

Knowledge Traditions and Practices of India

Sample Questions - Answer Key – XI

Section A: Reading Skills (20 Marks)

Question 1 **10 Marks**

- (i) Āryabhaṭa (1)
- (ii) Brahmagupta (1)
- (iii) Varāhamihira, Varāhamihira extensively discussed the revolutions of planets, eclipses, and the zodiac. *Sūrya Siddhānta*, was revised later and became a fundamental text of Indian astronomy (1+1)
- (iv) The chief characteristics were the use of trigonometric methods and epicyclic models for the computations of planetary positions. (2)
- (v) correct explanation for both lunar and solar eclipses, and stated that the diameter of the earth is 1,050 *yojanas*. (2)

Section B: Analytical Skills (25 Marks)

Question 2 **10 Marks**

- (i) Folk music popular: easy to comprehend; local or regional; doesn't require special training; celebratory in nature; folk music primarily is related to the festivals, religious traditions, folk stories and simple life of the people. Folk music is a type of music that virtually everyone can enjoy listening to. Part of daily life routine - weddings, births, farming etc.
- (ii) Basic difference between Indian classical and folk music:
- Rhythm
 - Instruments used
 - Training
 - Composition

Question 3 **15 Marks**

1. **The candidate is expected to elaborate the following points**
- Welfare/ happiness of all – the goal
 - Deviation from ethical goal
 - Ideology of the society changed- both macro and micro level
 - Alienation from our culture
 - Different ideals and morals

- f. Following the west
- g. Education system
- h. Media

Comparison with today's individuals thought process on the above points or any other relevant point.

Section C: Thinking Skills

Question 4

15 Marks

1. Main ideologies of Bhakti movement

- A loving relationship between the devotee and his personal god.
- Opposition to rituals and sacrifices as modes of worship.
- Purity of heart and mind, and kindness.
- Rejection of any discrimination based on gender, caste or creed.

2. Layout of the laboratory and make a list of apparatus used in it.

The layout of the laboratory: with four doors, an esoteric symbol (rasaliṅga) in the east, furnaces in the southeast, instruments in the northwest, etc.

Besides mortars (of stone or iron) and pestles, bellows (to heat the furnaces), sieves, pans, tongs, scissors and earthen or glass vessels, the apparatus included specialized instruments ingeniously developed for heating, steaming, distilling, triturating or extracting substances.

3. The cultural as well as practical motivations in worshipping trees

Three major factors were responsible for the origin of the tree-cult in India: their wood, leaves, fruits, etc. were useful to humans; it was believed that trees were possessed by spirits who guided humans in their distress; and humans developed respect for trees which often provided them with an alternative for medicinal plants.

4. Suśruta contributed towards Ayurveda

Suśruta is now revered as the father of surgery and advocated a thorough study of anatomy by dissecting the dead body. He introduced the method of sterilizing surgical instruments to prevent sepsis after surgical procedures. The compendium of Suśruta describes hundreds of sharp and blunt surgical instruments and many of them resemble instruments used by surgeons today. Suśruta is recognized for having developed innovative surgical procedures like reconstruction of the nose or rhinoplasty through plastic surgery, use of a specific species of ants as dissolvable sutures to close the intestines, surgical removal of cataract, and surgical management of urinary calculi.

5. Wootz steel

Wootz steel is primarily iron containing a high proportion of carbon (1.0 – 1.9%). Thus the term wootz (an English rendering of 'ukku', a Kannada word for steel) applies to a high-carbon alloy produced by crucible process. The basic process consisted in first preparing sponge (or porous) iron; it was then hammered while hot to expel slag, broken up, then sealed with wood chips or charcoal in closed crucibles (clay containers) that were heated, causing the iron to absorb appreciable amounts of carbon; the crucibles were then cooled, with solidified ingot of wootz steel remaining.

6. Four methods of abhinaya (expression) that are employed to display interplay of emotions.

Āngikābhinaya (voluntary non-verbal expression) to depict the emotions or feelings of the character being played; vācīkābhinaya (verbal expression) to express emotions / feelings, tone, diction, pitch of a particular character; āhāryābhinaya (costume and stage expression) to enhance expression; sāttvikābhinaya (involuntary non-verbal expression) expressed by the presence of tears, mark of horripilation, change of facial colour, trembling of lips, enhancing of nostrils) to express the deepest emotions of a character.

Question 5

10 Marks

1. Six
2. Mercury
3. Plants
4. Nine
5. Tamil Nadu
6. Guru Gobind Singh
7. Madurai
8. Mahābhārata
9. Aerophones
10. Four