Q.1) Which among the following is/are genetic diseases?

1. Hemophilia
2. Down's syndrome
3. Sickle-cell anemia
4. Kyasanur Forest disease (KFD)

Select the correct answer using the code given below.

a) 1 and 2 only
b) 2 and 3 only
c) 1, 2 and 3
d) All the above

Q.1) Solution (c)

Hemophilia: In this disease, a single protein that is a part of the cascade of proteins involved in the clotting of blood, is affected. Due to this, in an affected individual, a simple cut will result in non-stop bleeding. The heterozygous female (carrier) for hemophilia may transmit the disease to sons. The possibility of a female becoming a hemophilic is extremely rare because mother of such a female has to be at least carrier and the father should be hemophilic.

Sickle-cell anemia: This is an autosome linked recessive trait that can be transmitted from parents to the offspring when both the partners are carrier for the gene (or heterozygous). It results in an abnormality in the oxygen-carrying protein hemoglobin (hemoglobin S) found in red blood cells. This leads to a rigid, sickle-like shape under certain circumstances.

Down's Syndrome: The cause of this genetic disorder is the presence of an additional copy of the chromosome number 21 (trisomy of 21). The affected individual is short statured with small round head, furrowed tongue and partially open mouth. Palm is broad with characteristic palm crease.

Kyasanur Forest disease (KFD) is a tick-borne viral hemorrhagic fever endemic to South Asia. The disease is caused by a virus belonging to the family Flaviviridae, which also includes yellow fever and dengue fever.

Do you know?

- Other examples of genetic disorders are: Klinefelter Syndrome, Turners syndrome, Cystic fibrosis, Color blindness, Phenylketonuria, Thalassemia

THINK!

- Vitamin deficiency diseases.

Q.2) Which of the following organisms are common pollinating agents in flowering plants?

1. Bat
2. Bees
3. Wasp
4. Ants

Select the correct answer using the code given below.

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

Q.2) Solution (d)

Flowering plants use a range of animals as pollinating agents. Bees, butterflies, flies, beetles, wasps, ants, moths, birds (sunbirds and humming birds) and bats are the common pollinating agents, particularly bees are the dominant biotic pollinating agents. Even larger animals such as some primates (lemurs), arboreal (tree-dwelling) rodents, or even reptiles (gecko lizard and garden lizard) have also been reported as pollinators in some species.

Do you know?

A pollenizer (or polleniser), sometimes pollinizer (or polliniser, see spelling differences) is a plant that provides pollen.

The word pollinator is often used when pollenizer is more precise. A pollinator is the biotic agent that moves the pollen, such as bees, moths, bats, and birds. Bees are thus often referred to as 'pollinating insects'.

The verb form to pollenize is to be the source of pollen, or to be the site of the next plant generation.

THINK!

- Pollinator Partnership or P2

Q.3) With reference to respiration, consider the following statements:

1. Oxygen is required by all the organisms to break down glucose.
2. Rate of breathing is faster in aquatic animals than the terrestrial animals.

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

Q.3) Solution (b)

The food material taken in during the process of nutrition is used in cells to provide energy for various life processes. Diverse organisms do this in different ways - some use oxygen to break-down glucose completely into carbon dioxide and water, some use other pathways that do not involve oxygen. In all cases, the first step is the break-down of glucose, a six-carbon molecule, into a three-carbon molecule called pyruvate. This process takes place in the cytoplasm. Further, the pyruvate may be converted into ethanol and carbon dioxide. This process takes place in yeast during fermentation. **Since this process takes place in the absence of air (oxygen), it is called anaerobic respiration.**

Animals have evolved different organs for the uptake of oxygen from the environment and for getting rid of the carbon dioxide produced. Terrestrial animals can breathe the oxygen in the atmosphere, but animals that live in water need to use the oxygen dissolved in water. **Since the amount of dissolved oxygen is fairly low compared to the amount of oxygen in the air, the rate of breathing in aquatic organisms is much faster than that seen in terrestrial organisms.**

Do you know?

- **Cardiopulmonary resuscitation (CPR)** is an emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function until further measures are taken to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest. It is recommended in those who are unresponsive with no breathing or abnormal breathing, for example, agonal respirations.

THINK!

- Respiratory therapy

Q.4) With reference to the CHARGE syndrome, consider the following statements

1. It causes multiple life-threatening problems including heart defects and growth retardation.
2. It is a result of defective embryonic development.

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

Q.4) Solution (c)

CHARGE syndrome is a rare birth defect that affects approximately 1 in 20,000 people around the world. CHARGE syndrome causes multiple life-threatening problems in a newborn, such as facial bone and nerve defects that cause breathing and swallowing difficulties, deafness and blindness, heart defects, genital problems and growth retardation. The children may survive and go on to live with these deficiencies if the heart and bone defects are corrected with multiple surgeries, but those without access to such support usually do not survive past their first year.

CHARGE syndrome is a result of defective embryonic development. Two-thirds of the patients with CHARGE syndrome have a sporadic mutation in the gene called CHD7

Do you know?

- The diagnosis of CHARGE syndrome is often difficult, because it is rare. The syndrome spans many disciplines, and as such, can be diagnosed by a pediatrician, oral and maxillofacial surgeon, ENT specialist, ophthalmologist, audiologist, endocrinologist, cardiologist, urologist, developmental specialist, radiologist, geneticist, physiotherapist, occupational therapist, speech therapist, or orthopedic specialist.

THINK!

- "CHILD syndrome"

Q.5) A false fruit or pseudo-carp is derived from the floral parts other than ovary. Which of the following are false fruits?

1. Apple
2. Strawberry
3. Mango
4. Grapes
5. Pine apple

Select the correct answer using the code given below.

a) 1 and 3 only
b) 2 and 4 only
c) 1, 2 and 5 only
d) 1, 2, 3, 4 and 5

Q.5) Solution (c)

A false fruit or pseudo-carp is derived from the floral parts other than ovary, e.g., peduncle in cashewnut, thalamus in apple, pear, strawberry, gourd and cucumber and fused perianth in mulberry. Jack fruit and pine apple are also false fruits as they develop from the entire inflorescence. False fruits are also called spurious or accessory fruits.

A true fruit or eucarp is a mature or ripened ovary, developed after fertilization, e.g., Mango, Grape etc.

Do you know?

- An aggregate fruit or etaerio is a fruit that develops from the merger of several ovaries that were separate in a single flower. In contrast, a simple fruit develops from one ovary. In languages other than English, the meanings of aggregate and multiple fruit are reversed, so that aggregate fruits merge several flowers.

THINK!

- Compound fruit

Q.6) With reference to Photodynamic Therapy, consider the following statements:

1. It uses a photosensitive drug that becomes active under the action of light.
2. It is used in treatment of cancer.

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

Q.6) Solution (c)

Photodynamic therapy uses a photosensitive drug that becomes active under the action of light and converts molecular oxygen into reactive oxygen species that kill cancer cells.

It uses special drugs, called photosensitizing agents, along with light to kill cancer cells. Depending on the part of the body being treated, the photosensitizing agent is either put into the bloodstream through a vein or put on the skin. Over a certain amount of time the drug is absorbed by the cancer cells. Then light is applied to the area to be treated. The light causes the drug to react with oxygen, which forms a chemical that kills the cells. PDT might also help by destroying the blood vessels that feed the cancer cells and by alerting the immune system to attack the cancer.

Do you know?

- Photoimmunotherapy is an oncological treatment for various cancers that combines photodynamic therapy of tumor with immunotherapy treatment. Combining photodynamic therapy with immunotherapy enhances the immunostimulating response and has synergistic effects for metastatic cancer treatment.

THINK!

- Blood irradiation therapy

Q.7) Which among the following is/are parts of innate immunity of human body?

1. Lymphocytes
2. Tears
3. Saliva

Select the correct answer using the code given below.

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

Q.7) Solution (d)

Innate immunity is non-specific type of defense, that is present at the time of birth. This is accomplished by providing different types of barriers to the entry of the foreign agents into our body. Innate immunity consists of four types of barriers. These are:

Physical barriers: Skin on our body is the main barrier which prevents entry of the micro-organisms. Mucus coating of the epithelium lining the respiratory, gastrointestinal and urogenital tracts also help in trapping microbes entering our body.

Physiological barriers: Acid in the stomach, saliva in the mouth, tears from eyes-all prevent microbial growth.

Cellular barriers: Certain types of leukocytes (WBC) of our body like polymorpho-nuclear leukocytes (PMNL-neutrophils) and monocytes and natural killer (type of lymphocytes) in the blood as well as macrophages in tissues can phagocytose and destroy microbes.

Cytokine barriers: Virus-infected cells secrete proteins called interferons which protect non-infected cells from further viral infection.

Do you know?

- Passive or "adoptive transfer" of cell-mediated immunity, is conferred by the transfer of "sensitized" or activated T-cells from one individual into another. It is rarely used in humans because it requires histocompatible (matched) donors, which are often difficult to find.

THINK!

- Inoculation

Q.8) Which of the following statements regarding Kalam SAT are correct?

1. It is named after Dr A P J Abdul Kalam and is claimed to be the World's lightest satellite.
2. It was launched by ISRO.
3. The probe is composed of 3-D printed reinforced carbon fiber polymer.

Select the code from following:

a) 1 and 2
b) 2 and 3
c) 1 and 3
d) All of the above

Q.8) Solution (c)

Kalam SAT is a Femto Satellite and widely claimed to be the world's lightest satellite. It is named after former Indian president Dr. A. P. J. Abdul Kalam and was built by an Indian High school student team, led by Rifath Sharook, an 18-year-old from the Tamil Nadu town of Pallapatti. The high school team participated in Cubes in Space, a STEM-based education program by Idoodle Learning.Inc and NASA. As selected student competitors, the team won an opportunity to design experiments to be launched into space on a NASA rocket. Kalam

SAT was launched by NASA along with several other experiments on Terrier Orion sounding rocket on 22 June 2017 from Wallops Island flight facility in Virginia.

The weight of the probe is just 64 grams and it is fitted in a 3.8 centimeters cube. The probe is composed of 3-D printed reinforced carbon fiber polymer. Part of the components were supplied from India and other parts from abroad. The probe was launched by a sub-orbital spaceflight. The expected time span of the mission (post flight) is 240 minutes. The tiny probe will be operated only for less than 12 minutes to demonstrate the performance of 3-D printed carbon fiber in a micro-gravity environment of space.

Q.9) NASA's QueSST has passed preliminary tests and is set to become a reality. What is QueSST?

a) Supersonic passenger plane
b) Zero gravity chamber developed on earth.
c) Virtual platform to give a feel of space to visitors
d) Passenger Moon rover

Q.9) Solution (a)

NASA's Quiet Supersonic Transport (QueSST) aircraft passed a preliminary design review last week, marking a major milestone for the agency's experimental X-plane concept.

NASA has been developing new designs for supersonic aircraft, with a specific focus on reducing the strength of the sonic booms — the sound created by a shock wave from an

aircraft that moves faster than the speed of sound. The shape and overall design of a supersonic plane is particularly important for minimizing the loudness of the boom during flight.

Q.10) A large supercluster has been discovered 600 million light years across by Indian Scientists. It has been named

a) Ganga
b) Saraswati
c) Yamuna
d) Godavari

Q.10) Solution (b)

These are the largest coherent structures seen in the universe. Firstly there are clusters of galaxies together with associated gas and dark matter. Large groups of such clusters, linked by filaments, separated by voids together form the superclusters. Though initially a supercluster was used to describe groups of two-four clusters, now it is understood that much larger superclusters, comprising clusters that number an order of magnitude higher, exist. The first such large supercluster to be discovered was the Shapley supercluster.

Recently, a group of scientists from IUCAA (Pune), IISER (Pune), NIT Jamshedpur and Newman College (Thodapuzha) announced that they have discovered a very large "supercluster" of galaxies. They have named it **Saraswati.**

Q.11) Diesel Electric Multiple Unit (DEMU) broad gauge train has been launched by Indian Railways. The train has been made operational between

a) Delhi and Haryana
b) Mumbai and Ahmadabad
c) Patna and Haldia
d) Cochin to Kozhikode

Q.11) Solution (a)

The Railways launched the country's first solar-powered local train with a battery bank facility that ensures sufficient power even in the absence of sunlight.

The entire electrical need of the coaches, which includes lights, fans and information display system, will be met by the energy produced by solar panels fitted atop the coaches of the DEMU (diesel electric multiple unit) train.

This train has been inducted in the link of Train Number 740033 between Delhi Sarai Rohilla - Garhi Harsaru - Farukhnagar in Northern Railway.

The details of reduction in Carbon Emission and fuel saving shall be known after running this train for a period of one year.

Q.12) The Union Ministry of Science and Technology has launched SOHUM device. Which of the following statements is/are correct regarding SOHUM?

1. It is an indigenously developed low-cost hearing screening device for senior citizens.
2. It is a non invasive portable device which uses Brain Stem Auditory evoked response.

Select the code from following:

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

Q.12) Solution (b)

Sohum Device

The indigenously developed newborn hearing screening device – SOHUM was formally launched by the Minister of State for Science and Technology & Earth Sciences.

Sohum is a low cost and unique device which uses brainstem auditory evoked response, the gold standard in auditory testing to check for hearing response in a newborn. As of now, this technology is prohibitively expensive and inaccessible to many. Start-up Sohum has made the technology appropriate for the resource constrained settings and aims to cater to nearly 26 million babies born every year in India.

One of the most common birth disorders – congenital hearing loss – is a result of both genetic and non-genetic factors. These factors are mostly associated with resource-poor economies such as India where, unlike advanced healthcare systems, hearing impairment goes undiagnosed. Thus, when it is discovered at 4+ years, it's too late to reverse the damage and this leads to a host of problems such as impaired communication skills and

even possible mental illness; all of which have a deep impact on the child, emotionally and economically life-long.

Do you know?

The newborn hearing screening device developed by School of International Biodesign (SIB) startup M/s Sohum Innovation Labs India Pvt. Ltd.

This innovative medical device has been developed under Department of Biotechnology (DBT), Ministry of Science and Technology, Government of India supported (SIB). SIB is a flagship Program of the DBT aimed to develop innovative and affordable medical devices as per unmet clinical needs of India and to train the next generation of medical technology innovators in India, it is a valuable contribution to the Make in India campaign of the Government. This Program is implemented jointly at AIIMS and IIT Delhi in collaboration with International partners. Biotech Consortium India Limited manages techno-legal activities of the Program.

Q.13) UIDAI has launched a virtual ID that can be used instead of the actual Aadhar number. Which of the following statements are correct regarding Virtual ID?

1. It is a temporary code which contains 16 numerals.
2. The code is valid for at least one day.
3. All personal details are not revealed by virtual ID.

Select the code from following:

a) 1 and 2
b) 2 and 3
c) 1 and 3
d) All of the above

Q.13) Solution (d)

Considering the privacy of the personal data including the demographic and biometric information mentioned on the Aadhar card, UIDAI has recently decided to come up with a unique feature, termed as Aadhar Virtual ID.

The Aadhar Virtual ID offers limited KYC access providing only that much information which is required for verification rather than offering the complete details of an individual's Aadhar card.

The Aadhaar Virtual ID consists of 16-digit random numbers that is mapped to an individual's Aadhaar card at the back end. An Aadhaar card holder using the virtual ID need not submit his Aadhaar number every time for verification purpose, instead he can generate a Virtual ID and use it for various verification purposes like mobile number, bank and other financial documents.

The Aadhaar Virtual ID gives access to the biometric information of an Aadhaar card holder along with the basic details like name, address and photograph that are sufficient for the e-KYC. Unlike in the past, the agency will not know the 12-digit Aadhaar number and other personal details.

Q.14) Consider the following statements:

1. An asteroid belt in our solar system is found between Earth and Mars.
2. All asteroids in our solar system are found in the asteroid belt.

Which of the above statements are correct?

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

Q.14) Solution (d)

Asteroids are rocky worlds revolving around the sun that are too small to be called planets. They are also known as planetoids or minor planets. There are millions of asteroids, ranging in size from hundreds of miles to several feet across.

Asteroids lie within three regions of the solar system. Most asteroids lie in a vast ring between the orbits of Mars and Jupiter. This main asteroid belt holds more than 200 asteroids larger than 60 miles (100 km) in diameter. Scientists estimate the asteroid belt also contains between 1.1 million and 1.9 million asteroids larger than 1 km (3,281 feet) in diameter and millions of smaller ones.

Many asteroids lie outside the main belt. Trojan asteroids orbit a larger planet in two special places, known as Lagrange points, where the gravitational pull of the sun and the planet are balanced. Jupiter Trojans are the most numerous, boasting nearly as high a population as the main asteroid belt. Neptune, Mars and Earth also have Trojan asteroids.

Near-Earth asteroids (NEAs) circle closer to Earth than the sun. Amor asteroids have close orbits that approach but no not cross Earth's path, according to NASA. Apollo asteroids have Earth-crossing orbits but spend most of their time outside the planet's path. Aten asteroids also cross Earth's orbit but spend most of their time inside Earth's orbit. Atira asteroids are near-Earth asteroids whose orbits are contained within Earth's orbit. According to the European Space Agency, roughly 10,000 of the known asteroids are NEAs.

Q.15) CRISPR-Cas9 technology has become popular in recent years. The technology is about –

a) Altering DNA sequences and modifying gene function.
b) Environment-friendly propellant to power satellites and spacecraft.
c) World's largest single earth observation programme.
d) Global Monitoring for Environment and Security.

Q.15) Solution (a)

CRISPR technology is a simple yet powerful tool for editing genomes. It allows researchers to easily alter DNA sequences and modify gene function. Its many potential applications include correcting genetic defects, treating and preventing the spread of diseases and improving crops.

"CRISPR" (pronounced "crisper") is shorthand for "CRISPR-Cas9." CRISPRs are specialized stretches of DNA. The protein Cas9 (or "CRISPR-associated") is an enzyme that acts like a pair of molecular scissors, capable of cutting strands of DNA.

CRISPR technology was adapted from the natural defense mechanisms of bacteria and archaea (the domain of single-celled microorganisms). These organisms use CRISPR-derived RNA and various Cas proteins, including Cas9, to foil attacks by viruses and other foreign bodies. They do so primarily by chopping up and destroying the DNA of a foreign invader. When these components are transferred into other, more complex, organisms, it allows for the manipulation of genes, or "editing."

Q.16) This material which forms the building block of another, well-known allotrope of carbon, is about 200 times as strong as steel. What is it called?

a) Graphite
b) Graphene
c) Buckminsterfullerene

d) Lonsdaleite

Q.16) Solution (b)

Graphene is a semi-metal with a small overlap between the valence and the conduction bands (zero bandgap material). It is an allotrope (form) of carbon consisting of a single layer of carbon atoms arranged in a hexagonal lattice.

It is the basic structural element of many other allotropes of carbon, such as graphite, diamond, charcoal, carbon nanotubes and fullerenes.

Graphene has many uncommon properties. It is the strongest material ever tested, efficiently conducts heat and electricity, and is nearly transparent.

Q.17) A merger of 14 galaxies that took place more than 12 billion years ago was recently spotted by this telescope array. Name the array.

a) Chilean Atacama Large millimeter-submillimeter Array (ALMA)
b) James Webb Telescope
c) Very Large Array (VLA) in New Mexico
d) Cherenkov Telescope Array

Q.17) Solution (a)

The colossal merger of 14 galaxies more than 12 billion years ago has been captured by astronomers who used the world's most powerful telescopes to peer 90% of the way across the observable universe.

The galaxy cluster was first spotted as a faint smudge of light, using the South Pole telescope and the Herschel space observatory. Astronomers then used the Atacama large millimeter/submillimeter Array (Alma), a telescope comprising 66 antennas spread over 16km in the Chilean Andes, to make more detailed observations.

Q.18) Which is the longest continental mountain range in the world?

a) The Appalachian range
b) The Ural range
c) The Andes
d) Atlas Mountains

Q.18) Solution (c)

The Andes or Andean Mountains are the longest continental mountain range in the world. They form a continuous highland along the western edge of South America.

This range is about 7,000 km (4,300 mi) long, about 200 to 700 km (120 to 430 mi) wide (widest between 18° south and 20° south latitude), and of an average height of about 4,000 m (13,000 ft). The Andes extend from north to south through seven South American countries: Venezuela, Colombia, Ecuador, Peru, Bolivia, Argentina and Chile.

Q.19) Who are the mathematicians credited with the creation of analytic geometry – basically the description of geometry by means of equations and coordinates, for instance?

a) Aryabhata and Brahmagupta
b) Rene Descartes and Pierre de Fermat
c) Leonhard Euler and Joseph-Louis Lagrange
d) Sudarshan-Glauber representation

Q.19) Solution (b)

Analytic geometry was independently invented by René Descartes and Pierre de Fermat, although Descartes is sometimes given sole credit.

Cartesian geometry, the alternative term used for analytic geometry, is named after Descartes.

Pierre de Fermat also pioneered the development of analytic geometry.

Q.20) Richter scale is to measure earthquakes. What is the scale to measure the strength of hurricanes?

a) Saffir-Simpson scale
b) Mercalli scale
c) Moment Magnitude Scale
d) Seismic scale

Q.20) Solution (a)

The Saffir–Simpson hurricane wind scale (SSHWS), formerly the Saffir–Simpson hurricane scale (SSHS), classifies hurricanes – Western Hemisphere tropical cyclones that exceed the intensities of tropical depressions and tropical storms – into five categories distinguished by the intensities of their sustained winds. To be classified as a hurricane, a tropical cyclone must have maximum sustained winds of at least 74 mph (33 m/s; 64 kn; 119 km/h) (Category 1). The highest classification in the scale, Category 5, consists of storms with sustained winds exceeding 156 mph (70 m/s; 136 kn; 251 km/h).

The scale was developed in 1971 by civil engineer Herbert Saffir and meteorologist Robert Simpson, who at the time was director of the U.S. National Hurricane Center (NHC).

The classifications can provide some indication of the potential damage and flooding a hurricane will cause upon landfall.

Q.21) Recently Indian astronomers discovered a huge galactic supercluster that has the form of an enormous wall, located about 4 billion light years away. What did they name this supercluster?

a) Ganga
b) Brahmaputra
c) Saraswati
d) Tethys

Q.21) Solution (c)

Recently, a group of scientists from IUCAA (Pune), IISER (Pune), NIT Jamshedpur and Newman College (Thodapuzha) announced that they have discovered a very large "supercluster" of galaxies. They have named it Saraswati.

Galaxies are like the building blocks of the universe, they contain a huge number of stars, something like 100 billion at a count. Galaxy groups can have three to 20 galaxies, the richest systems are called clusters (like the Virgo cluster) which can have several hundred galaxies.

Superclusters are clusters of clusters. They can have as few as two clusters, and superclusters with two to four clusters are common. Saraswati has 42.

The newly discovered Saraswati supercluster is 600 million light years across. The Milky Way is 150,000 light years across.

Article link: http://www.thehindu.com/sci-tech/science/what-is-the-saraswati-supercluster/article19279697.ece

Q.22) Consider the following statements about 'e-FRRO scheme'

1. It is aimed at providing faceless, cashless and paperless visa related services to foreigners
2. It is launched by Ministry of External Affairs
3. Common Services Centres (CSCs) are the access points for delivery of these services

Select the correct statements

a) 1 Only
b) 1 and 2
c) 1 and 3
d) 1, 2 and 3

Q.22) Solution (a)

e-FRRO scheme

News: Home Ministry launched the web-based application 'e-FRRO' (e-Foreigners Regional Registration Office)

About

- It is aimed at building a centralized, transparent online platform for the foreigners to avail visa related services and to provide Faceless, Cashless and Paperless services to the foreigners with user friendly experience.
- It is vital in improving the ease of service delivery with respect to foreigners visiting and staying in India.
- In the new system, foreigners would be able to get as many as 27 Visa and Immigration related services in India from the comfort of their place of stay.
- Using the e-FRRO application, foreigners can apply online on the portal and obtain the service(s) through email/post without appearing in person at the FRO/FRRO office.

Present System

- In the present system, foreigners staying in India on Visa duration of more than 180 days have to get themselves registered with their respective FROs/FRROs.

- Similarly, foreigners requiring different kind of visa related services such as Visa extension, Visa Conversion, Change of address, Change of Educational institutions, Exit permits etc are currently required to visit the FROs/FRROs office.

Q.23) 'Aqaba Process' is associated with

1. Countering extremism and radicalisation in the Arab world
2. It was launched by Egypt, Israel, Jordan, and Saudi Arabia
3. India is an active participant in the process

Select the correct code:

a) 1 and 2
b) 2 and 3
c) 1 and 3
d) 1 Only

Q.23) Solution (c)

Jordan launched the Aqaba process to promote deradicalisation in which India is an active participant.

Q.24) Consider the following statements about 'e-Vidhan'

1. It is a mission mode project to digitize and make the functioning of State Legislatures in India paperless.
2. Ministry of Electronics and Information Technology is the Nodal Ministry for the project.

Select the correct statements

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) Neither 1 nor 2

Q.24) Solution (a)

e-Vidhan

- It is a mission mode project to digitize and make the functioning of State Legislatures in India paperless.
- It is a part of the broader Digital India Programme of the Government and is likely to contribute to the cleanliness & environment by reducing the use of papers to a great extent.
- The Ministry of Parliamentary Affairs is the Nodal Ministry for the project.

Q.25) Consider the following statements about 'Bratachari movement'

1. It was initiated by Gurusaday Dutt
2. It was aimed at the all-round development of the body, mind and soul through the invention of a specific tradition

Select the correct statements

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) Neither 1 nor 2

Q.25) Solution (c)

The Bratachari movement was a movement for spiritual and social improvement in India initiated by Gurusaday Dutt in 1932. The movement aimed to raise the self-esteem and national awareness of people of undivided India regardless of their religion, caste, sex or age. It was a comprehensive programme of physical, mental, and intellectual culture, based on folk traditions of physical exercise, art, dance, drama, music, singing and social service. The Bratacharis undertake to perform good deeds, strengthen fellowship and develop the mind and body through dance.

Source: https://www.livemint.com/Leisure/dehpsfYdswcW49JJsAZglN/Will-the-curtain-fall-on-Gurusaday-Museum.html

Q.26) 'Wojaris' is a community from

a) Telangana
b) Maharashtra
c) Odisha
d) Madhya Pradesh

Q.26) Solution (a)

Adilabad Dokra, an ancient bell metal craft popular in the tribal regions of Adilabad in Telangana, and Warangal durries, have been issued Geographical Indication (GI) Registration Certificate.

The Dhokra craftsmen belong to the Woj community, called Wojaris, and also called Otaris, in Telangana State. The uniqueness of Adilabad Dokra is that no two pieces are alike in shape as well as in size and hence replicas of the antiques are nearly impossible.

Adilabad Dhokra metal casting products mainly include idols of local deities, bells, dancing figures, jewellery, statues and other decorative items. Apart from all this, the craftsmen also make figures of animals and birds, santhal jewels such as twinkly saltation bells, and measuring chitties.

Source: https://www.thehindubusinessline.com/news/tribal-metal-craft-products-from-telangana-get-gi-tag/article23576492.ece