

**1. Consider the following statements regarding Food Fortification:**

1. It is an addition of one or more micronutrients to food and aims to replace the current balanced diet to address malnutrition.
2. Food Safety and Standards (Fortification of Foods) Regulations, 2018 has prescribed standards for fortification of food products in India.

Which of the above statements is/are correct?

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

**2. Which of the following statements regarding DNA Technology (Uses and Application) Regulation Bill, 2019 is/are correct?**

1. The bill aims at strengthening the justice delivery system of the country.
2. The bill provides for the establishment of a DNA Regulatory Board chaired by the Union Minister of Science & Technology.
3. The bill provides for consent-based collection of DNA for DNA Profiling in all categories of cases.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 3 only

**3. Consider the following statements regarding the Sheath Blight disease:**

1. It is a bacterial disease affecting the yield of rice crop.
2. Plants are more vulnerable to sheath blight during the winter season.

Which of the above statements is/are **incorrect**?

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

**4. Proton therapy, as seen recently in news, is used in the treatment of:**

- (a) Cancer

- (b) Tuberculosis
- (c) AIDS
- (d) Zika virus

**5. Consider the following pairs:**

1. **Dragon fly mission** - NASA's mission to Saturn
2. **Cassini Mission** - First spacecraft to orbit Saturn
3. **Raavana-1** - Sri Lanka's first satellite

Which of the above-given pairs is/are correctly matched?

- (a) 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**6. Consider the following statements regarding Varunastra:**

1. It is an indigenously-built heavyweight anti-submarine nuclear torpedo.
2. It has been developed by the Naval Science and Technology Laboratory (NTSL).

Which of the above statements is/are **incorrect**?

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

**7. ISRO plans to send humans to space as part of Gaganyaan Mission by 2022. In this regard, consider the following statements:**

1. India will become the 3<sup>rd</sup> country after Russia and USA to launch human spaceflight mission.
2. ISRO has signed a Memorandum of Understanding (MoU) with NASA for a short visit to International Space Station as a training mission.

Which of the above statements is/are correct?

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

**8. Consider the following statements about the Chandipur Virus :**

1. The virus spreads mainly through the bite of sand flies, and sometimes through mosquitoes.
2. The virus is discovered in 2019 for the first time.

Which of the above statements is/are correct?

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

**9. Strum Ataka, seen recently in news, is a:**

- (a) Zika virus vaccine
- (b) Military exercise between India and Mongolia
- (c) Anti-Submarine electric torpedo
- (d) Anti-tank missile

**10. Consider the following statements regarding Antimicrobial Resistance:**

1. According to WHO, it is a global public health threat.
2. Madhya Pradesh and Kerala are the only states in India that have developed an action plan to manage antimicrobial resistance.

Which of the above statements is/are correct?

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

**11. Consider the following statements about Anti-Satellite (ASAT) missile:**

1. It is a part of Mission Shakti which is a joint program of the Defence Research and Development Organisation (DRDO) and the Indian Space Research Organisation (ISRO).
2. For a country to have such a capability, it must be a member of Non-Proliferation Treaty.

Which of the above statements is/are correct?

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

**12. IndSpaceEx, seen in news recently refers to:**

- (a) India's first space warfare exercise.
- (b) Exercise to intercept a satellite in outer space based on indigenous technology.
- (c) DRDO's exercise to clean space debris created by Anti-Satellite Missile Test.
- (d) First UN-crewed experimental flight for Indian Human Spaceflight Programme.

**13. Chandrayaan-2 is India's mission to explore the lunar surface. In this context, consider the following statements:**

1. It is a completely indigenous mission.
2. It will be the first mission to the far side of the moon.
3. If successful, India will become the second country to soft-land on moon.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**14. Consider the following statements about the term "Eugenics" :**

1. It is the science of improving the human species.
2. It encourages healthy, superior people to reproduce and discouraged the reproduction of the mentally challenged or anyone who fell outside the social norm.

Which of the above statements is/are correct?

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

**15. What is TEMPLATES recently seen in news?**

- (a) A programme to investigate how new stars are born.
- (b) NASA's mission to study the Trojan asteroids of Jupiter
- (c) A study to observe and understand the Universe.
- (d) A programme to study the effect of solar flares on the communication system

**16. Vikram and Pragyan, seen in the news recently are:**

- (a) Long Range Inter-Continental Ballistic Missiles (ICBMs) developed by DRDO.
- (b) Lander and Rover of ISRO's Chandrayaan-2 mission.
- (c) Indigenously built Light Combat Aircrafts by HAL.
- (d) Altitude long-endurance Unmanned Aerial Vehicles (UAVs) by DRDO.

**17. Which of the following statements is/are correct regarding Ramanujan Machine?**

- 1. It is an algorithm that performs an unconventional function.
- 2. It is developed by scientists from Israel Institution of Technology.

Select the correct answer using the code given below:

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

**18. Consider the following statements regarding Hydrothermal Carbonisation Technology:**

- 1. It can convert wet municipal solid waste to biofuel, soil amendment, and absorbents.
- 2. This technology can be used to generate energy from solid waste with low moisture content.

Which of the above statement is/are correct?

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

**19. Cytokine storm refers to:**

- (a) Capacity to cause more infections in a disproportionately large number of people.
- (b) A condition wherein there is not enough oxygen available to the blood.
- (c) A severe immune reaction triggered by the body to fight an infection.
- (d) An immune system disorder caused by COVID-19.

**20. Which of the following statements is correct regarding Samudrayaan Project?**

- (a) It is an ocean project of ISRO to carry various

projects in deep ocean.

- (b) It is a pilot project of the Ministry of Earth Sciences' for deep ocean mining for rare minerals.
- (c) It is a Ministry of Home project to strengthen the maritime security.
- (d) It is a project under Ministry of defence to develop indigenous nuclear powered submarine.

**21. With which of the following companies/ organizations, The Ministry of Electronics and Information Technology (MeitY) has signed a statement of intent to roll-out 'Build for Digital India' programme?**

- (a) Facebook
- (b) Microsoft
- (c) Google
- (d) Powerhouse Cooper

**22. Consider the following statements about combatants to Tuberculosis:**

- 1. Rapid molecular, sputum, and culture-based methods are only 50% accurate in the early detection of Tuberculosis in patients.
- 2. National Strategic Plan set a target of TB elimination by 2025
- 3. The Health Ministry has signed a Memorandum of Understanding (MoU) with Wadhwani Institute for Artificial Intelligence (AI) to explore the application of Artificial Intelligence technology in its fight against tuberculosis (TB).

Which of the above statements is/are correct?

- (a) 1 and 3 only
- (b) 1 only
- (c) 1, 2 and 3 only
- (d) 2 and 3 only

**23. Consider the following statements about National Electronics Policy (NEP), 2019:**

- 1. It aims at making India as a global hub for Electronics System Design and Manufacturing (ESDM).
- 2. It promote domestic manufacturing in the entire value-chain of ESDM, including core components and materials.
- 3. Modified Special Incentive Package Scheme (M-SIPS) was launched under this policy in 2019

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**24. Consider the following statements regarding Project Miniature Sun:**

1. It is India's indigenously designed and developed plasma based fusion reactor.
2. It aims to harness fusion energy by mimicking the sun and other stars.

Which of the above statements is/are correct?

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

**25. Consider the following statements regarding "K2-18b"**

1. It is a potentially 'habitable' planet
2. It is the only planet orbiting a star outside the Solar System that is known to have both water and temperatures that can support life.
3. It is eight times the mass of Jupiter.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 only
- (d) 1,2 and 3

**26. EX TSENTR is recently seen in news, it is:**

- (a) An asteroid which might strike the Earth surface in recent future.
- (b) Part of the annual exercises of the Russian Armed Forces' annual training cycle.
- (c) A military exercise between India and Thailand.
- (d) A vaccine to prevent Malaria in tropical countries.

**27. Consider the following statements regarding eSIM technology**

1. eSIM technology supports multiple accounts and switching between them is super easy.
2. It will make devices smaller.
3. It could be extremely helpful for wearable devices.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 3 only
- (d) 1, 2 and 3

**28. Consider the following statements regarding African Swine Fever (ASF):**

1. It is haemorrhagic viral disease of pigs.
2. It is related to classical swine fever (CSF).
3. It severely impacts human health and could be lethal.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) None of the above

**29. Consider the following pairs:**

Vector	Disease
1. Anopheles Mosquito	Japanese encephalitis
2. Sandflies	Kala Azar
3. Aedes mosquito	Rift Valley fever

Which of the pairs given above is/are correctly matched?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**30. Consider the following statements regarding Hog technology in Railways:**

1. The new technology is expected to transform the way air conditioners (ACs) run and power is supplied in the railway coaches.
2. It will ensure sustainable use of resources.

Which of the above statements is/are correct?

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

**31. Consider the following statements about Pre-natal diagnosis tests:**

1. Dual Marker and Triple Marker Tests look at the level of certain hormones which are

'markers' associated with Down's Syndrome.

2. The use of Amniocentesis for sex determination is prohibited by law but its use for determination of disability in foetus is allowed.

Which of the above statements is/are correct?

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

**32. Consider the following statements regarding NASA's Lunar Reconnaissance Orbiter (LRO) mission:**

1. This Exploration Mission was focused on supporting the extension of human presence in the solar system.
2. It created the first cosmic ray albedo proton map of the Moon.

Which of the above statements is/are correct?

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

**33. Consider the following pairs:**

<b>Exercise</b>	<b>Countries</b>
1. Dharma Guardian	India-Japan
2. Shinyuu Maitri	India-China
3. Cope India	India-USA

Which of the pairs given above is/are correctly matched?

- (a) 1 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**34. The military exercise Maitree-2019 was held between which countries:**

- (a) India and Vietnam
- (b) India and Maldives
- (c) India and Thailand
- (d) India and Australia

**35. Consider the following statements regarding "vitamin B12":**

1. It is fat soluble and helps in the metabolism of

every cell in the human body.

2. This vitamin is only found in animal meat and to a lesser extent in milk products
3. India lacks a nation-wide data on B12 deficiency

Which of the above statements is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**36. Consider the following statements regarding "MOSAIC Mission":**

1. The mission is launched by NASA.
2. Objective of the mission is to find rare earth minerals beneath Earth's surface.

Which of the above statements is/are correct?

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

**37. Sagittarius A\* recently seen in news is:**

- (a) A black hole at the center of the Milky Way.
- (b) An exoplanet revolving around star Alpha Centauri.
- (c) A newly discovered asteroid in the Kuiper belt.
- (d) None of the above.

**38. Consider the following statements regarding UMMID initiative:**

1. It is started by The Department of Biotechnology (DBT).
2. It aims to create awareness about genetic disorders amongst clinicians to establish molecular diagnostic in hospitals.

Which of the above statements is/are correct?

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

**39. "INS Nilgiri" recently seen in news is a:**

- (a) Stealth frigate
- (b) Nuclear powered submarine

- (c) Aircraft Carrier
- (d) Anti-piracy ship

**40. Consider the following statements regarding Elephant Endotheliotropic Herpesvirus:**

1. EEHV is as a type of herpes virus that can cause hemorrhagic disease in young Asian elephants.
2. The disease is usually fatal, with a short course of 28-35 hours.
3. There is no cure for herpes viruses in animals.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**41. Which of the following are anti-drone technology/technologies?**

1. Drone Gun
2. Advanced Test High Energy Asset (ATHENA)
3. Rafale UAV
4. Sky wall 100

Select the correct answer using the code given below:

- (a) 2 and 3 only
- (b) 1 and 4 only
- (c) 1, 2 and 4
- (d) 1, 2, 3 and 4

**42. The Nobel Prize in Chemistry for 2019 was awarded for work on lithium-ion batteries. Which of the following statements are correct about lithium-ion batteries?**

1. They are made from lead-acid and are used to start gasoline and diesel-powered vehicles.
2. Lithium extraction causes environmental damage.
3. Lithium-ion batteries are lightweight and require little maintenance.
4. Lithium-ion technology can help create a fossil fuel-free society.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only

- (d) 2, 3 and 4 only

**43. With reference to the Geochemical Baseline Atlas of India, consider the following statements:**

1. It is the first such atlas developed by National Centre for Earth Sciences Studies.
2. The atlas will serve as a reference to assess the chemical compositional changes on Earth's surface.

Which of the above statements is/are correct?

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

**44. Consider the following statements regarding NASA's Artemis mission:**

1. The mission aims to land astronauts including woman astronaut on Mars by 2030.
2. Astronauts will be sent aboard the Orion spacecraft using the new Space Launch System (SLS) rocket.

Which of the above statements is/are *incorrect*?

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

**45. Recently, India successfully test-fired a Quick Reaction Surface-to-Air Missile (QRSAM). In this regard, consider the following statements:**

1. QRSAM is a short range surface-to-air missile system having capability to engage multiple targets.
2. It aims to protect moving armoured columns from aerial attacks.
3. It is an all-weather and all-terrain missile using liquid-fuel propellant.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**46. Indian tri-services commando unit has been set up recently. Which of the following Special Forces are part of it?**

1. Army's Parachute Regiment
2. Navy's MARCOS
3. Air Force's Garud Commando Force

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**47. Which of the following country will deliver the Akula class submarine to the Indian Navy by 2025?**

- (a) UK
- (b) France
- (c) Russia
- (d) Germany

**48. Consider the following statements, regarding recently detected interstellar 'helium hydride'?**

1. It was detected by the hubble telescope of NASA.
2. It was detected in a planetary nebula near the constellation Cygnus.

Which of the statements given above is/are correct?

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

**49. Project 3S is related to which of the following sector?**

- (a) Health
- (b) Satellites
- (c) Artificial Intelligence
- (d) Solar energy

**50. Which of the following statements is *incorrect* regarding Voyager 2?**

- (a) It has become the second human-made object in history to exit the Heliosphere.
- (b) It is the only spacecraft to have visited all four gas giant planets — Jupiter, Saturn, Uranus, and Neptune.
- (c) It is NASA's longest running mission.

- (d) None of the above

**51. Consider the following statements regarding PSLV-C47:**

1. It has launched Cartosat-3 into Sun Synchronous orbit.
2. It is the 21st flight of PSLV in 'XL' configuration.
3. It is fitted with 6 solid strap-on motors.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**52. Wooden Breast Syndrome was recently seen in news. Consider the following statements regarding it:**

1. It is a metabolic disorder characterized by abnormal sugar accumulation in the breast muscle tissue.
2. An enzyme called lipoprotein lipase is behind the syndrome.

Which of the above statements is/are correct?

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

**53. "Hera mission" launched by ESA is related to:**

- (a) Solar Winds Analysis
- (b) Jupiter Probe
- (c) Asteroid Deflection
- (d) Space Observation

**54. Consider the following statements regarding Vigyan Samagam:**

1. It is a multi-project exhibition organized by DRDO in collaboration with ISRO.
2. It aims to celebrate India's participation as one of the core contributors in international collaborative mega-science projects.
3. The exhibition will be organised in four cities in India including Mumbai, Bengaluru, Kolkata, and Delhi.

Which of the above statements are correct?

- (a) 1 and 2 only



- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**55. Which of the following statement is /are correct with regard to FASTag?**

1. FASTag is an electronic toll collection system in India.
2. FASTag is a device which works on Radio Frequency Identification (RFID) technology.
3. This device can be used for lifetime and transferred to another vehicle.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 1 and 2 only
- (c) 1 and 3 only
- (d) 2 and 3 only

**56. Consider the following statements regarding the recently discovered StrandHogg bug:**

1. It is known to target Windows and Ubuntu operating systems.
2. It allows real-time malware applications to pose as genuine applications and access user data.
3. There is no effective detection method against StrandHogg on the devices.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**57. Consider the followings statements regarding Secretagogen protein:**

1. It helps in managing the Estrogen levels in the body.
2. It has the potential to cure neurodegenerative disorders like dementia and Alzheimers.
3. It is known to lower lipid accumulation in liver cells.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**58. Consider the following statements regarding Bacteriophage:**

1. It a type of virus that infects bacteria.
2. Lysis is the process by which bacteriophages assemble and burst out of bacterium to increase their spread.
3. Transduction is the process by which an infected bacterium produces virus components.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**59. Consider the following statements regarding recently launched RISAT-2BR1 satellite of India:**

1. It is radar imaging earth observation satellite.
2. It was placed in a low earth orbit by GSLV launch vehicle.
3. The launch also accompanied commercial satellites of USA, Japan, Italy and Israel.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**60. Consider the following statements regarding the Indian Regional Navigation Satellite System:**

1. Its primary area of service extends 15,000km from the boundary of India.
2. Standard Positioning Service provided by it is available to all users.
3. The satellite constellation has four satellites placed in geostationary orbit and three in geosynchronous orbit.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 3 only
- (c) 2 only
- (d) 2 and 3 only

**61. Consider the following statements regarding BRUIE robot:**

1. It an underwater exploration robot developed



by NASA.

2. It is planned to be used to explore moons of the solar system like Europa of Jupiter.
3. It is being tested at Casey research station in Antarctica which is controlled by the USA.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**62. Which of the following statements is/are correct regarding Aditya-L1?**

1. The mission aims to put 1,500-kg heavy class Aditya-L1 satellite into halo orbit around Lagrangian point L1.
2. It is a flagship programme of NASA.

Select the correct answer using the code given below:

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

**63. Consider the following statements regarding Avangard missile system:**

1. It is Russia's new intercontinental subsonic missile system.
2. It's manoeuvring capability makes it difficult to predict its trajectory and gives it the ability to protect itself from the air and ballistic missile defences.

Which of the above statements is/are correct?

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

**64. Consider the following statements:**

1. Centralized Access Control System (CACS) project aims to share information in smart cities' complex ecosystem and combine it with contextual data that is analyzed in real-time.
2. e-BCAS project aims to achieve a paperless office under e-governance initiative of Indian government.
3. CACS and e-BCAS are projects launched by Ministry of Housing and Urban Affairs.

Which of the above statements is/are **incorrect**?

- (a) 1 and 3 only
- (b) 2 only
- (c) 3 only
- (d) 1 and 2 only

**65. Which of the following are the advantages of Polycrack technology for waste-to-energy conversion?**

1. It can be fed with all types of plastic
2. No need for pre-segregation of wastes
3. High moisture tolerance and no need to dry wastes
4. No affect on the air quality of surrounding area

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 1, 3 and 4 only
- (c) 2 and 4 only
- (d) 1, 2, 3 and 4

**66. With reference to Indian Science Congress (ISC), consider the following statements:**

1. ISC is India's largest annual gathering of scientific luminaries from countries across the world.
2. A Farmers Science Congress was organized as part of ISC for the first time in 2020.
3. The theme for ISC-2020 was 'Future India – Science and Technology'.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**67. NASA recently discovered an Earth-sized planet orbiting a star in its 'Goldilocks Zone'. In this context, consider the following statements:**

1. Goldilocks Zone refers to the habitable zone around a star where the temperature is just right for liquid water to exist.
2. Location of a planet in Goldilocks Zone is a guarantee of existence of life on that planet.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only

- (c) Both 1 and 2
- (d) Neither 1 nor 2

**68. Which of the following statements regarding Project NETRA are correct?**

1. It is an early warning system to detect debris and other hazards to Indian satellites.
2. The project launched by ISRO will enhance India's capability in Space Situational Awareness (SSA).
3. The project will cover Low Earth Orbits (LEO) only.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**69. Consider the following statements:**

1. Gravitational waves are generated due to the confluence of gravitational force of Earth and Moon.
2. LIGO India will be used for the detection of gravitational waves.
3. Gravitational waves were first predicted by Albert Einstein.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**70. The production of Geranium has got boost under the Aroma mission. In this regard, consider the following statements:**

1. Geranium is a plant originally from South Africa that is used in manufacturing essential oils.
2. The plant is only cultivated in the North-Eastern regions of India.
3. The Aroma Mission was launched by Indian Council of Agricultural Research (ICAR).

Which of the above statements is/are correct?

- (a) 1 only

- (b) 1 and 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**71. Maser Monitoring Organisation (M2O), recently seen in news is related to-**

- (a) To observe accretion burst event in the stars
- (b) To observe the most distant stars and galaxies as well as the planets in the solar system
- (c) To observe early noctilucent ice clouds over Antarctica.
- (d) To study how galaxies, stars and planets formed and changed.

**72. 'Dhanush', seen in news recently is a:**

- (a) Short Range Surface to Air Missile system to protect vulnerable areas and vulnerable points from air attacks.
- (b) First indigenously built long range artillery gun.
- (c) High-speed Expendable Aerial Target (HEAT) that offers a realistic threat scenario for practice of weapon systems.
- (d) Third generation fire and forget class anti-tank guided missile (ATGM) system.

**73. Consider the following statements regarding Spitzer Space Telescope:**

1. It was one of NASA's four Great Observatories which observed the universe in visible light.
2. It is known for the discovery of 7 Earth-sized rocky exoplanets.

Which of the above statements is/are correct?

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

**74. Consider the following statements regarding Coronavirus:**

1. Coronaviruses are a large family of zoonotic viruses causing respiratory problems.
2. The 2019 novel coronavirus (nCoV) is the same virus that caused SARS outbreak in 2003.
3. nCoV is more easily transmitted but is less dangerous than SARS.
4. Asymptomatic transmission is not possible for both SARS as well as nCoV.

Which of the above statements are correct?

- (a) 1 and 3 only
- (b) 2 and 4 only
- (c) 1, 2 and 4 only
- (d) 2, 3 and 4 only

**75. Consider the following statements:**

1. Neglected tropical diseases (NTDs) are a diverse group of non-communicable diseases.
2. NTDs are only caused by viruses and bacteria.
3. The first World Neglected Tropical Diseases Day was celebrated on 30 January 2020.

Which of the above statements is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

**76. Consider the following statements:**

1. Biorock is formed by electro accumulation of minerals dissolved in seawater on steel structures that are connected to a power source.
2. Biorock is a mineral accretion technology that can be used to restore coral reefs.

Which of the above statements is/are correct?

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

**77. The world record of Longest Spaceflight by a Woman is recently been obtained by which country?**

- (a) Russia
- (b) Canada
- (c) USA
- (d) Europe

**78. With reference to Polio disease, consider the following statements:**

1. The virus spreads from person to person.
2. IPV is created from a weakened form of poliovirus.
3. OPV is made from inactive poliovirus.

Which of the above statements is/are correct?

- (a) 2 and 3 only
- (b) 1 only
- (c) 3 only
- (d) 1, 2 and 3

**79. Consider the following statements regarding Classical Swine Fever:**

1. It is also known as hog cholera.
2. It is a contagious bacterial disease.

Which of the above statements is/are correct?

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

**80. Consider the following statements regarding National Mission on Quantum Technologies & Applications (NM-QTA):**

1. The move will be implemented by the Department of Science & Technology (DST).
2. Quantum entanglement is the theory that sub-atomic particles exist in multiple states simultaneously.

Which of the above statements is/are correct?

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

**81. Consider the following statements:**

1. Traditional Surrogacy is the process where egg used is of a surrogate mother, thus she becomes the biological mother of a child.
2. In Gestational Surrogacy surrogate mother's eggs are not used.
3. Altruistic Surrogacy includes surrogacy in which payment exceeding basic medical expenses and insurance covers are paid.

Which of the above statements are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**82. Consider the following statements regarding bio fortification:**

1. Bio fortification is the process of increasing nutritional value of food crops by increasing the density of vitamins and minerals in a crop through either conventional plant breeding; agronomic practices or biotechnology.
2. Madhuban Gajar is a bio-fortified crop which contains high  $\alpha$ -carotene and zinc content.

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

**83. With reference to Kala Azar consider the following statements:**

1. Kala-azar is also known as visceral leishmaniasis (VL).
2. It is spread to humans through bites from female Aedes aegypti mosquito.

Which of the above statement(s) are correct?

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

**84. Consider the following statements regarding "Raider-X" which was seen recently in news:**

1. It is a bomb detection device.
2. It has been developed by Bhabha Atomic Research Centre.
3. Device that can spot explosives from 200 meters away.

Which of the above statement(s) are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

**85. Which of the following statement(s) is/are incorrect about Regulation of Artificial Intelligence?**

1. Sundar Pichai advocated for the regulation of Artificial Intelligence keeping in mind both the harm and societal benefits that the technology could bring in.
2. NITI Aayog noted the stringent regulation around AI as a major weakness for India.

Codes:

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

**86. In a significant victory for India's defence sector, the country has bagged a deal to supply 'Swathi radars' to Armenia.**

With reference to this deal, consider the following statements:

1. Swathi is a weapon locating radar which provides fast, automatic and accurate location of enemy weapons.
2. It is developed by the Defence Research and Development Organisation (DRDO).
3. It would be operational in LoC in Jammu & Kashmir from 2022.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

**87. What is snow blindness?**

- (a) Inflammation of cornea
- (b) Inflammation of retina
- (c) Inflammation of eyeball
- (d) Inflammation of sclera

**88. What is JOIDES Resolution?**

- (a) An environmental protection treaty
- (b) A commercial agreement between India and Jordan
- (c) A research vessel that drills into the ocean floor to collect and study core samples
- (d) A UN nuclear cooperation treaty

**89. "siRNAs" term seen recently in news is related to which of the following?**

- (a) It is a new technique found to develop pesticide alternative to protect plants from viral infection.
- (b) It is a new missile system developed by DRDO.
- (c) It is a new asteroid recently discovered by NASA.
- (d) It is an invasive species recently found in India

which is damaging the crops of south India.

**90. What is indelible ink that was in news recently?**

- (a) Ink used in high end printers
- (b) Ink produced from the soot and smoke
- (c) Ink used in elections to prevent double counting
- (d) Ink used in painting

**91. Recently researchers at IIT Madras developed materials with optoelectronic properties. Consider the following statements in this regard:**

- 1. Optoelectronics is the study of electronic devices that source, detect and control light.
- 2. Optoelectronic materials find application in optical fibre communication.

Which of the above statements is/are correct?

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

**92. Consider the following statements regarding MANAV Human Atlas:**

- 1. It aims at creating a database network of all tissues in the human body from the available scientific literature.
- 2. It is funded by the Department of Science and Technology.

Which of the above statements is/are correct?

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

**93. Russia will deliver the Akula Class Submarine to the Indian Navy by 2025 for a period of 10 years. How will induction of this submarine into Indian Navy benefit India?**

- 1. It uses a nuclear reactor for propulsion, which makes its detection impossible.
- 2. It will help India in training Arihant and Arihant-class cruise on SSN submarines.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only

- (c) Both 1 and 2
- (d) Neither 1 nor 2

**94. With reference to the 'The International Energy Agency (IEA)', consider the following statements:**

- 1. It is a Paris based autonomous intergovernmental organization established under the framework of UN.
- 2. It works for the promotion of alternate energy sources.

Which of the statements given above is/are **incorrect**?

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

**95. International Rice Research Institute (IRRI) has recently developed a biofortified crop - 'Golden Rice'. In this regard, consider the following statements:**

- 1. Biofortification improves the nutritional quality of food crops through agronomic practices.
- 2. Golden Rice is the first purposefully created bio-fortified food to address zinc deficiency.
- 3. IRRI is an intergovernmental organization dedicated to reduce poverty and hunger through rice science.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**96. Consider the following statements regarding Compressed Bio-Gas:**

- 1. It is exactly similar to the commercially available natural gas in its composition.
- 2. SATAT Initiative has been launched to set up Compressed Bio-Gas (CBG) production plants.

Which of the above statements is/are correct?

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

**97. Consider the following statements regarding the gravitational lensing:**

1. It is a natural phenomenon that magnifies light around galaxies.
2. It is based on Einstein's theory of general relativity

Which of the above statements is/are correct?

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

**98. Recently, 'K-12 Education Transformation Framework' has been launched in India. In this context, consider the following statements:**

1. India is the first country in which this model has been launched.
2. This program has been launched by Google.

Which of the above statements is/are **incorrect**?

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

**99. Nipah virus outbreak was reported in Kerala recently. Consider the following statements regarding Nipah virus:**

1. It is a zoonotic virus with no human-to-human transmission.
2. It was first recognized during an outbreak among pig farmers in Uganda.
3. Pigs act as a natural host of Nipah virus.

Which of the above statements is/are **incorrect**?

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

**100. Consider the following statements:**

1. OSIRIS-REx is a planetary science mission for NASA's New Frontiers Program.
2. OSIRIS-REx is the first ever mission to collect a sample from an asteroid and bring it to Earth.

Which of the above statements is/are correct?

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



# *Answer Key*

Q. 1 (b)	Q. 21 (c)	Q. 41 (c)	Q. 61 (a)	Q. 81 (a)
Q. 2 (a)	Q. 22 (c)	Q. 42 (d)	Q. 62 (a)	Q. 82 (a)
Q. 3 (c)	Q. 23 (b)	Q. 43 (b)	Q. 63 (b)	Q. 83 (a)
Q. 4 (a)	Q. 24 (b)	Q. 44 (a)	Q. 64 (a)	Q. 84 (a)
Q. 5 (c)	Q. 25 (b)	Q. 45 (b)	Q. 65 (d)	Q. 85 (b)
Q. 6 (a)	Q. 26 (b)	Q. 46 (d)	Q. 66 (b)	Q. 86 (a)
Q. 7 (d)	Q. 27 (d)	Q. 47 (c)	Q. 67 (a)	Q. 87 (a)
Q. 8 (a)	Q. 28 (a)	Q. 48 (b)	Q. 68 (d)	Q. 88 (c)
Q. 9 (d)	Q. 29 (d)	Q. 49 (a)	Q. 69 (c)	Q. 89 (a)
Q. 10 (c)	Q. 30 (c)	Q. 50 (d)	Q. 70 (a)	Q. 90 (c)
Q. 11 (a)	Q. 31 (c)	Q. 51 (d)	Q. 71 (a)	Q. 91 (c)
Q. 12 (a)	Q. 32 (c)	Q. 52 (b)	Q. 72 (b)	Q. 92 (a)
Q. 13 (a)	Q. 33 (b)	Q. 53 (c)	Q. 73 (b)	Q. 93 (c)
Q. 14 (c)	Q. 34 (c)	Q. 54 (b)	Q. 74 (a)	Q. 94 (a)
Q. 15 (a)	Q. 35 (c)	Q. 55 (b)	Q. 75 (c)	Q. 95 (a)
Q. 16 (b)	Q. 36 (d)	Q. 56 (b)	Q. 76 (c)	Q. 96 (c)
Q. 17 (c)	Q. 37 (a)	Q. 57 (b)	Q. 77 (c)	Q. 97 (c)
Q. 18 (a)	Q. 38 (c)	Q. 58 (a)	Q. 78 (b)	Q. 98 (c)
Q. 19 (c)	Q. 39 (a)	Q. 59 (c)	Q. 79 (a)	Q. 99 (d)
Q. 20 (b)	Q. 40 (d)	Q. 60 (c)	Q. 80 (a)	Q. 100 (a)