b) From **Page no. 408**  
 Question No.4 (a) From **Page no. 402**  
 Question No.4 (b) From **Page no. 393**  
 Question No.5 (a) From **Page no. 378**  
 Question No.5 (b) From **Page no. 220**  
 Question No.6.(a) From **Page no. 487**  
 Question No.6.(b) From **Page no. 482**  
 Question No.6.(c) From **Page No. 485**

**Questions were asked from  
2018 edition**

Question No. 1 (a) From **Page No. 227**  
 Question No. 1(b) From **Page No. 423-426**  
 Question No. 2(a) From **Page No. 323**  
 Question No. 2(b) From **Page No. 355**  
 Question No. 3(a) From **Page No. 462**  
 Question No. 3(b) From **Page No. 234**  
 Question No. 4(a) From **Page No. 265**  
 Question No. 4(b) From **Page No. 159-163**  
 Question No. 5(a) From **Page No. 164-165**  
 Question No. 5(b) From **Page No. 334**  
 Question No. 6(a) From **Page No. 365, 335**  
 Question No. 6(b) From **Page No. 291**  
 Question No. 6 From **Page No. 299**

Note: The Case Study questions asked are similar to case study patterns given in the Lexicon.

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# UPSC/Civil services Prelims Solved 2021

## General Studies

### History of India and Indian National Movement

#### Ancient India

##### Indus Valley Civilization

1. Consider the following pairs:

<b>Historical Place</b>	:	<b>Well-known for</b>
1. Burzahom	:	Rock-cut shrines
2. Chandraketugarh	:	Terracotta art
3. Ganeshwar	:	Copper artefacts

Which of the pairs given above is/are correctly matched?

- (a) 1 only
- (b) 1 and 2
- (c) 3 only
- (d) 2 and 3

**Ans: (d), Burzahom:** In the Kashmir valley, there are several neolithic sites near Srinagar and between Baramulla and Anantnag. These include Burzahom, Gufkral, Hariparigom, etc. Pits have been found at neolithic levels at Burzahom. Other finds of Period I at Burzahom included ill-fired, handmade, coarse pottery in grey, red, brown, and buff colours. Burzahom had a well-developed bone tool industry; artefacts such as points, harpoons, needles, etc. The site is famous for pit dwelling and neolithic tool industry. **Hence pair 1 is not correctly matched.**

**Chandraketugarh:** It is located in the Ganga delta in West Bengal. In early historic times, Chandraketugarh was connected to the Ganga by the Vidyadhari River, and must have been an important centre of trade, and possibly also a political centre. Chandraketugarh was a major centre of terracotta craft. Various kinds of artefacts have been found at the site over the years, including coins, pottery, seals and sealings, and figurines made of ivory, wood, and bronze. **Hence pair 2 is correctly matched.**

**Ganeshwar:** The Ganeshwar–Jodhpura culture was located in the north-eastern part of Rajasthan. Hundreds of copper objects found at this site suggest that it had emerged as a copper-working centre and that its people were supplying these items to communities elsewhere. **Hence pair 3 is correctly matched.**

#### Gupta and Post-Gupta Period

1. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs?
- (a) Dholavira
  - (b) Kalibangan
  - (c) Rakhigarhi
  - (d) Ropar

**Ans: (a), Dholavira,** the Harappan City in the Rann of Kutch, has been **inscribed on UNESCO's World Heritage List**, making it the "40th treasure" in India to earn the special recognition.

Discovered in 1968, the site is known for its unique characteristics, such as its **water management system**, multi-layered defensive mechanisms, extensive use of stone in construction and special burial structures.

Along with Gujarat's Dholavira, Rudreshwara/Ramappa Temple in Telangana was also inscribed in the list during the 44th session of the UNESCO World Heritage Committee in Fuzhou, China. While the Harappan city of Dholavira has borne witness to the entire trajectory of the rise and fall of an early civilization of humankind, the Kakatiya Rudreshwara (Ramappa) Temple stands as an outstanding marvel of the Kakatiyan culture.

**Kalibangan** is a famous site of Indus Valley Civilization in **Rajasthan**. It is famous for pottery, **black bangles**. It was an **industrial site the sign of ploughed field, fire altar** and couple buried are founded.

The site of **Rakhigarh** is one of the five known biggest townships of Harappan civilization on Indian sub-continent. Other four are Harappa, Mohenjodaro and Ganveriwala in Pakistan and Dholavira (Gujrat) in India. Five interconnected mounds spread in a huge area form the Rakhigarhi's unique site. Two mounds, out of five, were thickly populated. This site was excavated by Shri Amarendra Nath of Archeological Survey of India.

The town is a shadily populated spot famous for being as **one of the major excavation sites of the Indus Valley Civilization**. Ropar is the **first Indus valley excavation** site in independent India. The excavations from Ropar have yielded a detailed insight on the Indus valley civilization and the Harappa Culture.

## VIII ■ General Studies (Prelims) Solved

### Art & Architecture in Ancient India

#### 1. Which one of the following statements is correct?

- (a) Ajanta Caves lie in the gorge of Waghora river.
- (b) Sanchi Stupa lies in the gorge of Chambal river.
- (c) Pandu-lena Cave Shrines lie in the gorge of Nar-mada River.
- (d) Amaravati Stupa lies in the gorge of Godavari river.

**Ans: (a), Ajanta Caves:** The Ajanta caves are located in the Aurangabad district of the state of Maharashtra. These are a group of Buddhist caves which were carved and sculpted from the 2nd Century BCE. to 5th century CE. The caves were declared as a World Heritage Site by UNESCO in 1983. The site is a horseshoe shaped escarpment which overlooks the **Waghora River**.

**Pandu-lena:** Popularly known as Pandu-lena or Pandava's Caves, the group of 24 cave excavation is located (on the north face of a hill called Trirasmī in ancient times) 8 km southwest of Nasik town (ancient city of Nasika or Nasikya which figures in many of the donor inscriptions of west Indian caves). The caves are hewn at a height of nearly 60 – 70 m from the surrounding plains. The hill was known as Trirasmī, probably due to the location of three independent hill groups which marks the end of Trimbak-Anjaneri range of Sahyadris.

**Amaravati** is situated on the right bank of the river Krishna at a distance of 35 km north of the railway station of Guntur town. It is also a center of pilgrimage, known as Amareswaram.

The Amaravati School of Art occupies a pre-eminent position in the history of Indian Art. With its beginning in 3rd century BC the Amaravati unfolds its chapters through the galaxy of sculptural wealth that once adorned the Mahachaitya the majestic monument of the Buddhists situated here with its history extending over a period of a millennium and a half.

**Sanchi**, variously known as Kakanaya, Kakanava, Kakanadabota and Bota-Sripurvata in ancient times, has a singular distinction of having remarkable specimen of Buddhist art and architecture right from the early Mauryan period (c. third century BC to twelfth century AD). Sanchi is famous in the world for stupas, monolithic Asokan pillar, temples, monasteries and sculptural wealth.

It was Emperor Asoka who laid the foundations of a religious centre at Sanchi fascinated probably by the location of the hill or because of his Queen Devi, who was the daughter of a merchant of Vidisha. He erected the Great Stupa (Stupa 1) here after redistribution of mortal remains of Lord Buddha for erecting several stupas all over the country in order to spread Buddhism. This stupa was originally a low structure of brick, half the diameter of the present edifice hemispherical in shape with raised terraces at the base. It was enclosed by a wooden railing and a stone umbrella at the top. This Great Stupa served as a

nucleus to the large Buddhist establishment during the later period.

During Sunga times, several edifices were raised at Sanchi and its surrounding hills. The Asokan stupa was enlarged and faced with stones and decorated with balustrades, staircases and a harmika on the top.

In the first century BC the Andhra-Satavahanas, who had extended their sway over the eastern Malwa, caused the elaborately carved gateways to Stupa 1. The Great Stupa of Sanchi displays an austere grandeur and the exquisite carvings of the doorway depict in detail the significant episodes and miracles from Lord Buddha's life and events depicted in the Buddhist Jataka stories.

#### 2. With reference to the history of ancient India, Bhavabhuti, Hastimalla and Kshemeshvara were famous

- (a) Jain monks
- (b) playwrights
- (c) temple architects
- (d) philosophers

**Ans: (b), Bhavabhuti**, a major dramatist of the later Sanskrit dramatic period, was the court poet of King Yashovarman of Kannauj, in north India in 8th CE. He too wrote plays based on the Ramayana, such as the Mahaviracharita (Exploits of a Great Hero), which depicts the early life of Rama and Uttaramcharita (The Latter History of Rama), which shows the final years of Rama's life as written in the Uttara Kanda of the Ramayana. Both the plays consist of seven acts written in the Nataka style. His third drama, Malatimadhava (Malati and Madhava), is a Prakarana play centered on the love story of Malati, the daughter of a minister and Madhavya, her beloved.

**Hastimalla** was a kannada poet and playwright during the reign of Hoysalas.

#### 3. With reference to the history of ancient India, which of the following statements is/are correct?

- 1. Mitakshara was the civil law for upper castes and Dayabhaga was the civil law for lower castes.
- 2. In the Mitakshara system, the sons can claim right to the property during the lifetime of the father, whereas in the Dayabhaga system, it is only after the death of the father that the sons can claim right to the property.
- 3. The Mitakshara system deals with the matters related to the property held by male members only of a family, whereas the Dayabhaga system deals with the matters related to the property held by both male and female members of a family.

Select the correct answer using the code given below.

- (a) 1 and 2
- (b) 2 only
- (c) 1 and 3
- (d) 3 only

**Ans: (b), Statement 1 is not correct:** Both the Two systems of family/civil law, Dayabhaga and Mitakshara are the basic to the upper castes alone - Dayabhaga system prevailed in eastern India and Mitakshara in remaining parts of the country.



# Indian History

## Ancient India

### Indus Valley Civilization

1. Which one of the following is not a Harappan site?

- (a) Chanhudaro (b) Kot Diji  
(c) Sohagaura (d) Desalpur

(IAS 2019)

2. Which of the following characterizes / characterize the people of Indus Civilization?

1. They possessed great palaces and temples.  
2. They worshipped both male and female deities.  
3. They employed horse-drawn chariots in warfare.

Select the correct statement/statements using the codes given below:

- (a) 1 and 2 only  
(b) 2 only  
(c) 1, 2 and 3  
(d) None of the statements given above is correct

(IAS 2013)

3. Regarding the Indus Valley Civilization, consider the following statements:

1. It was predominantly a secular civilization and the religious element, though present, did not dominate the scene.  
2. During this period, cotton was used for manufacturing textiles in India.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2

(IAS 2011)

4. Match List I (Ancient site) with List II (Archaeological finding) and select the correct answer using the codes given below the lists:

List I (Ancient site)

- (A) Lothal  
(B) Kalibangan  
(C) Dholavira  
(D) Banawali

List II (Archaeological finding)

1. Ploughed field  
2. Dockyard  
3. Terracotta Replica of a Plough  
4. An inscription comprising ten large sized signs of the Harappan Script

Codes:	A	B	C	D
(a)	1	2	3	4
(b)	2	1	4	3
(c)	1	2	4	3
(d)	2	1	3	4

(IAS 2002)

5. Which one of the following animals was NOT represented on the seals and terracotta art of the Harappan culture?

- (a) Cow  
(b) Elephant  
(c) Rhinoceros  
(d) Tiger

(IAS 2001)

6. What is the correct chronological order in which the following appeared in India?

1. Gold coins  
2. Punch-marked silver coins  
3. Iron plough  
4. Urban culture

Select the correct answer using the codes given below

- (a) 3, 4, 1, 2  
(b) 3, 4, 2, 1  
(c) 4, 3, 1, 2  
(d) 4, 3, 2, 1

(IAS 1998)

7. The earliest evidence of silver in India is found in the—

- (a) Harappan culture  
(b) Chalcolithic cultures of Western India  
(c) Vedic texts  
(d) Silver punch marked coins

(IAS 1994)

### Explanations

1. (c) The Sohgaora copper plate inscription is an Indian copper plate inscription written in Prakrit language in the Brahmi script. It was discovered in Sohgaora, a village on the banks of the Rapti River, about 20km south-east of Gorakhpur, in the Gorakhpur District, Uttar Pradesh, India.  
The plate, consisting of a line of symbolic drawings and four lines of text, is the result of a molding. The inscription is sometimes presented as pre-Ashokan, even pre-Mauryan, but the writing of the plate, especially the configuration of akshara would rather suggest a date after Ashoka.  
Desalpar Gunthli is a village and site belonging to Indus Valley Civilization located at Nakhtrana Taluka, Kutch District of Gujarat, India. Desalpar is 25 km away from Bhuj.  
Chanhudaro and Kot Diji are Harappan sites.
2. (b) Worshipping in Indus Civilization
  - The people of Indus valley Civilization used to live in sculpted houses with flat roofs made of red sand and clay and not the palaces or temples. So, first option is incorrect.
  - Fire-baked bricks—which were uniform in size and moisture-resistant—were important in building baths and sewage structures.
  - The Indus people probably worshipped Mother Goddess as the symbol of fertility, in addition to male and female deities.
  - They worshipped a father God who might be a progenitor of the race and probably was a prototype of Siva as the Lord of the Animals. So, this statement is correct.
  - Within the Harappan civilization, there are numerous depictions of wheels on seals, as well as clay figurines in the shape of bullock carts and wheeled animals. But the horse driven chariot was not used as horse was not known to Indus Valley Civilization. So, it is incorrect.
3. (c) Indus Valley civilization is one of the oldest civilizations, which is believed to exist from 2500 to 1750 BC (through carbon-14 dating) contemporary to the civilizations of Egypt and Mesopotamia.
  - The people from Indus Valley Civilization were secular in nature as derived from the seals, terracotta figurines and copper tablets which provides us with a brief idea on the religious life of the Harappans.
  - The farmers of the Indus Valley Civilization were the first among all other civilization to produce Cotton which was known as Sindon by the Greeks which was found at the site of Mohenjodaro.
  - Thus, both the statements (1) & (2) are correct.
4. (b) Lothal: Dockyard  
Kalibangan: Ploughed field  
Dholavira: An inscription comprising ten large sized signs of the Harappan script  
Banawali: Terrecotta Replica of a plough
5. (a) Thousands of seals were discovered from Harappan sites made of steatite and occasionally of agate, chert, copper, faience and terracotta, with beautiful figures of animals such as unicorn bull, rhinoceros, tiger, elephant, bison, goat, buffalo, etc. Cow, camel, horse and lion were not depicted on seals.
6. (d)
  - First urban culture refers to Indus Valley Civilisation (2250-1750 BC). It is the earliest known urban civilization of the Indian subcontinent (2500-1700 BCE).
  - Iron Plough used in Vedic times.
  - Punch Marked Silver coins are considered the earliest documented coins in India dating to between the 6th and 2nd centuries B.C.E.
  - The Indo-Greeks were the first rulers in India to issue gold coins which can definitely be attributed to the kings. They were the first to issue gold coins in India. (270 BCE).
7. (b)
  - The Indus valley civilization was also called the Harappan Civilization. It was famous for Metallurgy. Over
  - time the Harappan civilization developed as an urban one. Metal technology attained great excellence
  - with the mature Harappan civilization. The earliest evidence of silver in India is found in the Harappan
  - culture.

### Vedic Period

1. With reference to the difference between the culture of Rigvedic Aryans and Indus Valley people, which of the following statements is/are correct?
  1. Rigvedic Aryans used the coat of mail and helmet in warfare whereas the people of Indus Valley Civilization did not leave any evidence of using them.
  2. Rigvedic Aryans knew gold, silver and copper whereas Indus Valley people knew only copper and iron.

3. Rigvedic Aryans had domesticated the horse whereas there is no evidence of Indus Valley people having been aware of this animal.

Select the correct answer using the code given below:

- (a) 1 only (b) 2 and 3 only  
(c) 1 and 3 only (d) 1, 2 and 3

(IAS 2017)

2. The national motto of India, 'Satyameva Jayate' inscribed below the Emblem of India is taken from

- (a) Katha Upanishad  
(b) Chandogya Upanishad  
(c) Aitareya Upanishad  
(d) Mundaka Upanishad

(IAS 2014)

3. The religion of early Vedic Aryans was primarily of

- (a) Bhakti  
(b) image worship and Yajnas  
(c) worship of nature and Yajnas  
(d) worship of nature and Bhakti

(IAS 2012)

4. With reference to the guilds (Shreni) of ancient India that played a very important role in the country's economy, which of the following statements is/are correct?

- Every guild was registered with the central authority of the State and the king was the chief administrative authority on them.
- The wages, rules of work, standards and prices were fixed by the guild.
- The guild had judicial powers over its own members.

Select the correct answer using the codes given below:

- (a) 1 and 2 only (b) 3 only  
(c) 2 and 3 only (d) 1, 2 and 3

(IAS 2012)

5. The "dharma" and "rita" depict a central idea of ancient Vedic civilization of India. In this context, consider the following statements:

- Dharma was a conception of obligations and of the discharge of one's duties to oneself and to others.
- Rita was the fundamental moral law governing the functioning of the universe and all it contained.

Which of the statements given above is/ are correct?

- (a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2

(IAS 2011)

6. Which one of the following four Vedas contains an account of magical charms and spells?

- (a) Rig-veda (b) Yajur-veda  
(c) Atharva-veda (d) Sama-veda

(IAS 2004)

7. The term 'Aryan' denotes

- (a) an ethnic group (b) a nomadic people  
(c) a speech group (d) a superior race

(IAS 1999)

8. The famous dialogue between Nachiketa and Yama is mentioned in the:

- (a) Chhandogya Upanishad (b) Mundakopanishad  
(c) Kathopanishad (d) Kenopanishad

(IAS 1997)

9. The river most mentioned in early Vedic literature is:

- (a) Sindhu (b) Sutudri  
(c) Saraswati (d) Ganga

(IAS 1996)

10. In the context of ancient Indian society which one of the following terms does not belong to the category of the other three?

- (a) Kula (b) Vamsa  
(c) Kosa (d) Gotra

(IAS 1996)

11. Who among the following was a Bhrahmavadini who composed some hymns of the Vedas?

- (a) Lopamudra (b) Gargi  
(c) Leelavati (d) Savitri

(IAS 1995)

12. According to ancient Indian cosmogonic ideas the sequential order of the cycle of four acons (yugas) is:

- (a) Dvapara, Krita, Treta and Kali  
(b) Krita, Dvapara, Treta and Kali  
(c) Krita, Treta, Dvapara and Kali  
(d) Treta, Dvapara, Kali and Krita

(IAS 1996)

13. The word 'Hindu' as reference to the people of Hind (India) was first used by:

- (a) the Greeks (b) the Romans  
(c) the Chinese (d) the Arabs

(IAS 1995)

14. Match List-I with List-II and select the correct answer (using codes given below the lists)

List-I (Eras) List-II (Reckoned from)

- |                |              |
|----------------|--------------|
| A. Vikrama era | 1. 3102 B.C. |
| B. Saka era    | 2. 320 A.D.  |
| C. Gupta era   | 3. 78 A.D.   |
| D. Kali era    | 4. 58 B.C.   |
|                | 5. 248 A.D.  |

Codes:

- (a) A-2; B-4; C-5; D-1 (b) A-1; B-3; C-2; D-4  
(c) A-4; B-5; C-2; D-3 (d) A-4; B-3; C-2; D-1

(IAS 1995)

# Ecology & Environment



## Ecology & Environment

1. **In the context of India, which of the following is/are considered to be practice(s) of eco-friendly agriculture?**  
1. Crop diversification 2. Legume intensification  
3. Tensiometer use 4. Vertical farming  
Select the correct answer using the code given below:  
(a) 1, 2 and 3 only (b) 3 only  
(c) 4 only (d) 1, 2, 3 and 4  
(IAS 2020)
2. **In rural road construction, the use of which of the following is preferred for ensuring environmental sustainability or to reduce carbon footprint?**  
1. Copper slag  
2. Cold mix asphalt technology  
3. Geotextiles  
4. Hot mix asphalt technology  
5. Portland cement  
Select the correct answer using the code given below:  
(a) 1, 2 and 3 only (b) 2, 3 and 4 only  
(c) 4 and 5 only (d) 1 and 5 only  
(IAS 2020)
3. **In the context of which one of the following are the terms 'pyrolysis and plasma gasification' mentioned?**  
(a) Extraction of rare earth elements  
(b) Natural gas extraction technologies  
(c) Hydrogen fuel-based automobiles  
(d) Waste-to-energy technologies  
(IAS 2019)
4. **Consider the following statements:**  
1. As per law, the Compensatory Afforestation Fund Management and Planning Authority exists at both National and State levels.  
2. People's participation is mandatory in the compensatory afforestation programmes carried out under the Compensatory Afforestation Fund Act, 2016.  
Select the correct answer using the code given below:  
(a) 1 only (b) 2 only  
(c) Both 1 and 2 (d) Neither 1 nor 2  
(IAS 2019)
5. **Which of the following is/are the possible consequence/s of heavy sand mining in river beds?**  
1. Decreased salinity in the river  
2. Pollution of groundwater  
3. Lowering of the water-table  
Select the correct answer using the code given below:  
(a) 1 only (b) 2 and 3 only  
(c) 1 and 3 only (d) 1, 2 and 3  
(IAS 2018)
6. **With reference to agricultural soils, consider the following statements:**  
1. A high content of organic matter in soil drastically reduces its water holding capacity.  
2. Soil does not play any role in the sulphur cycle.  
3. Irrigation over a period of time can contribute to the salinization of some agricultural lands.  
Which of the statements given above is/are correct?  
(a) 1 and 2 only (b) 3 only  
(c) 1 and 3 only (d) 1, 2 and 3  
(IAS 2018)
7. **Consider the following statements:**  
1. Most of the world's coral reefs are in tropical waters.  
2. More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.  
3. Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.  
Which of the statements given above is/are correct?  
(a) 1 and 2 only (b) 3 only  
(c) 1 and 3 only (d) 1, 2 and 3  
(IAS 2018)
8. **The term "sixth mass extinction/sixth extinction" is often mentioned in the news in the context of the discussion of**  
(a) Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.  
(b) Fears of a possible collision of a meteorite with the Earth in the near future in the manner it hap-

pened 65 million years ago that caused the mass extinction of many species including those of dinosaurs.

- (c) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.
- (d) Mankind's over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution and global climate change.

(IAS 2018)

9. **With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following fall under the Conservation Agriculture?**

1. Avoiding the monoculture practices
2. Adopting minimum tillage
3. Avoiding the cultivation of plantation crops
4. Using crop residues to cover soil surface
5. Adopting spatial and temporal crop sequencing/crop rotations.

Select the correct answer using the code given below:

- (a) 1, 3 and 4
- (b) 2, 3, 4 and 5
- (c) 2, 4 and 5
- (d) 1, 2, 3 and 5

(IAS 2018)

10. **Which of the following best describes/describe the aim of 'Green India Mission' of the Government of India?**

1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'.
2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future.
3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

(IAS 2016)

11. **What can be the impact of excessive/inappropriate use of nitrogenous fertilizers in agriculture?**

1. Proliferation of nitrogen-fixing microorganisms in soil can occur.
2. Increase in the acidity of soil can take place.
3. Leaching of nitrate to the ground-water can occur.

Select the correct answer using the code given below:

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

(IAS 2015)

12. **Which one of the following is the best description of the term 'ecosystem'?**

- (a) A community of organisms interacting with one another
- (b) That part of the Earth which is inhabited by living organisms
- (c) A community of organisms together with the environment in which they live
- (d) The flora and fauna of a geographical area

(IAS 2015)

13. **With reference to the Indian Renewable Energy Development Agency Limited (IREDA), which of the following statements is/are correct?**

1. It is a Public Limited Government Company.
2. It is a Non-Banking Financial Company.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

(IAS 2015)

14. **Consider the following:**

1. Bats
2. Bears
3. Rodents

The phenomenon of hibernation can be observed in which of the above kinds of animals?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1, 2 and 3
- (d) Hibernation cannot be observed in any of the above

(IAS 2014)

15. **With reference to Eco-Sensitive zones', which of the following statements is/are correct?**

1. Eco-Sensitive Zones are the areas that are declared under the wildlife (protection) Act, 1972.
2. The purpose of the declaration of Eco-Sensitive Zones is to prohibit all kinds of human activities in those zones except agriculture.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

(IAS 2014)

16. **Photochemical smog is a resultant of the reaction among**

- (a) NO<sub>2</sub>, O<sub>3</sub> and peroxyacetyl nitrate in the presence of sunlight
- (b) CO, O<sub>2</sub> and peroxyacetyl nitrate in the presence of sunlight
- (c) CO, CO<sub>2</sub> and N<sub>2</sub>O at low temperature
- (d) High concentration of NO<sub>2</sub>, O<sub>3</sub> and CO in the evening

(IAS 2013)

17. **In the grasslands, trees do not replace the grasses as a part of an ecological succession because of**