

Pre-Mix

19-09

5 HIGH VALUE QUESTIONS FOR PRELIMS

Free Courses

Monday to Friday

Complete GS
(Prelims + Mains)

Pre-Mix

5 High Value Prelims Oriented Questions

MAD

5 Mains Related Questions per week

Saturday

Weekly CSAT Class
Weekly Scheme Analysis
Weekly Editorial Analysis

Also Covered

Sociology Optional

Political Science Optional

Paid Courses

For Prelims 2019

Prelims Test Series

(With/Without Video Solutions)

For Mains 2018

GS Crash Course

For GS 1, 2, 3, 4

Question & Answers Oriented

Sociology For Mains 2018

Crash Course

(With/Without Test Series)

1.

Which of the following is false about Kabir ?

- a) Verses ascribed to Kabir has been compiled only in Kabir Bijak and Adi Granth Sahib.
- b) He believed in a formless Supreme God and preached that the only path to salvation was through bhakti or devotion
- c) He described the Ultimate Reality as Allah, Khuda, Hazrat and Pir.
- d) His teachings openly ridiculed all forms of external worship of both Brahmanical Hinduism and Islam

KABIR (NCERT)

- Kabir, who probably lived in the fifteenth-sixteenth centuries, was one of the most influential saints.
- He was brought up in a family of Muslim julahas or weavers settled in or near the city of Benares (Varanasi). We have little reliable information about his life.
- We get to know of his ideas from a vast collection of verses called sakhis and pads said to have been composed by him and sung by wandering bhajan singers. Some of these were later collected and preserved in the Guru Granth Sahib, Kabir Granthavali Panch Vani and Bijak
 - He described the Ultimate Reality as Allah, Khuda, Hazrat and Pir.
- He also used terms drawn from Vedantic traditions, alakh (the unseen), nirakar (formless), Brahman, Atman, & Other terms with mystical connotations such as shabda (sound) or shunya (emptiness) were drawn from yogic traditions.
 - Kabir's teachings were based on a complete, indeed vehement, rejection of the major religious traditions.
 - His teachings openly ridiculed all forms of external worship of both Brahmanical Hinduism and Islam, the pre-eminence of the priestly classes and the caste system.
- The language of his poetry was a form of spoken Hindi widely understood by ordinary people. He also sometimes used cryptic language, which is difficult to follow.
- Kabir believed in a formless Supreme God and preached that the only path to salvation was through bhakti or devotion
 - Kabir drew his followers from among both Hindus and Muslims.

2.

Which of the following is false about UNEP?

- a) It is not a part of United Nations system.
- b) It was founded by Maurice Strong, its first director, as a result of the United Nations Conference on the Human Environment (Stockholm Conference) in June 1972
- c) Global Environment Outlook is published by UNEP.
- d) It is headquartered in Nairobi, Kenya

- United Nations Environment Programme (UNEP), organization established in 1972 to guide and coordinate environmental activities within the United Nations (UN) system.
- UNEP promotes international cooperation on environmental issues, provides guidance to UN organizations, and, through its scientific advisory groups, encourages the international scientific community to participate in formulating policy for many of the UN's environmental projects.
- Headquartered in Nairobi, Kenya, the organization also has encouraged participation by the private sector to promote the sustainable use of the world's natural resources.
 - One of UNEP's most widely recognized activities is EARTHWATCH, an international monitoring system designed to facilitate the exchange of environmental information among governments
- .UNEP provides the technical assistance for a variety of international conventions, including the Montreal Protocol on Substances That Deplete the Ozone Layer (1987), the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (1989), and the UN Convention on Biological Diversity (1992).
 - As the secretariat for these conventions, UNEP services the conferences, implements the decisions, monitors implementation, and provides data and information. T
- Together with the Food and Agriculture Organization, UNEP helps to implement the Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998).
- UNEP also coordinates the work on UN agencies with respect to desertification and the regional seas (with special attention to the Mediterranean Sea).
- The 58-member Governing Council, the organization's principal legislative body, is elected by the UN General Assembly for four-year terms. Seats are allocated by region to assure widespread representation, generally providing about 16 seats for African states, 13 for Asia, 6 for eastern Europe, 10 for Latin America and the Caribbean, and 13 for western Europe and other states.

3.

What is the following is true in context with India Based Neutrino Laboratory?

- a) Its primary goal is to study the properties and interactions of weakly interacting, naturally occurring particles, called *neutrinos*.
- b) The experiment will neither produce any radioactivity nor can it function well where there is radiation (at the Earth's surface).
- c) The proposed site for INO is located in the Bodi West Hills region, about 2 km from the nearest village Pudukottai in Pottipuram Panchayat, Theni District of Tamil Nadu.
- d) All of the above

What is Neutrino?

- Neutrinos are tiny, neutral, elementary particles which interact with matter via the weak force.
- The weakness of this force gives neutrinos the property that matter is almost transparent to them.
- The Sun, and all other stars, produce neutrinos copiously due to nuclear fusion and decay processes within their core.
- Since they rarely interact, these neutrinos pass through the Sun, and even the Earth, unhindered.
- There are many other natural sources of neutrinos including exploding stars (supernovae), relic neutrinos (from the birth of the universe), natural radioactivity, and cosmic ray interactions in the atmosphere of the Earth.
- Billions of neutrinos stream through our body every second, yet only one or two of the higher energy neutrinos will interact with you in your lifetime.
- The neutrino was proposed by Wolfgang Pauli in 1930; but it took another 26 years for it to be actually detected.
- In 1956 Reines and Cowan found evidence of neutrino interactions by monitoring a volume of cadmium chloride with scintillating liquid near to a nuclear reactor. Reines was jointly awarded the Nobel Prize in Physics in 1995 in part for this revolutionary work.
- . They have a tiny mass whose value is still not known.
- Moreover, they exhibit a quantum-mechanical phenomenon in which one type of neutrino oscillates into another as it propagates in space; this is called neutrino oscillation and this observation has generated immense excitement in the particle physics community.

Why detect them?

- This is important because neutrinos are by far the most numerous of all the particles in the universe (other than photons of light) and so even a tiny mass for the neutrinos can enable them to have an effect on the evolution of the Universe through their gravitational effects.
- There are other recent astrophysical measurements that provide information on the evolution of the Universe and it is crucial to seek complementary information by direct determinations of the masses of neutrinos and their other properties. In a sense, neutrinos hold the key to several important and fundamental questions on the origin of the Universe and the energy production in stars.
- We have some partial answers but many details are still awaited from future experiments.
- Yet another important possible application of neutrinos is in the area of neutrino tomograph of the earth, that is detailed investigation of the structure of the Earth from core on wards. This is possible with neutrinos since they are the only particles which can probe the deep interiors of the Earth.

Why should the lab be located underground?

- Neutrinos, as mentioned before, are notoriously difficult to detect in a laboratory because of their extremely weak interaction with matter.
- The background from cosmic rays (which interact much more readily than neutrinos) and natural radioactivity will make it almost impossible to detect them on the surface of the Earth. This is the reason most neutrino observatories are located deep inside the Earth's surface.
- The overburden provided by the Earth matter is transparent to neutrinos whereas most background from cosmic rays is substantially reduced depending on the depth at which the detector is located.
- One of the earliest laboratories created to detect neutrinos underground in the world was located more than 2000 m deep at the Kolar Gold Field (KGF) mines in India.
- The first atmospheric neutrinos were detected at this laboratory in 1965. This laboratory has been closed due to the closure of the mines. Most underground laboratories around the world are located at a depth of a km or more.
- There are two types of underground laboratories: either located in a mine or in a road tunnel.
- There are now four major laboratories around the world: in Sudbury in Canada, Kamioka in Japan, under the Gran Sasso mountains in Italy and in Soudan mines in the USA.
- Several others are planned including INO which is an attempt to recapture the pioneering studies on neutrinos at KGF

4.

Which of the following is false in context with the term “ FASTag” :

- a) FASTag is a simple to use, reloadable tag which enables automatic deduction of toll charges and lets you pass through the toll plaza without stopping for the cash transaction.
- b) FASTag is linked to a prepaid account from which the applicable toll amount is deducted
- c) The tag employs Radio-frequency Identification (RFID) technology and is affixed on the vehicle's windscreen after the tag account is active.
- d) None of the above

What is Electronic Toll Collection (ETC) / FASTag?

- NHAH has rolled out program for Electronic Toll Collection on Toll Plazas on National Highways to be called FASTag.
- FASTag is a device that employs Radio Frequency Identification (RFID) technology for making toll payments directly from the prepaid account linked to it. It is affixed on the windscreen of your vehicle and enables you to drive through toll plazas. FASTag has a validity of 5 years and after purchasing it, you only need to recharge/ top up the FASTag as per your requirement.
- FASTag offers near non-stop movement of vehicles through toll plazas and the convenience of cashless payment of toll fee with nation-wide interoperable Electronic Toll Collection Services.

What are the benefits of using FASTag?

- 1. Ease of payment – No need to carry cash for the toll transactions, saves time
- 2. Near non-stop movement of vehicles leading to lower fuel cost.
- 3. Online Recharge – FASTag can be recharged online through Credit Card / Debit Card / NEFT/ RTGS or Net banking
- 4. SMS alerts for toll transactions, low balance, etc.
- 5. Online Portal for customers
- 6. Validity of 5 Years
- 7. Incentive: You can avail a cashback of 10% on all Toll payments using FASTag in 2016-17
- 8. Other benefits are:
 - (a) Environmental benefit :
 - Reduced air pollution,
 - Reduced use of paper
 - (b) Social benefit :
 - Reduced toll payment hassles ,
 - Analytics for better highway management
 - (c) Economic benefit :
 - Reduced effort in management at toll plaza,
 - Reduced effort in monitoring centrally

Is there any incentive / discount on Toll payments using FASTag?

- Customer can avail a cashback of 10% on all Toll payments using FASTag in FY 2016-17. The cashback amount for a particular month will be credited back to your FASTag account within a week of subsequent month.

Is FASTag compulsory & is FASTag for any particular kind / category of vehicle?

- Adopting FASTag is voluntary at this stage of the program. However, it may be made mandatory in future at some locations. FASTag is applicable for all categories, kinds, makes and types of vehicles.

Who is implementing this program?

- Indian Highways Management Company Limited (IHMCL) (a company incorporated by National Highways Authority of India) and National Payment Corporation of India (NPCI) are implementing this program with help from Toll Plaza Concessionaires, FASTag Issuer Agencies and Toll Transaction Acquirer (select banks).

On which highways / roads FASTag can be used?

- FASTag is presently operational at 240+ toll plazas across National Highways. More toll plazas will be brought under the FASTag program in the future. To find out list of toll plazas currently integrated with FASTag

5. – From today's Lecture

(PREVIOUSLY ASKED IN UPSC)

In India, Judicial Review implies

- a) the power of the Judiciary to pronounce upon the constitutionality of laws and executive orders.
- b) the power of the Judiciary to question the wisdom of the laws enacted by the Legislatures.
- c) the power of the Judiciary to review all the legislative enactments before they are assented to by the President.
- d) the power of the Judiciary to review its own judgements given earlier in similar or different cases.

Let's Do It!

