

Winmeen Current Affairs

1. The researchers of which country has showed that dark matter is not made up of tiny black holes?

- [A] India
- [B] United States
- [C] China
- [D] Japan

- ✓ Researchers led by Kavli Institute for the Physics and Mathematics of the Universe in Japan has put a theory speculated by the late Stephen Hawking to its most rigorous test to date, and their results have ruled out the possibility that primordial black holes smaller than a tenth of a millimeter make up most of dark matter.
- ✓ They used the gravitational lensing effect to look for primordial black holes between Earth and the Andromeda galaxy. However, gravitational lensing effects are very rare events because it requires a star in the Andromeda galaxy, a primordial black hole acting as the gravitational lens, and an observer on Earth to be exactly in line with one another.
- ✓ In order to maximise the chances of capturing an event, the researchers used the Hyper Suprime-Cam digital camera on the Subaru telescope in Hawaii, which can capture the whole image of the Andromeda galaxy in one shot.
- ✓ Taking into account how fast primordial black holes are expected to move in interstellar space, the team took multiple images to be able to catch the flicker of a star as it brightens for a period of a few minutes to hours due to gravitational lensing.
- ✓ The team's results showed primordial black holes can contribute no more than 0.1% of all dark matter mass. Therefore, it is unlikely the theory is true.

2. India-Africa Institute of Agriculture and Rural Development (IAIARD) will be set up in which of the following countries?

- [A] Seychelles
- [B] Malawi
- [C] South Africa
- [D] Djibouti

- ✓ India has recently signed an agreement with National Bank for Agriculture and Rural Development Consultancy Service (NABCONS) for setting up India-Africa Institute of Agriculture and Rural Development (IAIARD) in Malawi.
- ✓ The agreement is a part of India's efforts to enhance capacity in the areas of agro-financing and entrepreneurship development for African countries. IAIARD will be a Pan-African Institute wherein trainees not only from Malawi but also from other African countries, will receive training to develop their human resources and build their capacity.
- ✓ The entire expenditure on faculty from India, the travel, logistics and training course expenses for students from other African countries will be borne by the Government of India (GoI) for an initial period of 3 years.
- ✓ This institute will be the first of its kind developed in an African country by India. This will further strengthen the bilateral relations with Malawi and India's relations with African Union.

3. Which country has decided to launch world's first national 5G networks?

- [A] South Korea
- [B] Japan
- [C] China
- [D] France

- ✓ South Korea will launch the world's first fully-fledged 5G mobile networks on 5th April 2019. Hyper-wired South Korea has a reputation for technical prowess, and Seoul has made the 5G rollout a priority as it seeks to stimulate stuttering economic growth.
- ✓ The superfast communications heralded by fifth-generation wireless technology will bring smartphones near-instantaneous connectivity - 20 times faster than the existing 4G.
- ✓ It is crucial for the future development of devices ranging from self-driving vehicles that send data traffic to one another in real time, industrial robots, drones and other elements of the Internet of Things.
- ✓ 5G's hyper speed can connect one million devices within a one square kilometre zone simultaneously.

Until now, no mobile networks have offered nationwide 5G access.

- ✓ Japan is expected to roll out a limited deployment in 2019 before full services start in time for 2020 Tokyo Olympics.

4. MH-60R Seahawk helicopters, sometimes seen in news, is associated to which of the following countries?

- [A] Russia
- [B] France
- [C] Germany
- [D] **United States**

- ✓ The United States has approved the sale of 24 multi-role MH-60 Romeo Seahawk helicopters to India under its Foreign Military Sales (FMS) program at an estimated cost of \$2.4 billion. The multi-mission helicopters can detect, track and attack submarines and surface ships at sea.
- ✓ They are designed to operate from frigates, destroyers, cruisers and aircraft carriers. Thus, these are considered the world's most advanced maritime helicopters.
- ✓ The choppers will provide the Indian defence forces with the capability to perform anti-surface and anti-submarine warfare missions along with the ability to perform secondary missions including vertical replenishment, search and rescue, and communications relay. Hence, the Lockheed Martin-built helicopters would replace India's aging fleet of British-made Sea King helicopters.
- ✓ The proposed sale will support US foreign policy & national security by helping to strengthen the US-Indian strategic relationship and to improve the security of a major defensive partner.

5. Who is the author of the book "Kundan: Saigal's Life & Music"?

- [A] Kanika Kapoor
- [B] **Sharad Dutt**
- [C] Akriti Kakar
- [D] Khushi

- ✓ The book titled "Kundan: Saigal's Life & Music" has been penned by Sharad Dutt, documentary filmmaker and former DDG of Doordarshan.

- ✓ The genius of legendary singer K L Saigal, his timeless compositions and the golden era of Indian cinema have been brought alive in a book.
- ✓ The book has been trans-created in English by Jyoti Sabharwal of Stellar Publishers and will be released on April 4, the 115th birth anniversary of Saigal.
- ✓ Some of Saigal's all time hits are 'Jab dil hi toot gaya', 'Ek bangla bane nyara', 'Dukhake din aab bitat nahin', 'Duniyamen hun duniyaka talabgaar nahin hun' and 'So ja rajkumari so ja'.

6. The UK researchers have used which telescope to determine that Sun's magnetic field is 10 times stronger than thought?

- [A] Snow Solar Telescope
- [B] **1m Solar Telescope**
- [C] Waypoint-1 Space Telescope
- [D] Hubble Space Telescope

- ✓ According to a new collaborative study by the Queen's University Belfast and Aberystwyth University in the UK, the sun's magnetic field is ten times stronger than previously thought.
- ✓ Using the Swedish one-metre Solar Telescope at Roque de los Muchachos Observatory, in the Canary Islands, David Kuridze studied a particularly strong solar flare which erupted near the surface of the Sun on September 10, 2017.
- ✓ A combination of favourable conditions and an element of luck enabled the team to determine the strength of the flare's magnetic field with unprecedented accuracy. The researchers believe the findings have the potential to change our understanding of the processes that happen in the Sun's immediate atmosphere.
- ✓ The study found that the sun's corona extends millions of kilometres above the surface, measuring 1,400,000 kilometres across -- 109 times larger than Earth -- and 150,000,000 km from Earth.
- ✓ Solar flares appear as bright flashes and occur when magnetic energy that has built up in the solar atmosphere is suddenly released. These solar flares can lead to storms which, if they hit Earth, form the northern lights -- the Aurora Borealis. They can also disrupt communications satellites and GPS systems.

7. Which South American nation has recently joined International Solar Alliance (ISA)?

- [A] Ecuador
 [B] Colombia
 [C] Uruguay
 [D] **Bolivia**

- ✓ On March 28, President Ram Nath Kovind became the first-ever Indian President to visit Bolivia. Here, President Evo Morales Ayma conferred the highest State Honour of Bolivia - Condor de los Andes en el Grado de Gran Collar - on President Kovind.
- ✓ Both the countries have agreed to facilitate Bolivian supplies of lithium Carbonate to India and foster joint ventures for Lithium battery / cell production plants in India. This move will make Bolivia, which is known to have one-fourth of the world's lithium reserves, one of the major provider of metal for India's e-mobility and e-storage needs.
- ✓ To mark the 150th Birth Anniversary of Mahatma Gandhi, India offered two busts of Gandhiji to Bolivia. The Bolivian side accepted the offer and is likely to place the busts in its capital La Paz and its largest city Santa Cruz.
- ✓ This South American nation has also joined the International Solar Alliance (ISA) by signing the framework agreement on ISA. In a total, India and Bolivia have signed 8 MoUs in various fields of mining, space, traditional medicine during President's Kovind three day visit to the country.

8. Which Indian psychiatrist has won the 2019 John Dirks Canada Gairdner Global Health Award?

- [A] Shekhar Saxena
 [B] Anirudh Kala
 [C] **Vikram Patel**
 [D] P B Buckshey

- ✓ Prof. Vikram Patel, a psychiatrist and professor of global health at Harvard Medical School, has won the prestigious 2019 John Dirks Canada Gairdner Global Health Award.
- ✓ Mr. Patel has led research generating knowledge on the burden and determinants of mental health problems in low and middle-income countries and pioneered approaches which utilise community

resources for the prevention and treatment of mental health problems in India with global impact.

- ✓ Laureates receive a \$100,000 cash honorarium and will be formally presented with their awards on October 24, 2019 at the annual Canada Gairdner Awards Gala in Toronto.

9. Café Scientifique, sometimes seen in news, is a public science initiative of which state?

- [A] **Kerala**
 [B] Andhra Pradesh
 [C] Tamil Nadu
 [D] Karnataka

- ✓ In Kerala, the group of science experts of the Hume Centre for Ecology and Wildlife Biology has decided to launch 'Café Scientifique' to promote science among public in an interesting way.
- ✓ It is the first such initiative in the state to popularise the subject. It envisages to bring science back into popular culture by demystifying scientific research for the public and empowering non-scientists to comfortably assess science and technology issues, particularly those that impact social policy making.
- ✓ The project is also aimed at making science relevant, powerful and important to the public, especially the younger generations. Here, various topics such as universe, climate change, evolution, genetics and human-animal relations will be discussed in every monthly gathering.
- ✓ It is a grassroots public science initiative based on the French Café Philosophique model.

10. Which state has been ranked first in e-learning training programme of Department of Personal and Training (DoPT) of the Government India?

- [A] Assam
 [B] **Telangana**
 [C] Uttar Pradesh
 [D] Tamil Nadu

- ✓ For the second successive year, Telangana has been ranked first in e-learning training programme of Department of Personal and Training (DoPT) of the Government India.
- ✓ In FY 2018-19, Dr. MCR HRD Institute had enrolled over 20,000 field staff in different districts of the

State to impart training on 12 soft skill modules and three domain-specific modules on the RTI, office procedures, and finance and accounts, apart from Sustainable Development Goals (SDGs).

- ✓ The institute is also mentoring Punjab, Madhya Pradesh, J&K, Odisha, Uttarakhand, and Gujarat to guide trainers for e-learning training programme and develop modules in regional languages to spread the Comprehensive Online Modified Modules on Induction Training (COMMIT) programme as a national mission.