



### **Daily Current Affairs Prelims Quiz 28-09-2021 - (Online Prelims Test)**

1) With respect to All-India Quarterly Establishment based Employment Survey (AQEES), consider the following statements:

1. The report will provide quarterly updates on employment in both organised and unorganised segments.
2. The report will be based on nine selected sectors which account for a majority of total employment in the non-farm establishments.
3. The report will be prepared by the Labour Bureau.

Which of the statements given above are correct?

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

Answer : d

- Union Minister for Labour and Employment has recently released the report of first quarter of Quarterly Employment Survey (QES) from April to June 2021.
- It is a part of All-India Quarterly Establishment-based Employment Survey (AQEES).

### **All-India Quarterly Establishment-based Employment Survey (AQEES)**

- The AQEES has been taken to provide quarterly updates about the employment and related variables of establishments, in both organised and unorganised segments of nine selected sectors.
- These sectors altogether account for a majority of the total employment in the non-farm establishments.
- These nine selected sectors are Manufacturing, Construction, Trade, Transport, Education, Health, Accommodation and Restaurant, IT/ BPO and Financial Services.

### **About AQEES**

- The AQEES will be prepared by the Labour Bureau.
- There are two components under AQEES, Quarterly Employment Survey (QES) and Area Frame Establishment Survey (AFES).
- The Quarterly Employment Survey (QES) under AQEES would provide the employment estimates for the establishments employing 10 or more workers. The Area Frame Establishment Survey (AFES) would provide the employment estimates for the establishments recruiting 9 or less workers.

2) Which one of the following is the objective of XENON1T Experiment, sometimes seen in the news recently?

- a. To search for Dark Matter

- b. To search for Extra Terrestrial Life
- c. To search for Gravitational Waves
- d. None of the above

Answer : a

- Dark energy, the mysterious form of energy that makes up about 68% of the universe, has intrigued physicists and astronomers for decades.
- With advanced technologies and newer experiments, scientists have found certain clues about it and an international team of researchers made the first putative direct detection of dark energy.

## **XENON 1T Experiment**

- The XENON1T experiment is the world's most sensitive dark matter experiment and was operated deep underground at the INFN Laboratori Nazionali del Gran Sasso in Italy.
- It is a 3500kg liquid xenon detector to search for the elusive Dark Matter.
- The finding also suggests that experiments like XENON1T, which are designed to detect dark matter, could also be used to detect dark energy.

3) Consider the following statements with respect to Akash Missile

1. It is a part of five major missile developed under the Integrated Guided Missile Development Programme (IGMDP).
2. It is primarily a Short Range Surface to Air Missile built to provide air defence cover to the vulnerable areas.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2



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Answer : c

- The Defence Research and Development Organisation (DRDO) has recently conducted the maiden flight test of the new version of Akash Missile — Akash Prime.
- This comes after the maiden test of another Akash version, Akash-NG (New Generation), in January, 2021.

## **Origin of AKASH**

- The development of the Akash SAM was started by the DRDO in the late 1980s as part of the Integrated Guided Missile Development Programme.
- Akash is primarily a Short Range Surface to Air Missile built to provide air defence cover to the vulnerable areas.
- The initial version of the Akash has an operational range of 27-30 km and a flight altitude of around 18 km.
- According to the Ministry of Defence, the Akash Missile system is 96 per cent indigenised, one of the highest proportions of the indigenisation.

## **Advanced Version of AKASH**

### **AKASH Prime**

- The Akash Prime has the same range as that of the earlier version but has a crucial new addition — that of an indigenous active Radio Frequency (RF) seeker for improved accuracy to

hit aerial targets.

- Other improvements in the system ensure more reliable performance under low temperature environments at higher altitudes.
- These new additions have been to provide air defence cover for vital installations and sensitive areas in high-altitude regions.

### AKASH New Generation (NG)

- It is a new generation SAM, primarily designed for the IAF with an aim of intercepting high maneuvering aerial threats that have low Radar Cross Section (RCS), which is the electromagnetic signature of the object.
- The NG version has an extended range of up to 70 km, is sleeker, lighter and has much smaller ground system footprint.
- As an additional feature, Akash NG is canisterised, which means that it is stored and operated from specially designed compartments.
- In the canister, the inside environment is controlled thus along with making its transport and storage easier, the shelf life of weapons also improves significantly.

4) Consider the following statements with respect to National Disaster Management Authority (NDMA)

1. NDMA is not a statutory body and derives its powers from the Disaster Management Act, 2005.
2. It is the apex body for Disaster Management in India, headed by the Union Defence Minister.
3. Setting up of National, State and District level disaster management authority is mandated by the Disaster Management Act, 2005.

Which of the statement(s) given above is/are *not correct*?

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



Answer : b

- 17th Formation Day of the National Disaster Management Authority (NDMA) was celebrated recently in New Delhi.
- The theme of this year's Formation Day is Cascading effects of disaster events in the Himalayan region.

### National Disaster Management Authority (NDMA)

- It is the apex body for Disaster Management in India.
- It is a statutory body established through the Disaster Management Act, 2005.
- It will be headed by the Prime Minister of India.
- Setting up of NDMA and the creation of an enabling environment for institutional mechanisms at the State and District levels is mandated by the Disaster Management Act, 2005.
- NDMA is mandated to lay down the policies, plans and guidelines for Disaster Management.

5) How is Dark Matter different from Dark Energy?

1. Dark energy attracts and holds galaxies together whereas dark matter repels and causes the expansion of our universe.
2. Despite both components being invisible, dark energy is even more elusive than dark matter.

Which of the statement(s) given above is/are correct?

- a. 1 only
- b. 2 only

- c. Both 1 and 2
- d. Neither 1 nor 2

Answer : b

- Everything we see, the planets, moons, massive galaxies, makes up less than 5% of the universe.
- About 27% is dark matter and 68% is dark energy.

### **Dark energy Vs Dark matter**

- While dark matter attracts and holds galaxies together, dark energy repels and causes the expansion of our universe.
- Despite both components being invisible, we know a lot more about dark matter, since its existence was suggested as early as the 1920s, while dark energy wasn't discovered until 1998.
- Large-scale experiments like XENON1T have been designed to directly detect dark matter, by searching for signs of dark matter 'hitting' ordinary matter, but dark energy is even more elusive.



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