

Q.1) With reference to Indus Valley people, consider the following statements:

1. Indus people were the first to produce cotton.
2. James Prinsep was the 1st person to decipher Harappan script.
3. The Harappan culture belongs to chalcolithic age.
4. Gold was known to them.

Which of the above statements are correct?

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

Q.1) Solution (a)

Statement analysis

Statement 1: **Indus people were the first to produce cotton** because cotton was produced in this area the Greeks called it Sindon, which is derived from Sindh.

Statement 2: Harappans invented the art of writing like the people of ancient Mesopotamia. Although the earliest specimen of Harappan script was noticed in 1853 and the complete script discovered by 1923, **it has not been deciphered so far**. James Prinsep deciphered Kharosthi and Brahmi Script from Mauryan Empire.

Statement 3: **Harappan culture belongs to Bronze Age**, the people of Harappa used many tools and implements of stone, but they were acquainted with the manufacture and use of bronze. Bronze was made by smiths by mixing tin with copper.

Statement 4: Goldsmiths of Harappan age used to make jewellery of gold, silver and other precious stones. **Gold jewellery** from these civilizations also consisted of bracelets, necklaces, bangles, ear ornaments, rings, etc.

Q.2) In the early Vedic period, Visu refers to?

- a) Basic unit of Political organization.
- b) Group of villages
- c) Leader of the grama
- d) None of the above

Q.2) Solution (b)

Explanation:

'Kula' was the basic unit of political organization in Rig-Vedic societies. Multiple families together of kinship formed 'gram' or village which was under Gramani. **Group of villages were called Visu which was headed by 'Vishayapati'.**

However it is difficult to state whether 'Visu' of the Rig-Vedic period was a local sub-division or a block kinship like clan. The highest political unit was Jana or tribe. The king is referred to as the protector of the Jana or people.

Q.3) Which of the following statements with reference to Chola Empire is incorrect?

- a) The capital of the Chola Empire was Tanjore.
- b) The Chola Empire was divided into mandalams and each mandalam into valanadus and nadus.
- c) The practice of sati was prevalent among royal families.
- d) Siva temple at Gangaikondacholapuram was built by Rajaraja I.

Q.3) Solution (d)

Basic information:

After the decline of the Sangam period, the Cholas became feudatories in Uraiyur. They became prominent in the ninth century and established an empire comprising the major portion of South India. **Their capital was Tanjore.** They also extended their sway in Sri Lanka and the Malay Peninsula. Therefore, they are called as the Imperial Cholas.

Explanation:

Statement 2: The **Chola Empire was divided into mandalams and each mandalam into valanadus and nadus.** In each nadu there were a number of autonomous villages. The royal princes or officers were in charge of mandalams. The valanadu was under periyannattar and nadu under nattar.

Statement 3: **The practice of 'sati' was prevalent among the royal families.** The devadasi system or dancing girls attached to temples emerged during this period.

Statement 4: Siva temple at Gangaikondacholapuram was built by Rajendra I, who was the son of Rajaraja I.

Q.4) From which of the following places the burial R-37 was obtained?

- a) Kalibanga
- b) Harappa
- c) Mohenjodaro
- d) Ropar

Q.4) Solution (b)

Basic Information:

Explanation:

Two types of burial practices one of typical R37 type and another of atypical cemetery H type seen was seen in Harappa.

R37 is a primary burial site with skeletons found in extended position.

Q.5) Consider the following pairs with reference to Harappan Period:

<i>Raw Material</i>	:	<i>Source</i>
1. Lapis-Lazuli	:	Shortughai
2. Carnellian	:	Nageshwar
3. Copper	:	Khetri

Which of the above given pairs are correctly matched?

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

Q.5) Solution (b)

Explanation:

Harappans procured materials for craft production in various ways, such as; Nageshwar and Balakot where shell was easily available

- **Shortughai in Afghanistan where lapis lazuli** (a highly valued blue stone) was available.
- **Lothal which was near sources of carnelian** (from Bharuch in Gujarat),
- steatite (from south Rajasthan and north Gujarat) and metal (from Rajasthan)
- Another method used was to send expeditions to areas like **Khetri in Rajasthan for Copper** & South India for Gold. They even got copper from Oman in west asia.

Q.6) Tripartite struggle for Kannauj involved which of the following ruling dynasties?

1. Gurjara -pratihara
2. Palas
3. Satavahanas
4. Rasthrakutas

Select the correct code

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

Q.6) Solution (b)

Explanation:

It is quite clear towards the end of 8th century A.D. there were three great powers in India viz; **the Palas, Gurjara-pratiharas and Rasthrakutas**. The struggle for control over Kannauj among these three dynasties is known as the tripartite struggle in Indian history. Briefly, big chunks of North-West India (Pratiharas), East India (Palas) and South India (Rasthrakutas) were at war for 200 years and made all three dynasties weak in the long run. This resulted into the political disintegration of the country and benefited the Islamic invaders from Middle-east.

Q.7) In the context of Administrative posts during Mauryan period, consider the following pairs:

1. Sannidhata : Head of Royal treasury

2. Akaradhyaksha : Accountant General
3. Panyadhyaksha : Superintendent of commerce

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

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

Q.7) Solution (c)

Statement Analysis:

Important officials in Mauryan Bureaucracy

Sannidhata	Head of Royal Treasury.
Samharta	Chief tax collector
Pradestha	Chief justice of criminal court.
Akaradhyaksha	Superintendent of mines
Sitaadhyaksha	Supervised Agriculture
Panyadhyaksha	Superintendent of commerce
Rajuka	Revenue settlement officer

Q.8) Which of the following inventions/discoveries are credited to the people of Neolithic Age?

1. Invention of pottery
2. Polished ground stone tools
3. Concept of division of labour
4. Emergence of self-sufficient villages

Choose the correct answer using the codes given below:

- a) 1 only

- b) 1, 3 and 4 only
- c) 3 and 4 only
- d) All of the above

Q.8) Solution (d)

All the statements are very much unique features of the Neolithic Age. Hence correct option would be 'All of the above'.

Basic Information:

- In northern India, the Neolithic age emerged around c.8000–6000 BCE. At some places in south and eastern India, it is as late as 1000 BCE.
- The great British archaeologist V. Gordon Childe termed the Neolithic phase as Neolithic Revolution.

Some of the innovations of this period include:

- **Advent of food production:** The Neolithic man cultivated land and grew fruits & corn like ragi and horse gram (kulathi). He domesticated cattle, sheep, and goats.
- **Innovations in technology:** The Neolithic man innovated in the production of stone tools, producing implements such as polished, pecked, and ground stone tools.
- They **depended on polished stones** other than quartzite for making tools. The use of celts was especially important for ground and polished hand axes.
- **Invention of pottery:** The Neolithic era communities first made pottery by hand and then with the help of the potter's wheel. Their pottery included black burnished ware, grey ware, and mat-impressed ware. It can therefore be said that pottery on a large-scale appeared in this phase.
- **Emergence of self-sufficient village communities:** In the later phases of the Neolithic era, people led a more settled life. They lived in circular and rectangular houses made of mud and reed.
- They also knew how to **make boats and could spin cotton and wool** and weave cloth.
- **Division of labour based on sex and age:** As society was progressing, the need for additional labour was recognised and thus labour was procured from other non kin groups too.

Q.9) Consider the following statements regarding 'Chalcolithic Age':

1. Chalcolithic people were the first to invent some form of script/writing system.
2. This period gave rise to refined techniques of copper metallurgy.
3. Usage of stone tools ceased to exist during this period.

Choose the correct statement/s using the codes given below:

- a) 2 only
- b) 2 and 3 only
- c) 1 and 2 only
- d) All of the above

Q.9) Solution (c)

Statement Analysis:

Statement 1	Statement 2	Statement 3
Correct	Correct	Incorrect
Indus Valley Civilisation was a Chalcolithic civilisation which invented a Script.	The name of Chalco-lithic Age itself highlights the importance of 'Copper' metal. Hence it would be a corollary that this time period hosted/invented high standards of copper metallurgy.	Stone tools continued to be in use along with the new found metal in 'copper'. Various excavations from this period have yielded diverse forms of stone tools, beads made of semi-precious stones etc. Moreover, the name of 'Chaco-lithic' has 'lithic' part which signifies the importance of stone tools.

Basic Information:

Some of the distinguishing features of people in the Chalcolithic age are as follows:

- They were not acquainted with burnt brick, and generally lived in thatched **houses made of mud bricks**. Their economy was a **village-based economy**.
- Chalcolithic-era people did **not know the use of writing (Except the IVC people)**. Their villages were small, with huts close to each other.
- Chalcolithic age people **cooked their food**. Small **clay images of earth goddesses** have been found from Chalcolithic sites. It is thus possible to say that they venerated the Mother Goddess.
- Chalcolithic people were fond of **ornaments and decoration**. The women wore ornaments **of shell and bone** and carried finely worked combs in their hair.
- The **bull** was probably the symbol of their **religious cult** (based on stylised bull terracottas of Malwa and Rajasthan).
- The Chalcolithic people were **expert coppersmiths**. They knew the **art of copper-smelting** and were good stone workers as well.
- They manufactured **beads of semi-precious stones** such as carnelian, steatite, and quartz crystal. They knew **spinning and weaving**.
- **Infant mortality was very high** among Chalcolithic people, as evident from the burial of a large number of children in western Maharashtra.
- One can note the **beginnings of social inequalities** in Chalcolithic societies, as chiefs who lived in rectangular houses dominated others who lived in round huts.

Q.10) Consider the following pairs:

Vedas	Their respective Upavedas
1. Rig Veda	Dhanurveda
2. Sama Veda	Shilpa veda
3. Yajur Veda	Gandharva veda
4. Atharva Veda	Ayurveda

Which of the above-mentioned pairs are correctly matched?

- a) 1 and 4 only
- b) 2, 3 and 4 only
- c) 2 and 3 only

d) None of the above

Q.10) Solution (d)

None of the given pairs in the question are correctly matched.

Correct Pairs:

Vedas	Their respective Upavedas
1. Rig Veda	Ayurveda (Medicine)
2. Sama Veda	Gandharva veda (Arts and Dance)
3. Yajur Veda	Dhanurveda (Archery)
4. Atharva Veda	Shilpa veda (Sculpturing)

Q.11) Which of the following statements are not correct with reference to Mauryan Empire?

- Punch marked coins were used during Mauryan period.
- Haranya was a tax on cattles during Mauryan period.
- Bindusara patronized Ajivika Sect.
- In Ashokan inscription 4 different script were used.

Q.11) Solution (b)

Statement Analysis:

Statement 1	Statement 2	Statement 3	Statement 4
Correct	Incorrect	Correct	Correct
The use of currency became fairly common during Mauryan period on account of the development of commerce.	The distinguishing feature of mauryan economy is the state control of Agriculture, industry and trade and the levy of all varieties of	Bindusara and Ashoka both have patronized Ajivika sect. Ashoka even gifted two cave in the Barabara hills to	Most Asokan inscriptions were in the Prakrit language while those in the northwest of the subcontinent were in Aramaic and Greek.

The largest number of Punch-marked (mostly silver) coins are assignable to Mauryan period.	taxes on people. The peasants were required to pay land tax, irrigation tax called Haranya , taxes on their cattles and also a tax to meet expenditure of army passing through their territories.	them.	Most Prakrit inscriptions were written in the Brahmi script ; however, some, in the northwest, were written in Kharosthi . The Aramaic and Greek scripts were used for inscriptions in Afghanistan.
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Q.12) Consider the following statements with reference to Gupta rulers?

1. Chandragupta I was the 1st to take title of Maharajadhiraj and to issue gold coins.
2. Hien-tsang visited India during Chandragupta II reign.
3. Srigupta established Nalanda University.

Which of the statements given above is/are incorrect?

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

Q.12) Solution (b)

Explanation:

Incorrect statement is being asked here

Statement Analysis:

Statement 1	Statement 2	Statement 3
Correct	Incorrect	Incorrect

Chandragupta was a son of the Gupta king Ghatotkacha, and a grandson of the dynasty's founder Gupta, both of whom are called Maharaja ("great king") in the Allahabad Pillar inscription.

Chandragupta assumed the title Maharajadhiraja ("king of great kings") and issued gold coins

The famous Chinese pilgrim, Fahien visited India during the reign of Chandragupta II.

The main purpose of his visit was to see the land of the Buddha and to collect Buddhist manuscripts from India.

Kumargupta laid the foundation of the Nalanda University which emerged an institution of international reputation.

Kumaragupta was the son and successor of Chandragupta II. His reign was marked by general peace and prosperity.

Q.13) Consider the following places and arrange them from west to East.

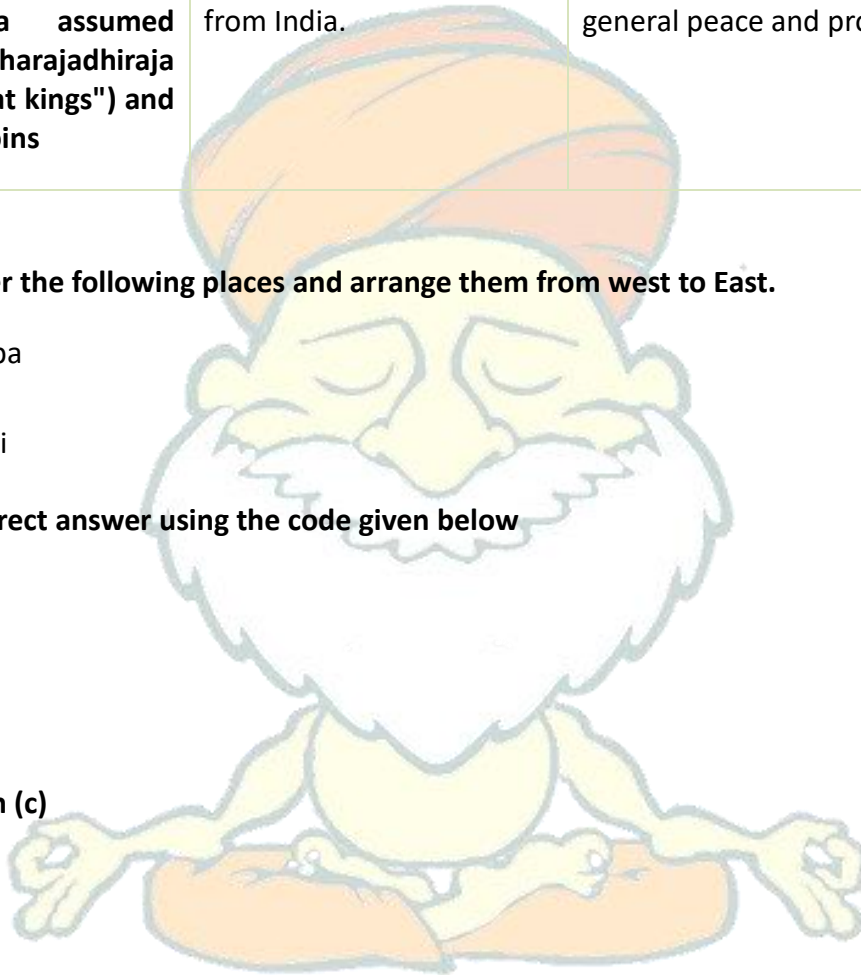
1. Harappa
2. Lothal
3. Kot-Diji

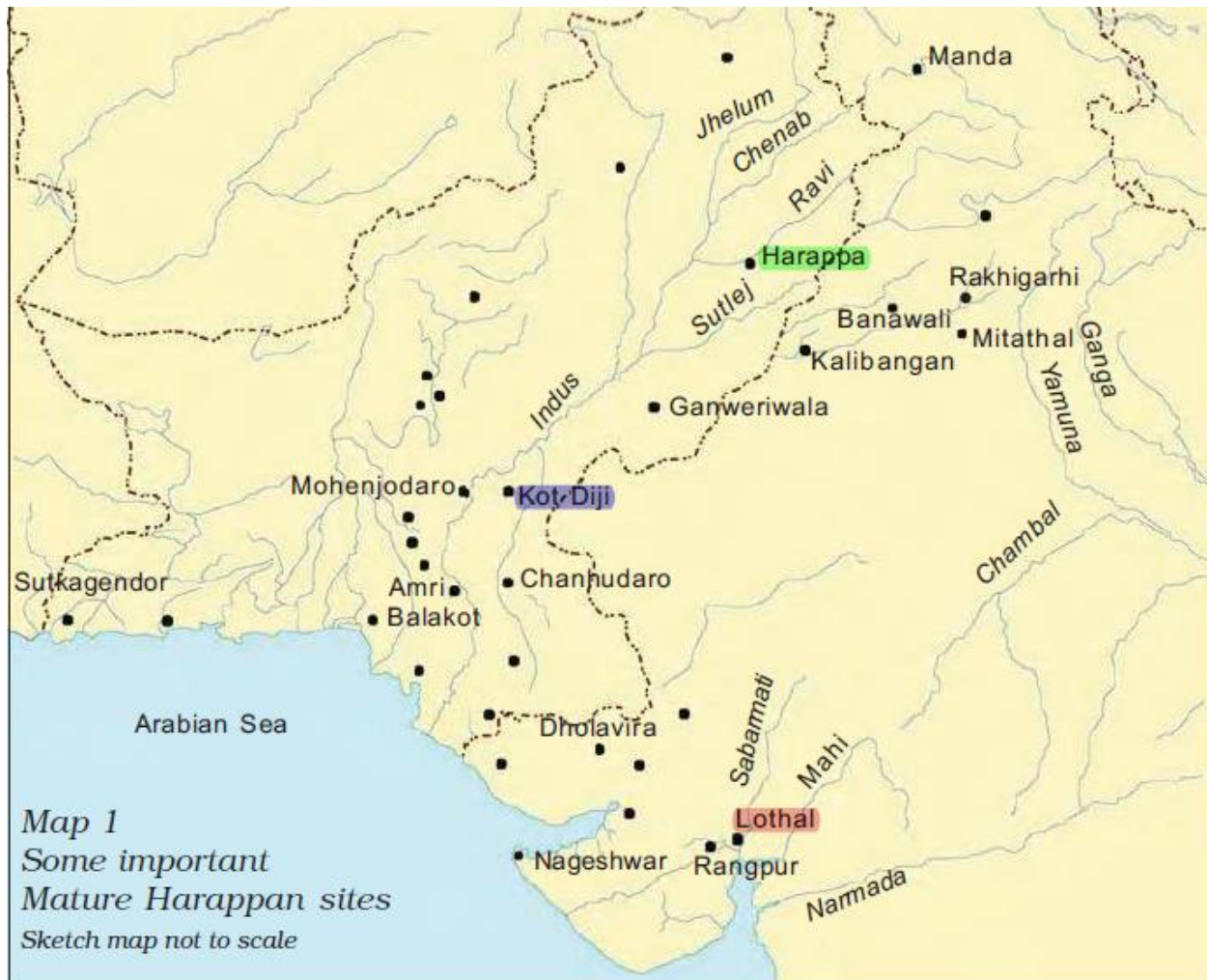
Select the correct answer using the code given below

- a) 1-2-3
- b) 3-2-1
- c) 3-1-2
- d) 1-3-2

Q.13) Solution (c)

Explanation:





Q.14) With reference to Agrahara, which of the following is correct?

- a) It was tax collected on agricultural produce
- b) It was an land measurement method
- c) Classification of urban lands
- d) Land granted to Brahmana

Q.14) Solution (d)

Explanation:

An **agrahara** was land granted to a Brahmana, who was usually exempted from paying land revenue and other dues to the king, and was often given the right to collect these dues from the

local people. It is often heritable, perpetual and tax free land.

Q.15) Which of the following is not correct with reference to Gupta's period?

- a) Kalidasa was among Navratna of Samudragupta.
- b) Gupta period witnessed the writings of Aryabhatta and Varamihira.
- c) Land became commodity of exchange during Gupta's period.
- d) Nivartana was used to measure Land.

Q.15) Solution (a)

Explanation:

Statement 1: **Kalidasa was in the court of Chandragupta II Vikramaditya** as one of the nine gems (Navratna), not samdudragupta.

Statement 2: The Gupta period saw the compilation of two epics Ramayana and Mahabharata. **Gupta period also witnessed scientific works of Aryabhata who wrote Aryabhattiyam, which introduced decimal system and Varahamira's Romaka sidhanta.**

Statement 3: It appears that the land was to all intents and purposes that of the peasants. **Land could be as commodity of exchange** but the king claimed its theoretical owner-ship.

Statement 4: Different land measures were known in different regions such as **Nivartana, Kulyavapa and Dronavapa**. The importance of irrigation to help agriculture was recognized in India from the earliest times

Q.16) Consider the following statements regarding the Sunga Empire:

- 1. Patanjali was contemporary to Pushyamitra Sunga.
- 2. Kalidasa's Malavikagnimitram is based on love story of Agnimitra (son of P. Sunga) and Malavika, a handmaiden.
- 3. Sunga Dynasty was followed by Kanvas with capital at Patliputra.

Which of the above statements is/are correct?

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

d) 1, 2 and 3

Q.16) Solution (d)

Basic information:

Pushyamitra Shunga was the founder and first ruler of the Shunga Empire. Pushyamitra was originally a Senapati of the Maurya Empire. In 185 BCE he assassinated the last Mauryan Emperor, Brihadratha Maurya, during an army review, and proclaimed himself emperor.

Statement Analysis

Statement 1: Patanjali was a sage in ancient India, thought to be the author of a number of Sanskrit works. The greatest of these are the Yoga Sutras, a classical yoga text. **He was contemporary to Pushymitra Shunga.**

Statement 2: Kalidas a court poet of Chandragupta Vikramaditya of Gupta dynasty. He wrote Malavikagnimitram, a play which gives lot of information about the horse sacrifice of Pushyamitra and the fight of Agnimitra with the ruler of Vidarbha. This play depicts the love story Agnimitra and Malvika, a handmaiden.

Statement 3: The last Sunga king was Devabhuti, who was killed by his own minister, **Vasudeva Kanva in around 73 BC. This established the Kanva dynasty at Magadha from 73 to 28 BC.**

Q.17) Consider the following statements:

1. Artharveda is most secular among all Vedas.
2. Brahmanas are prose version of Vedas.
3. Upanishads are also known as Vedantas.

Select the correct answer using the code given below:

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

Q.17) Solution (d)

Statement analysis:

Statement 1	Statement 2	Statement 3
Correct	Correct	Incorrect
<p>Artharveda: Its theme is witchcraft, sorcery etc..</p> <p>It deals with Ayurveda, Ganithashastra. Rekhanigita</p> <p>A Brahmin never recites this.</p> <p>It is most secular of all the vedas.</p>	<p>Brahmanas are Related to conduct of various ceremonies.</p> <p>It is a prose version of the Vedas.</p> <p>They are 108 in number, Satapatha Brahmana most famous dealing with rituals connected with Agricultural production.</p>	<p>Upanishad are also known as vedantas.</p> <p>There are 108 Upanishads out of which, 13 are considered major one.</p> <p>The concepts of Atman and Brahman are majorly discussed in this.</p>

Q.18) Consider the following statements with reference to Satavahana rulers:

1. Satavahanas were the first rulers to make tax free land grants to the Brahmanas and Buddhist monks.
2. Satavahana king believed in divine rights of kings.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 and 2

Q.18) Solution (a)

Basic Information:

The Satavahanas, also referred to as the Andhras in the Puranas, were an ancient Indian dynasty based in the Deccan region. The founder of the Satavahana dynasty was Simuka. He and his successors established their authority from the mouth of the Krishna to the entire Deccan plateau.

According to the Puranas, the Satavahana king killed the last Kanva ruler of Magadha and

presumably took possession of his kingdom.

Statement Analysis

Statement 1: the Satavahana started the practice of granting tax-free villages to Brahmanas and Buddhist monks. The cultivated fields and villages granted to them were declared free from molestation by Royal policemen, soldiers and all kinds of royal officers.

Statement 2: the Satavahana king merely took up the title of raja. **They did not believe in divine rights of kings.** They did not claim to exercise absolute power. They were controlled by the law as laid down in the Dharmshastras and the customs of the country.

Q.19) Consider the following statements with reference to Mauryan Empire:

1. The state enjoyed monopoly in mining, forest, salt, and sale of liquor.
2. The practice of divorce prevailed during Mauryan Empire.
3. The last Mauryan ruler was Mahendra, who was killed by Pushyamitra sunga.

Which of the above statements is/are incorrect?

- a) 1 and 2 only
- b) 2 only
- c) 3 only
- d) None of these

Q.19) Solution (c)

Explanation:

Note: incorrect statements are asked.

Statement 1: During Mauryan period the state enjoyed monopoly in mining, forest, salt, sale of liquor, manufacture of arms etc.

Statement 2: During Mauryan periods women participated in social and religious function. The system of sati was practiced at few places in North West, but it was not a general practice. **The practice of divorce prevailed during the Mauryan period.**

Statement 3:- **The last Mauryan ruler Brihadratha Maurya**, was assassinated during an army inspection by his own general Pushyamitra Shunga. So, statement 3 is correct answer here.

Q.20) Which of the following are correct with reference to Kushana rulers?

1. Kanishka convened third Buddhist council.
2. Kushana rulers introduced satrap system in India.
3. Many kushan rulers adopted title Devaputra or "Son of God".
4. Charaka and Sushruta were in the court of Kanishka

Select the correct code:

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

Q.20) Solution (b)

Statement analysis:

Statement 1: **Kanishka convened fourth Buddhist council in Kashmir.** Vasumitra presided that council while Ashvagosh was his deputy. Buddhism got divided here into two sect Mahayana and Hinayana. Mahayana Buddhism became the state religion during Kanishka's period.

Statement 2: **The Ancient Sakas in India had introduced Satrap system of government,** along with Parthians, which was quite similar to the Iranian Achaemenid and Seleucid. Under this system, the kingdom was divided into provinces, each under military governor Mahakshatrapa (great satrap). The governors of lower status were called kshatrapas (satraps). These governors had the power to issue their own inscriptions and mint their own coins

Statement 3: Some historians feel that the Kushanas considered themselves godlike. **Many Kushana rulers also adopted the title devaputra, or "son of god",** possibly inspired by Chinese rulers who called themselves sons of heaven.

Statement 4: **Nagarjuna, Vaumitra, Ashvaghosh , Charak and Sushruta were in the court of Kanishka.**

Q.21) Which of the following are sources of Ammonia emissions?

1. Agriculture
2. Vehicular emissions
3. Forest fires

4. Decomposition of organic waste

Select the correct answer using the code given below:

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

Q.21) Solution (d)

- Ammonia (NH₃) is a colourless gas and is used as an industrial chemical in the production of fertilisers, plastics, synthetic fibres, dyes and other products.
- Sources of Ammonia emissions:
 - The largest source of NH₃ emissions is **Agriculture**, including animal husbandry and NH₃-based fertilizer applications.
 - Other sources of NH₃ include industrial processes, **vehicular emissions**, volatilization from soils and oceans, **decomposition or breakdown of organic waste**, forest fires, animal and human waste, nitrogen fixation processes.

Q.22) With reference to Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), consider the following statements:

1. It came into being in 1997 through the New Delhi Declaration.
2. All the members of BIMSTEC are littoral states of Bay of Bengal.
3. Its permanent secretariat is located in Dhaka.

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

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

Q.22) Solution (a)

- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organisation of seven nations of South Asia and Southeast Asia, housing 1.5 billion people and having a combined Gross Domestic Product of \$3.5 trillion (2018).

Statement 1 Incorrect	Statement 2 Incorrect	Statement 3 Correct
7 member States of BIMSTEC: Bangladesh, Bhutan, India, Nepal, Sri Lanka, Myanmar and Thailand. Nepal and Bhutan are landlocked countries and not littoral.	BIMSTEC came into being in 1997 through the Bangkok Declaration. Initially, it was formed with four Member States with the acronym 'BIST-EC' (Bangladesh, India, Sri Lanka and Thailand Economic Cooperation).	Leadership is rotated in alphabetical order of country names. The permanent secretariat is in Dhaka, Bangladesh.

Q.23) Which of the following warships are built under Project 17A of Indian Navy?

- a) Submarines
- b) Torpedo launch vessels
- c) Stealth frigates
- d) Amphibious transport docks

Q.23) Solution (c)

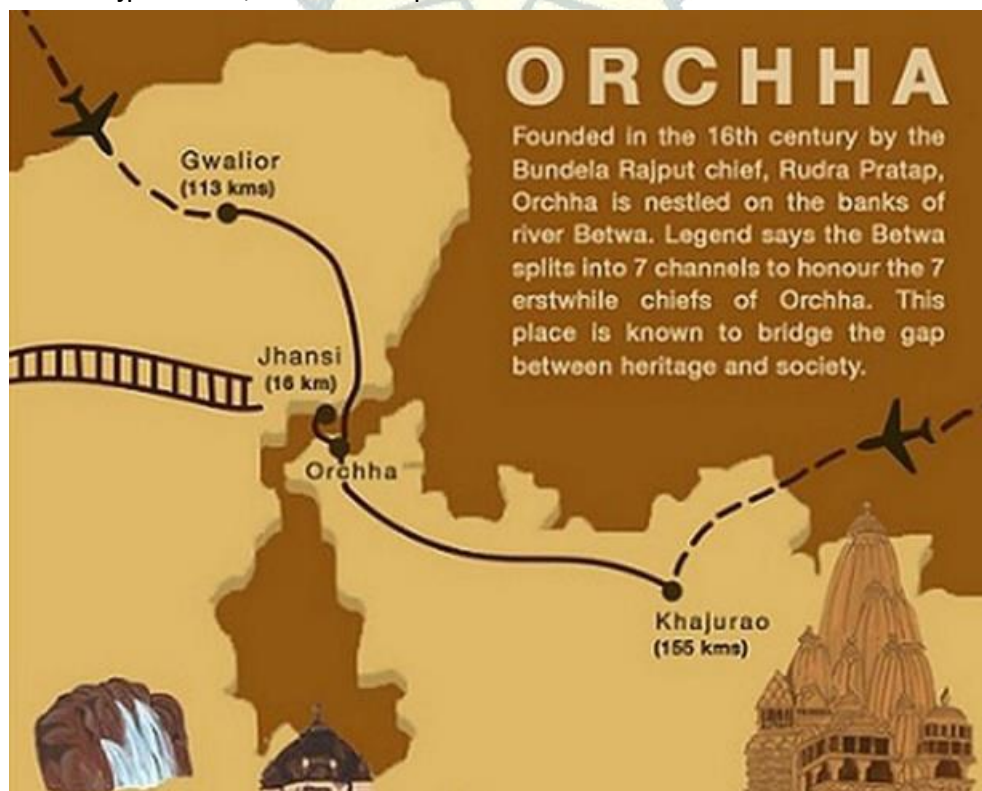
- **Himgiri**, the first of the three **stealth frigates** being built by Garden Reach Shipbuilders and Engineers (GRSE), Kolkata, under Project 17A for the Navy, was launched recently.
- INS Nilgiri is the first ship of the Project-17A.
- Under Project 17A program, a total of seven ships are being built with enhanced stealth features, advanced indigenous weapon and sensor fit along with several other improvements.

Q.24) Orchha, the capital of the Bundela kingdom in the 16th century is nestled on the banks of which of the following rivers?

- a) Betwa
- b) Ken
- c) Chambal
- d) Sind

Q.24) Solution (a)

- Orchha is popular for its temples and palaces and was the capital of the Bundela kingdom in the 16th century.
- The famous spots in the town are Raj Mahal, Jehangir Mahal, Ramraja Temple, Rai Praveen Mahal, and Laxminarayan Mandir.
- Orchha located in the Bundelkhand region of Madhya Pradesh. The historic town of **Orchha, nestled on the banks of river Betwa**, was founded in the 16th century by the Bundela Rajput Chief, Rudra Pratap.



Q.25) Consider the following pairs:

Country

1. Estonia
2. Eritrea
3. Dominican Republic

Sea associated with

- North Sea
Red Sea
Caribbean Sea

Which of the pairs given above are correctly matched?

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

Q.25) Solution (c)

- Recently the Cabinet approved opening of 3 Indian Missions in Estonia, Paraguay and Dominican Republic.



Q.26) With reference to Blue Flag certification, consider the following statements:

1. It is awarded by the United Nations Environment Programme (UNEP) under its 'Clean Seas' Programme.
2. It can be obtained by a beach or marina only.

3. Environmental, educational, access and safety related criteria should be satisfied to qualify for the Blue Flag certificate.

Which of the statements given above is/are correct?

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

Q.26) Solution (b)

Statement 1	Statement 2	Statement 3
Incorrect	Incorrect	Correct
The Blue Flag is an eco-label and blue flag beaches should provide clean and hygienic bathing water, along with basic infrastructure for tourists. The Blue Flag Certification is awarded by a non-profit organization called the Foundation for Environmental Education (FEE).	The certification is awarded to beaches, marinas (which are small ports or harbours designed for pleasure yachts or boats) and sustainable boat tourism operators in FEE member countries.	To qualify for the Blue Flag certificate, a series of stringent requirements or criteria should be satisfied. The criteria are environmental, educational, access and safety related.

Q.27) With reference to National Family Health Survey (NFHS), consider the following statements:

- 1. International Institute for Population Sciences (IIPS), Mumbai is the nodal agency for the NFHS survey.
- 2. NFHS survey is conducted once in every five years.
- 3. These surveys are completely funded by the Ministry of Health and Family Welfare (MoHFW).

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

- a) 1 and 2 only

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

Q.27) Solution (c)

Statement 1 Correct	Statement 2 Incorrect	Statement 3 Incorrect
The NFHS is a large-scale, multi-round survey conducted in a representative sample of households throughout India. The Ministry of Health and Family Welfare (MoHFW) has designated the International Institute for Population Sciences (IIPS) Mumbai, as the nodal agency for providing coordination and technical guidance for the survey.	The first phase of the fifth National Family Health Survey (NFHS-5) has been released recently for which data was collected in the second half of 2019 covered 17 states and five Union Territories. The first four NFHS were conducted in 1992-93, 1998-99, 2005-06 and 2015-16, respectively. MoHFW has decided to conduct integrated NFHS with a periodicity of three years in lieu of different surveys from 2015-16 onwards.	Along with MoHFW many international agencies provide funds to carry out the NFHS. They are United States Agency for International Development (USAID), The Bill and Melinda Gates Foundation, Department for International Development (DFID), United Nations Children's Fund (UNICEF) and United Nations Population Fund (UNFPA).

Q.28) With reference to Narrow Band-Internet of Things (NB-IoT), consider the following statements:

1. NB-IoT is a low power wide area technology to connect wide range of new IoT devices.
2. NB-IoT doesn't operate in the licensed Long-Term Evolution construct.
3. Worlds' first satellite-based NB-IoT network will be established in India.

Which of the statements given above is/are correct?

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

d) 1, 2 and 3

Q.28) Solution (d)

Statement 1
Correct

Narrow Band-Internet of Things (NB-IoT) is a wireless communication standard for the Internet of Things (IoT). **It is a Low Power Wide Area (LPWA) technology** that was developed to enable wide range of new internet of things devices.

Statement 2
Correct

NB-IoT doesn't operate in the licensed Long-Term Evolution (LTE) construct. Instead, it works in one of three ways: (1) Independently; (2) In unused 200-kHz bands that have previously been used for GSM (Global System for Mobile Communications) and (3) On LTE base stations allocating a resource block to NB-IoT operations or in their guard bands.

Statement 3
Correct

BSNL, in partnership with Skylotech India, announced **worlds' first satellite-based Narrow Band-Internet of Things (NB-IoT) network in India.** This is indigenously developed by Skylo. It will connect with BSNLs satellite-ground infrastructure and provide PAN-India coverage, including Indian seas.

Q.29) The Fordow Fuel Enrichment Plant is located in which of the following country?

- a) Israel
- b) United Arab Emirates (UAE)
- c) Iran
- d) Kazakhstan

Q.29) Solution (c)

- **Fordow Fuel Enrichment Plant (FFEP)** is an Iranian underground uranium enrichment facility located 20 miles northeast of the Iranian city of Qom, near Fordow village.
- It is the second Iranian uranium enrichment facility, the other one being that of Natanz.

Q.30) Consider the following statements regarding Saguna Rice Technique:

1. It is a method of cultivation of rice and related rotation crops.

2. It is a zerotill technique.
3. In this technique, puddling and hoeing is to be done to control weeds.

Which of the statements given above is/are correct?

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

Q.30) Solution (a)

Statement 1	Statement 2	Statement 3
Correct	Correct	Incorrect
Saguna Rice Technique is a unique new method of cultivation of rice and related rotation crops without ploughing, puddling and transplanting (rice) on permanent raised beds.	This zerotill technique is a unique Conservation Agriculture (CA) type of cultivation method evolved at SagunaBaug, District Raigad, Maharashtra.	Saguna Rice Technique insists that all roots and small portion of stem should be left in the beds for slow rotting. No ploughing, puddling and hoeing is to be done to control weeds. Weeds are to be controlled with weedicides and manual labor.

Read the following passage and answer the questions that follow each passage. Your answer to these questions should be based on passage only.

Passage 1

At this stage of civilisation, when many nations are brought in to close and vital contact for good and evil, it is essential, as never before, that their gross ignorance of one another should be diminished, that they should begin to understand a little of one another's historical experience and resulting mentality. It is the fault of the English to expect the people of other countries to react as they do, to political and international situations. Our genuine goodwill and good intentions are often brought to nothing, because we expect other people to be like us. This would be corrected if we knew the history, not necessarily in detail but in broad outlines, of the social and political conditions which have given to each nation its present character.

Q.31) As per the passage, The need for a greater understanding between nations

- a) is more today than ever before
- b) was always there
- c) is no longer there
- d) will always be there

Q.31) Solution (a)

...it is essential, as never before, that their gross ignorance of one another should be diminished, that they should begin to understand a little of one another's historical experience and resulting mentality.

This statement makes it clear that option a is the correct answer

Passage 2

Soft bodied animals like caterpillars often fall a prey to voracious hunters like birds or reptiles. Despite having no means to actively defend them with weapons like claws or jaws, they have nevertheless, evolved other equally effective deterrents. A particular species of the caterpillar lives at an altitude over 2.500 metres in the Himalayas. It uses prominent colour to inform would be predators of its in edibility. In the event that an inexperienced or adventurous bird did eat the caterpillar, it would probably vomit it soon after and subsequently desist from attacking similar species in future. Even though this would do the unfortunate victim no good, the species benefits. This is a rare example of the martyr among animals.

Q.32) The expression "others equally effective deterrents" mean

- a) preventive weapons which have equal effect of others
- b) mechanism which scares everyone equally well
- c) preventive equipment which it is as effective as something that has been already mentioned in the passage
- d) deterrents that are as powerful as those the caterpillars have

Q.32) Solution (b)

Despite having no means to actively defend themselves, with weapons like claws or jaws, they have nevertheless, evolved other equally effective deterrents.

This statement makes it clear that option b is the correct answer

Q.33) Two dice are tossed at the same time. The probability that the total score is a prime number is:

- a) $1/15$
- b) $5/12$
- c) $3/14$
- d) $6/15$

Q.33) Solution (b)

Clearly, the total number of outcomes, $n(S) = (6 \times 6) = 36$.

Let E = Event that the sum is a prime number.

Then, $E = \{(1, 1), (1, 2), (1, 4), (1, 6), (2, 1), (2, 3), (2, 5), (3, 2), (3, 4), (4, 1), (4, 3), (5, 2), (5, 6), (6, 1), (6, 5)\}$

$n(E) = 15$.

$P(E) = n(E)/n(S) = 15/36 = 5/12$

Q.34) P, Q and R were trying to hit a target. If P hits the target 5 times in 8 attempts, Q hits it 3 times in 5 attempts and R hits it 2 times in 4 attempts. What is the probability that the target is hit by at least 2 persons?

- a) $41/80$
- b) $23/70$
- c) $49/80$
- d) $47/90$

Q.34) Solution (c)

Probability of P hitting a target = $5/8$

Probability of Q hitting a target = $3/5$

Probability of R hitting a target = $1/2$

Probability that the target is hit by at least 2 persons = $1 - [\text{Probability of no hit} + \text{Probability of 1 hit}]$

$= 1 - [(3/8) \times (2/5) \times (1/2) + (5/8) \times (2/5) \times (1/2) + (3/8) \times (3/5) \times (1/2) + (3/8) \times (2/5) \times (1/2)]$

$$= 1 - (6+10+9+6)/80$$

$$= 1 - 31/80 = 49/80$$

Q.35) Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?

- a) $1/4$
- b) $3/4$
- c) $5/8$
- d) $7/16$

Q.35) Solution (b)

In a simultaneous throw of two dice, we have $n(S) = (6 \times 6) = 36$.

Then, $E = \{(1, 2), (1, 4), (1, 6), (2, 1), (2, 2), (2, 3), (2, 4), (2, 5), (2, 6), (3, 2), (3, 4),$

$(3, 6), (4, 1), (4, 2), (4, 3), (4, 4), (4, 5), (4, 6), (5, 2), (5, 4), (5, 6), (6, 1),$

$(6, 2), (6, 3), (6, 4), (6, 5), (6, 6)\}$

So, $n(E) = 27$

$$P(E) = n(E)/n(S) = 27/36 = 3/4$$

