

Knowledge Traditions and Practices of India

Sample Questions - XI

Section A: Reading Skills

Ques 1: Passage from the textbook

(20 marks)

A) Read the passage given below and answer the following questions:(10 marks)

Beginning in the 5th century CE, this is the Siddhāntic era, when texts called *siddhāntas* were composed — a Sanskrit word meaning ‘principle’ or ‘conclusion’, but which applies here to a collection of conclusions or a treatise. Their chief characteristics were the use of trigonometric methods and epicyclic models for the computations of planetary positions. Āryabhaṭa I (born 476 CE), working near what is today Patna, ushered in this era with his *Āryabhaṭīya*, which dealt concisely but systematically with developments in mathematics and astronomy. Among other things, it discussed units of time and features of the celestial sphere, described the earth as a rotating sphere hanging in space, and produced a table of the planets’ mean positions. Āryabhaṭa also gave a correct explanation for both lunar and solar eclipses, and stated that the diameter of the earth is 1,050 *yojanas* (defining the *yojana* as 8,000 average human heights or about 13.6 km); this is close to the actual dimension, though 12% too large. (His diameters for the planets and the sun are however much too small.)

Many brilliant astronomers followed, dealing with issues of coordinate systems, time measurement and division, mean and true positions of celestial bodies, and eclipses. Varāhamihira, Āryabhaṭa’s contemporary, composed in 505 CE a collection of five astronomical texts prevalent during his time; one of the five texts, the *Sūrya Siddhānta*, was revised later and became a fundamental text of Indian astronomy; two others expounded the principles of Greek astronomy. Varāhamihira extensively discussed the revolutions of planets, eclipses, and the zodiac, often with an astrological background. Bhāskara I (b. 600 CE), the earliest known exponent of Āryabhaṭa I, provided a very useful elucidation of Āryabhaṭa’s astronomy, besides improved calculation methods.

A few years later, Brahmagupta (born 598 CE), who lived near Mount Abu, mistakenly rejected Āryabhaṭa’s view of the earth as a rotating sphere, but contributed much to calculations of the mean and true longitudes of planets, conjunctions and problems of lunar and solar eclipses, applying to all these his considerable mathematical skills.

1. Who produced a table of the planets’ mean positions? 1
2. Name the famous Indian astronomer who mistakenly rejected Aryabhata’s view of the earth as a rotating sphere. 1
3. Who composed the astronomical text the ‘Surya Sidharta’? Mention his important contributions on astronomy. 1+1=2
4. What were the chief characteristics of the Sidhantic era? 2
5. Write any two contributions of Brahmagupta in the field of astronomy. 2
6. State any two issues related to astronomy dealt in Aryabhatiya 2

Section B: Analytical Skills

Ques 2: Read the passage given below and answer the following questions 10 marks

Indian classical music has seven basic notes with five interspersed half-notes, resulting in a twelve-note scale. Unlike the twelve-note scale in Western music, the base frequency of the Indian scale is not fixed, and intertonal gaps (temperament) may also vary; however, with the gradual replacement of the sārāṅgi by the harmonium, an equal-tempered scale is increasingly used. The performance is set to a rāga characterized in part by specific ascent (āroha) and descent (avaroha) sequences, which may not be identical. Other characteristics include vādī (dominant or king) and samvādī (helpmate or queen) notes and pakaḍ (characteristic phrases). In addition, each rāga has its mīṛḍ (natural register or ambit) and portamento rules. Performances are usually marked by considerable improvisation within these norms. Rāgas are the basic unity of Indian classical music.

Folk music

Another important form of Indian music is folk music, which is the music of the masses. It is one of the forms of popular music. Folk music has its own charm. Simple in form but rich in meaning, its appeal is instantaneous and almost infectious. It should, however, be remembered that in spite of the basic difference between the classical music and folk music, folk is also a living and integral part of Indian classical music culture. Folk instruments and styles have also influenced classical rāgas. In many classical rāgas, one is often reminded of some popular tune or folk song. Similarly, the classical rāgas of yesterday are often found reflected in some folk tunes of today. The verses for swāṛṅ and nautāṅki are written in only a few metres like caubolā, dohā, bahretabil, daur etc. and are sung in a number of rāgas and styles with differing emotional impact. RāgaMāṛḍa is very popular in the Rājasthānī folk music. ARājasthānī folk song, 'kesariyābālama', is sung in rāgamāṛḍa in a festive mood. It should, however, be noted that despite the similarity of some tunes arising from an unconscious process of give and take between these two types of music, folk music has its own wide appeal.

- | | | |
|------|---|---|
| i. | Why is folk music called the music of the masses? | 3 |
| ii. | What is the basic difference between Indian Classical and folk music? | 4 |
| iii. | Give two eminent names for each category | 3 |
| | a) Hindustani music | |
| | b) Carnatic music | |
| | c) Instrumentalist | |
| | d) Film Music | |

Ques3 Long answer type questions (1*15= 15 marks)

1. In India, all knowledge has an ethical goal, the welfare or happiness of all animate beings: one well-known Upaniṣadic invocation goes sarvebhavantusukhinaḥ 'May all creatures be happy.' Does this thought resonate with the individual today? Explain with suitable arguments.

Section C: Thinking Skills

Ques 4 Short Answer Questions (3*5= 15 marks)

1. What are the main ideologies of Bhakti movement?
2. Explain the layout of the laboratory and make a list of apparatus used in it.
3. What are the cultural as well as practical motivations in worshipping trees?
4. How has *Suśruta* contributed towards Ayurveda?
5. How is wootz steel manufactured?
6. Explain any three methods of abhinaya (expression) that are employed to display interplay of emotions.

Ques5 Objective type question based on multiple choice answers (1*10= 10 marks)

1. According to Yajur-Veda a year is divided into _____ *ṛtus* or seasons
 - i. seven
 - ii. four
 - iii. six
 - iv. three
2. Which metal is called as the *amṛtadhātu* or 'immortal metal'
 - i. Mercury
 - ii. Tin
 - iii. Bronze
 - iv. Iron
3. *Vrkṣāyurveda* deals with the treatment of
 - i. horses
 - ii. plants
 - iii. animals
 - iv. elephants
4. How many kinds of Bhakti in relation to god/ gods have been identified.
 - i. Nine
 - ii. Seven
 - iii. Three
 - iv. Eight
5. Where did Bhakti movement start?
 - i. Tamil Nadu
 - ii. Maharashtra
 - iii. Andhra Pradesh
 - iv. Himachal Pradesh
6. Who laid the foundation of KhālsāPaṛth in Anandpur Sahib in 1699?
 - i. Tulsidas
 - ii. Guru NanakDev
 - iii. Guru Gobind Singh
 - iv. Guru TeghBahadur Singh
7. Name the city Kaṛṇāgi burnt.
 - i. Madurai
 - ii. Ahmedabad
 - iii. Hyderabad
 - iv. Allahabad

8. Which is the longest epic poem of the world?
- i. *Mahābhārata*
 - ii. *Ramayana*
 - iii. *Meghduttam*
 - iv. *Abhijñānaśakuntalā,*
9. The wind or reed-type instruments are also called _____.
- i. aerophones
 - ii. ideophones
 - iii. membrphones
 - iv. chordophones
10. In olden days, a dhrupada had _____ parts.
- i. four
 - ii. three
 - iii. two
 - iv. one