

Q 59.A

- During the ancient times apart from Vedic and Dharmasastric teaching, subjects like grammar, rhetoric, prose and verse compositions, logic, mathematics, astronomy, medicine, and astrology were taught to the students. Ancient India has achieved phenomenal heights in the fields of metallurgy, architectural engineering, hydraulic engineering, astronomy, mathematics, astrology, medicine, etc. in the period between 200 BCE-1200 CE.
- **Sulba/Shulva means measurement.** Sulbasutras or Shulvasutras deal with **geometrical constructions**, a large majority of them for the purpose of carrying out Vedic rituals at precisely constructed altars. It is appendices to the Vedas performing the role of manuals enunciating rules for the construction of Vedic altars, preparation of the site where Vedic sacrifices were to be carried out, etc.
 - The sulbasutras also suggest how to square a circle i.e. how to construct, using only a ruler and compass, a square the area of which is equal to that of a given circle.
- **Baudhayana (500 CE)** is credited with the writing of the earliest Sulbasutra or Shulvasutras. It is also known as the Baudhayana Sulbasutra. **It specifically deals with the dimensions of Vedic brick fire altars.** The rules of construction are noteworthy from the viewpoint of mathematics. They throw light on various significant mathematical formulae, including the value of pi to a considerable degree of precision and giving a version of the Pythagoras theorem. The sequences associated with primitive Pythagorean triples were named Baudhayana sequences.
 - Later, other authors including Apastamba, Manava, Katyayana, Satyasadha Hiranyakesin, Vadhula, Varaha and Kathaka composed sulbasutras as well.
- **Hence, Option (a) is the correct answer.**

Q 60.A

- **Article 280 of the Constitution of India provides for the Finance Commission as a quasi-judicial body. Hence statement 1 is correct.**
- **Its recommendations are advisory in nature** and hence, not binding on the government
- According to The Finance Commission (Miscellaneous Provisions) Act, 1951, the members of the Commission shall render whole-time or part-time service to the Commission as the President may in each case specify, and **shall be paid such fees or salaries and such allowances as the Central Government may determine. Hence statement 2 is not correct.**

Q 61.B

- The **Rig Vedic concept of Rita** refers to the **order of the universe**, the order of the sacrifice, and the **moral order that human beings should adhere to**. Some hymns in the Rig Veda refer to Varuna and Mitra as the guardians or furtherers of Rita.
- The Veda identifies cosmic order as Rita. Deviation from Rita in personal life and social relations engenders the tendency toward getting more of the worldly objects than one needs or deserves. It signifies a disjunction of man from the light that illumines his inner being and specifies the pattern of his right relationship with a well-ordered universe. This universe represents a crucial aspect of man's mode of living, his being-in-the-world, as a unified plan of (The Earth), Dyau (Heaven), Amartyas (immortals), and martyas (mortals). These four constitute a primordial community and man is an integral part of it. This primordial community is sustained through a continuous process of exchange among them. **Hence option (b) is the correct answer.**

Q 62.C

- Flowers are the reproductive parts of a plant. The stamens are the male reproductive part and the pistil is the female reproductive part.
- The flowers which contain either only the pistil or only the stamens are called unisexual flowers. The flowers which contain both stamens and pistil are called bisexual flowers. Both the male and the female unisexual flowers may be present in the same plant or in different plants.
- **Unisexual flowers**
 - Coconut flowers, **Papaya**, Watermelon, **Cucumber**, Maize, Musk melon, Snake gourd, Bitter gourd.
- **Bisexual flowers**
 - Lily, Rose, **Sunflower**, Tulip, Daffodil, **Mustard**, **Brinjal**, Hibiscus, Tomato, Long bean, Chille, Country bean, Mango.
- **Hence, option (c) is the correct answer.**