

1. The Clavius Crater was in news recently, where is it located?

- (a) Moon
- (b) Mars
- (c) Bennu asteroid
- (d) Europa

Correct Answer: A

Explanation:

Clavius is one of the largest crater formations on the Moon and the second largest crater on the visible near side.

NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA) has confirmed, for the first time, water on the sunlit surface of the Moon. This discovery indicates that water may be distributed across the lunar surface, and not limited to cold, shadowed places.

SOFIA has detected water molecules (H₂O) in Clavius Crater, one of the largest craters visible from Earth, located in the Moon's southern hemisphere

2. Which of the following defence agreement(s) is/are yet to be signed between India and USA?

- 1. Logistics Exchange Memorandum of Agreement (LEMOA)
- 2. Communications Compatibility and Security Agreement (COMCASA)
- 3. General Security of Military Information Agreement (GSOMIA)

Select the correct answer using the code given below:

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

Correct Answer: D

Explanation:

All of the above agreements have already been signed by India and USA.

The agreements include: General Security of Military Information Agreement (GSOMIA, 2002), Logistics Exchange Memorandum of Agreement (LEMOA, 2016) and Communications Compatibility and Security Agreement (COMCASA, 2018) and Basic Exchange and Cooperation Agreement (BECA) was signed recently.

3. Consider the following statements regarding The Code on Social Security, 2020:

1. It defines ‘platform work’ as a work arrangement within the traditional employer-employee relationship in which individuals use an online platform.
2. It provides for a social security funds for unorganized workers, gig workers and platform workers.

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

Correct Answer: B

Explanation:

Statement 1 is incorrect. The Code On Social Security, 2020 defines that “platform work” means a work arrangement outside of a traditional employer-employee relationship in which organisations or individuals use an online platform to access other organisations or individuals to solve specific problems or to provide specific services or any such other activities which may be notified by the Central Government, in exchange for payment.

Statement 2 is correct. The code mandates that there shall be established by the Central Government a Social Security Fund for social security and welfare of the unorganised workers, gig workers and platform workers.

4. Which of the following statement is correct regarding the recently concluded VAIBHAV Summit?

- (a) It aimed to exchange ideas and chart a course for using AI for social transformation
- (b) It was a global virtual summit of overseas and resident Indian researchers and Academicians
- (c) It proposed a model for equitable distribution of COVID-9 vaccines
- (d) It was an intergovernmental summit of International Solar Alliance members

Correct Answer: B

Explanation:

Vaishwik Bharatiya Vaigyanik (VAIBHAV) Summit was a global virtual summit of overseas and resident Indian researchers and Academicians on Gandhi Jayanti. The deliberations started

on 3rd of October and concluded on the occasion of Sardar Vallabhbhai Patel Jayanti, 31st October 2020.

Among panelists, 45% were overseas Indians and 55% were resident Indian academicians and scientists. The Summit intended to “create an ideal research ecosystem, merging tradition with modernity to create prosperity”.

The discussions were held on computational sciences, electronics & communication, quantum technologies, photonics, aerospace technologies, health and medical sciences, pharma and biotechnology, agro-economy and food security, material & processing technologies, advanced manufacturing, earth sciences, energy, environmental sciences, management and social sciences.

5. Consider the following statements regarding the Serological Surveys:

1. It is based on antibody test conducted on a sample of the population.
2. It is used to estimate the part of population that has already been infected with an infection.

Which of the statements give above is/are correct?

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

Correct Answer: C

Explanation:

Both statements are correct.

Serological surveys are conducted to assess the prevalence of a disease in a population. It is done by detecting the presence of specific antibodies that are produced against the virus.

A serological survey generally includes the IgG Enzyme-Linked Immunosorbent Assay (ELISA) test. It estimates the proportion of the population exposed to an infection.

The human body produces Immunoglobulin M (IgM) and Immunoglobulin G (IgG) antibodies to fight against a pathogen.

6. What was the objective of the Indian Navy’s Mission Sagar in past few months?

- (a) Providing food aid and medicines to countries in Indian Ocean
- (b) Strategic deployment of destroyers at Strait of Malacca
- (c) Bilateral exercises with countries in South China Sea
- (d) Naval deployment for anti-piracy operations

Correct Answer: A

Explanation:

As part of the Government of India outreach amidst the ongoing COVID-19 pandemic, Indian Naval Ship Kesari has departed for Maldives, Mauritius, Seychelles, Madagascar and Comoros, to provide Food Items, COVID related Medicines including HCQ Tablets and Special Ayurvedic Medicines with Medical Assistance Teams embarked, on 10 May 20.

This deployment as ‘Mission Sagar’, is in line with India’s role as the first responder in the region and builds on the excellent relations existing between these countries to battle the COVID-19 pandemic and its resultant difficulties.

Mission Sagar-II, follows the first ‘Mission Sagar’ undertaken in May-June 2020, Indian Naval Ship Airavat will deliver food aid to Sudan, South Sudan, Djibouti and Eritrea.

7. Consider the following statements regarding the Emergency Credit Line Guarantee Scheme (ECLGS):

1. It provides fully guaranteed and collateral free credit to borrowers.
2. The Pradhan Mantri Mudra Yojana (PMMY) borrowers are also covered under the scheme.

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

Correct Answer: C

Explanation:

Both statements are correct.

The Emergency Credit Line Guarantee Scheme (ECLGS) was announced as part of the Aatma Nirbhar Bharat Package (ANBP).

A 100% guarantee would be provided by National Credit Guarantee Trustee Company (NCGTC) to Member Lending Institutions (MLIs), and which will be extended in the form of additional working capital term loan facility in case of Scheduled Commercial Banks (SCBs) and Financial Institutions (FIs), and additional term loan facility in case of Non-Banking Financial Companies (NBFCs), to eligible MSMEs/ Business Enterprises, individual borrowers in case of the original loan having been for own business and interested Pradhan Mantri Mudra Yojana (PMMY) borrowers.

The Union Government has extended the Emergency Credit Line Guarantee Scheme (ECLGS) by one month till November 30th, 2020, or till such time that an amount of Rs. 3 lakh crore is sanctioned under the Scheme, whichever is earlier.

8. Which of the following statement is correct regarding the Antigens?

- (a) It induces an immune response in the body
- (b) It is the immune response of the body
- (c) It prohibits the immune response of the body
- (d) None of the above

Correct Answer: A

Explanation:

Antigens are substances that cause an immune response in the body by identifying substances in or markers on cells. The human body produces antibodies to fight antigens, or harmful substances, and tries to eliminate them.

An antigen may be a substance from the environment, such as chemicals, bacteria, viruses, or pollen.

9. Which of the following initiatives have been proposed in the National Education Policy 2020?

- 1. National Research Foundation (NRF)
- 2. A Vedic Education Board
- 3. National Assessment Centre (PARAKH)

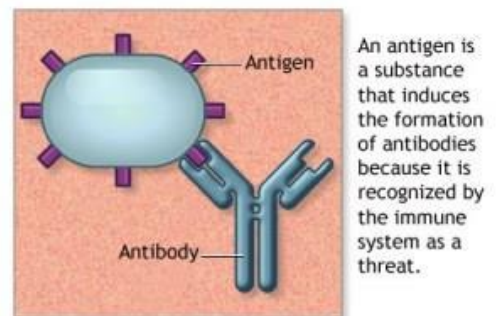
Select the correct answer using the code given below:

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

Correct Answer: C

Explanation:

Option 1 is correct. To build on these various elements in a synergistic manner, and to thereby truly grow and catalyze quality research in the nation, the NEP envisions the establishment of a National Research Foundation (NRF).



The overarching goal of the NRF will be to enable a culture of research to permeate through our universities. In particular, the NRF will provide a reliable base of merit-based but equitable peer-reviewed research funding, helping to develop a culture of research in the country through suitable incentives for and recognition of outstanding research, and by undertaking major initiatives to seed and grow research at State Universities and other public institutions where research capability is currently limited.

Option 2 is incorrect. No such proposal in the NEP 2020 document.

The policy does state that traditional Indian values and all basic human and Constitutional values (such as seva, ahimsa, swachchhata, satya, nishkam karma, shanti, etc.) will be developed in all students. Children will have the opportunity to read and learn from the original stories of the Panchatantra, Jataka, Hitopadesh, and other fun fables and inspiring tales from the Indian tradition and learn about their influences on global literature.

Option 3 is correct. It is proposed to set up a National Assessment Centre, PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development), as a standard-setting body under Education Ministry that fulfils the basic objectives of setting norms, standards, and guidelines for student assessment and evaluation for all recognized school boards of India.

10. Consider the following statements regarding the Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP):

1. It aims to reduce out of pocket expenses in healthcare by providing quality medicines available at affordable prices for all.
2. Bureau of Pharma PSUs of India (BPPI) is the implementation agency for the PMBJP.

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

Correct Answer: C

Explanation:

Both statements are correct.

Objectives of the scheme: Making quality medicines available at affordable prices for all, particularly the poor and disadvantaged, through exclusive outlets “Pradhan Mantri Bhartiya Janaushadhi Kendras”, so as to reduce out of pocket expenses in healthcare.

The Bureau of Pharma PSUs of India (BPPI), the implementing agency for PMBJP, has been established under the Department of Pharmaceuticals, Government of India, with the support of all the Pharma CPSUs for coordinating procurement, supply and marketing of generic drugs through the Pradhan Mantri Bhartiya Janaushadhi Kendras.

Since then, the Jan Aushadhi stores selling affordable generic medicines has grown from mere 99 stores in 2014-15 to around 6600 stores at present.

11. Consider the following statements regarding food fortification:

1. It is the practice of deliberately increasing the content of an essential micronutrient of the food.
2. Rice fortification is not possible due to its brittle character.

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

Correct Answer: A

Explanation:

Statement 1 is correct. Fortification is the practice of deliberately increasing the content of an essential micronutrient, i.e. vitamins and minerals (including trace elements) in a food, so as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.

Statement 2 is incorrect. Rice can be fortified by adding a micronutrient powder to the rice that adheres to the grains or spraying of the surface of ordinary rice grains in several layers with a vitamin and mineral mix to form a protective coating.

Rice can also be extruded and shaped into partially precooked grain-like structures resembling rice grains, which can then be blended with natural polished rice. Rice kernels can be fortified with several micronutrients, such as iron, folic acid and other B-complex vitamins, vitamin A and zinc.

To initiate the process of taking the country towards nutritional security, Department of Food & Public Distribution (DFPD) has been running a “Centrally Sponsored Pilot Scheme on Fortification of Rice & its distribution through Public Distribution System”.

12. Consider the following statements regarding the COVID-19 Shri Shakti Challenge:

1. It was organized by MyGov in collaboration with UN Women.
2. It aimed to encourage and involve women led startups to come up with innovative solutions that can help in the fight against COVID-19.

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

Correct Answer: C

Explanation:

Both statements are correct.

Six women led startups have won COVID-19 Shri Shakti Challenge organized by MyGov in collaboration with UN Women. With an objective to encourage and involve women led startups to come up with innovative solutions that can help in the fight against COVID19 or solve problems that impact a large number of women.

13. Consider the following statements regarding the report ‘Banking on Climate Change 2020’:

1. It has been released by Rainforest Action Network.
2. It notes that the total bank financing to fossil fuels industry has consistently reduced since the Paris Agreement of 2015.

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

Correct Answer: A

Explanation:

Statement 1 is correct. The 11th edition of the annual fossil fuel finance report, ‘Banking on Climate Change 2020’ has been released by the Rainforest Action Network. The report lays out banks’ support for fossil fuels in the four years after the Paris Agreement was adopted.

Statement 2 is incorrect. According to the 2020 report, after the Paris Agreement of 2015, where countries agreed to try to limit average global warming to well below 2°C, global banks continued to finance the fossil fuel industry with \$2.7 trillion. The report finds that big U.S. banks dominate this arena with JPMorgan Chase, Wells Fargo and Citi being the world's top fossil fuel financiers.

14. Consider the following statements:

1. Bamboo is classified as a tree under the Indian Forest Act.
2. Bamboo has potential for its use as a clean source of energy.

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

Correct Answer: B

Explanation:

Statement 1 is incorrect. The Indian Forest Act 1927 says “forest produce” is what is found in or brought from a forest. This originally included bamboo as trees.

The Parliament amended the act in 2017 to exclude bamboo from the definition of tree under the Indian Forest Act, claiming it would improve the earnings of tribals and dwellers living around forests.

Statement 2 is correct. Bamboo pellets are considered reliable biomass energy sources in certain parts of the world. In terms of mass and energy density, pellets from bamboo have characteristics superior to other biomass products, such as woodchips and briquettes.

Such higher density allows for easy and cost-effective transportation and greater efficiency in energy generation with suitable properties for residential and industrial use.

Minister of DONER at inauguration of Virtual Bamboo Exhibition stated that ‘Bamboo has great potential for its use as a clean source of energy and can also replace the single use plastic, thus promoting the environment and Climate cause in India’.

15. What is the mandate of recently constituted Shashi S. Vempati committee?

- (a) Review Guidelines on Television Rating Agencies in India
- (b) Criminal Law Reforms
- (c) 5G Technology Regulations in India

(d) Personal Data Protection Law

Correct Answer: A

Explanation:

Ministry of Information and Broadcasting has constituted a committee headed by Shashi S. Vempati, CEO, Prasar Bharti to review “Guidelines on Television Rating Agencies in India” notified by the Ministry in 2014.

The present guidelines issued by the Ministry of Information and Broadcasting (MIB) on Television Rating Agencies in India were notified after detailed deliberations by the Parliamentary Committee, Committee on Television Rating Points (TRP) constituted by the MIB and recommendations of Telecom Regulatory Authority etc.

16. Consider the following statements regarding India and Italy:

1. The Venetian merchant Marco Polo traveled to India in the 13th century.
2. Both countries are members of the Group of Twenty (G20).

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

Correct Answer: C

Explanation:

Statement 1 is correct. Marco Polo, famous for his travels to Asia in the 13th century, returned to Italy 24 long years after he left. In India, Marco Polo stopped by in Tamil Nadu and Kerala.

Statement 2 is correct. The members of the G20 are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, United Kingdom, United States, and the European Union.

Italy will assume the Presidency of G-20 in December 2021 followed by India in 2022.

17. Consider the following statements regarding the Gov-Tech-Thon 2020:

1. It has been organized by the NITI Aayog.
2. The Hackathon was to focus on the problem statements provided by the select Ministries of the Union Government.

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

Correct Answer: B

Explanation:

Statement 1 is incorrect. Gov-Tech-Thon 2020, a 36 hours, pan-India virtual hackathon organized by IEEE, National Informatics Centre (NIC) and Oracle, under the aegis of the Ministry of Electronics and Information Technology (MeitY), Government of India, witnessed a successful conclusion on 1st November, 2020.

Statement 2 is correct. 100 teams participated in the Hackathon on the five problem statements provided by 3 central Government Ministries – Ministry of Agriculture and Farmers' Welfare, Ministry of Road Transport and Highway and Ministry of Education.

18. Consider the following statements regarding the National Education Technology Forum (NETF):

1. It has been proposed to be set up as an autonomous body by the National Education Policy 2020.
2. The NETF aims to provide independent evidence-based advice to Central and State Government agencies on technology-based interventions.

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

Correct Answer: C

Explanation:

Both statements are correct.

The National Education Policy 2020 proposes NETF as an autonomous body to provide a platform for the free exchange of ideas on the use of technology to enhance le

The NETF will have the following functions:

–provide independent evidence-based advice to Central and State Government agencies on technology-based interventions;

–build intellectual and institutional capacities in educational technology;

–envision strategic thrust areas in this domain; and

–articulate new directions for research and innovation.

19. Consider the following statements regarding Cancer:

1. The cancer cells are less specialized in their functions than normal cells.
2. The Drug Price Control Order (DPCO) 2013 does not include any cancer treatment drugs.

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

Correct Answer: A

Explanation:

Statement 1 is correct. Cancer is the name given to a collection of related diseases. In all types of cancer, some of the body's cells begin to divide without stopping and spread into surrounding tissues.

Cancer cells differ from normal cells in many ways that allow them to grow out of control and become invasive. One important difference is that cancer cells are less specialized than normal cells. That is, whereas normal cells mature into very distinct cell types with specific functions, cancer cells do not. This is one reason that, unlike normal cells, cancer cells continue to divide without stopping.

In addition, cancer cells are able to ignore signals that normally tell cells to stop dividing or that begin a process known as programmed cell death, or apoptosis, which the body uses to get rid of unneeded cells.

Statement 2 is incorrect. National pharmaceutical Pricing Authority (NPPA) regulates the prices of all Drugs as per the Drug Price Control Order (DPCO) 2013.

It fixes the Ceiling Price of scheduled formulations as per the list of medicines specified in the National List of Essential Medicines (NLEM) which are included in the First Schedule of Drug Pricing Control Order (DPCO), 2013.

First Schedule of DPCO, 2013 also includes select drugs used for the treatment of cancer. However, there has been a long standing felt need to further regulate the Non Scheduled segment also where high markups have led to arbitrary pricing practices.

20. What is the potential impact of the D614G mutation in coronavirus?

- (a) Increased infectivity and high viral load
- (b) No ill effect on health of infected person
- (c) High infectivity on infants and zero infectivity on adults.
- (d) Zero infectivity and zero viral load in the individual

Correct Answer: A

Explanation:

A mutation is a change in a DNA sequence. Mutations can result from DNA copying mistakes made during cell division, exposure to ionizing radiation, exposure to chemicals called mutagens, or infection by viruses.

In the D614G mutation in coronavirus, the virus replaced the aspartic acid (D) in the 614th position of the amino acid with glycine (G). Hence the mutation is called the D614G.

It has also been reported in India.

A preprint posted in medRxiv, which has not undergone peer-review, explains the sequenced genomes of 5,085 SARS-CoV-2 strains in Houston. By doing so, it discovered that not only did the D614G show increased infectivity but it also displayed greater ability at attaching itself to the cell walls inside an individual's nose and throat, increasing the viral load.

21. Which of the following protected area(s) is/are part of UNESCO's World Network of Biosphere Reserves?

1. Panna Biosphere Reserve
2. Great Nicobar Biosphere Reserve
3. Similipal Biosphere Reserve

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) All of the above

Correct Answer: D

Explanation:

All of the above have been recognized as part of “World network of Biosphere Reserves”.

Panna Biosphere Reserve (Madhya Pradesh) is the latest inclusion in this list taking the total count from India to 12. The others are: Nilgiri, Gulf of Mannar, Sunderban, Nanda Devi, Nokrek, Pachmarhi, Similipal, Achanakmar – Amarkantak, Great Nicobar, Agasthyamala and Khangchendzonga Biosphere Reserve.

The Man and the Biosphere (MAB) programme is an intergovernmental scientific programme that aims to establish a scientific basis for enhancing the relationship between people and their environments.

22. Consider the following statements regarding the ‘Integrated Govt. Online training’ (iGOT) program:

1. It is a training module for the capacity building of frontline workers to handle the COVID-19 pandemic efficiently.
2. The iGOT module has been launched on the DIKSHA platform of Ministry of Education.

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

Correct Answer: C**Explanation:**

Both statements are correct.

In April 2020 Government of India had launched a training module for management of COVID-19 named ‘Integrated Govt. Online training’ (iGOT) portal on Ministry of Education’s DIKSHA platform for the capacity building of frontline workers to handle the pandemic efficiently.

Courses on iGOT have been launched for Doctors, Nurses, Paramedics, Hygiene Workers, Technicians, Auxiliary Nursing Midwives (ANMs), State Government Officers, Civil Defence Officers, Various Police Organizations, National Cadet Corps (NCC), Nehru Yuva Kendra Sangathan (NYKS), National Service Scheme, Indian Red Cross Society, Bharat Scouts and Guides and other volunteers at the stage.

Ministry of Health has said that uniquely designed Integrated Government Online training' - iGOT platform provides self-contained training material for COVID-19 warriors comprising 56 modules, 196 videos and 133 training documents.

23. Consider the following statements regarding the Employees Provident Fund

Organization (EPFO):

1. It is under the administrative control of Ministry of Labour and Employment.
2. It has allowed pensioners to submit Digital Life Certificate to avail the benefits instead of the hard copy.

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

Correct Answer: C

Explanation:

Statement 1 is correct. The Employees' Provident Funds & Miscellaneous Provisions Act, 1952 and Schemes framed there under are administered by a tri-partite Board known as the Central Board of Trustees, Employees' Provident Fund, consisting of representatives of Government (Both Central and State), Employers, and Employees.

The Central Board of Trustees administers a contributory provident fund, pension scheme and an insurance scheme for the workforce engaged in the organized sector in India.

The EPFO is under the administrative control of Ministry of Labour and Employment, Government of India.

Statement 2 is correct. EPFO has proactively partnered with Common Service Centre (CSC) to provide facilities to submit Digital Jeevan Pramaan Patra. Further Post offices have also started collection of Digital Jeevan Pramaan. A multi- agency model adopted by EPFO empowers EPS pensioners with choice and autonomy to select the service delivery agency as per their convenience.

In this regard, a key policy change has been brought by EPFO to allow EPS pensioners to submit their Digital Pramaan Patra at any time during the year as per their convenience and not just during the months of November & December. The Life Certificate will remain valid for One year from the date of submission.

24. The report ‘Assessment of climate change over the Indian region’ has been released by which of the following institution/organization?

- (a) India Meteorological Department
- (b) Geological Survey of India
- (c) Intergovernmental Panel on Climate Change
- (d) Ministry of Earth Sciences

Correct Answer: D

Explanation:

Assessment of climate change over the Indian region: A report of the Ministry of Earth Sciences (MoES) discusses the impact of human-induced global climate change on the Indian subcontinent and regional monsoon, the adjoining Indian Ocean and the Himalayas.

–India’s average temperature has risen by around 0.7°C during 1901–2018. In the recent 30-year period (1986–2015), temperatures of the warmest day and the coldest night of the year have risen by about 0.63°C and 0.4°C , respectively.

–Sea surface temperature (SST) of the tropical Indian Ocean has risen by 1°C on average during 1951–2015, markedly higher than the global average SST warming of 0.7°C , over the same period.

–The summer monsoon precipitation (June to September) over India has declined by around 6% from 1951 to 2015, with notable decreases over the Indo-Gangetic Plains and the Western Ghats.

–The overall decrease of seasonal summer monsoon rainfall during the last 6–7 decades has led to an increased propensity for droughts over India. Both the frequency and spatial extent of droughts have increased significantly during 1951–2016.

25. Consider the following statements regarding the National Infrastructure Pipeline (NIP):

- 1. The pipeline is to be completely funded wholly through the private investment.
- 2. The NIP dashboard is being hosted on the India Investment Grid (IIG).

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

Correct Answer: B

Explanation:

Statement 1 is incorrect. National Infrastructure Pipeline (NIP) is a first-of-its-kind, whole-of-government exercise to provide world-class infrastructure across the country, and improve the quality of life for all citizens. It aims to improve project preparation, attract investments (both domestic and foreign) into infrastructure, and will be crucial for target of becoming a \$5 trillion economy by FY 2025.

The Final Report of NIP Task Force has projected total infrastructure investment of Rs 111 lakh crore during the period FY 2020-25.

The Centre (39 per cent) and states (40 per cent) are expected to have an almost equal share in implementing the projects, while the private sector has a 21 per cent share.

Statement 2 is correct. The NIP dashboard is being hosted on the India Investment Grid (IIG).

India Investment Grid (IIG) is an interactive and dynamic online platform to showcase the best of investment opportunities in India to the global investor community. Developed and managed by Invest India, the National Investment Promotion and Facilitation Agency, IIG serves as the gateway to investments in India, and is also widely used by Indian missions and embassies across the world.

26. Which of the following statements correctly defines the Intermediate-Range Nuclear Forces (INF) treaty?

- (a) An arms control treaty between the United States and the Soviet Union
- (b) A multilateral treaty banning conventional ground-launched ballistic and cruise missiles
- (c) A subset of the Comprehensive Nuclear-Test-Ban Treaty
- (d) An arms control treaty among the European Union members

Correct Answer: A

Explanation:

The 1987 Intermediate-Range Nuclear Forces (INF) Treaty required the United States and the Soviet Union to eliminate and permanently forswear all of their nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometers.

On Aug. 2, 2019, the United States formally withdrew from the INF Treaty citing Russian noncompliance and concerns about China's intermediate-range missile arsenal.

27. Consider the following statements regarding the Generalized System of Preferences (GSP):

1. It is a system of trade concessions provided by certain developed countries to developing countries on non-reciprocal basis.
2. Presently, India does not benefit from the GSP of United States.

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

Correct Answer: C

Explanation:

Statement 1 is correct. The concept of generalized tariff preferences was originally mooted at the first UNCTAD Conference, which took place in Geneva in 1964. It was formally accepted in 1968 by the members of the UN at the second UNCTAD Conference in New Delhi, which established the key principles of the generalized system of preferences (GSP), i.e. its application to all developing countries, non-reciprocity of concessions and internal non-discrimination.

Statement 2 is correct. In March 2019, President Trump's administration announced that it would revoke India's GSP status, since India failed to make improvements. India's GSP benefits were terminated in June 2019.

28. Consider the following statements regarding the India-Maldives relations:

1. Maldives claim to Minicoy islands was resolved by the Maritime Boundary Treaty of 1976.
2. Indian military's Operation Cactus foiled the 1988 coup attempt in Maldives.

Which of the statements given above is/are correct?

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

Correct Answer: C

Explanation:

Statement 1 is correct. The one-time claim of Maldives to Minicoy Island was resolved by the Maritime Boundary Treaty of 1976 between the two countries, whereby Maldives has recognized Minicoy as an integral part of India.

Statement 2 is correct. In 1988, a Maldivian group led by Abdullah Luthufi attempted to overthrow the government in Maldives. The group was aided by armed mercenaries of the

People's Liberation Organisation of Tamil Eelam (PLOTE), a Sri Lankan Tamil secessionist organisation.

The intervention by Indian armed forces – codenamed 'Operation Cactus' – foiled the attempted

29. Which of the following statements correctly defines Tarballs?

- (a) Chemical developed by PUSA to decompose agricultural waste
- (b) Brown carbon particles emitted during the burning of fossil fuels
- (c) High volatile component containing coal
- (d) None of the above

Correct Answer: B

Explanation:

Tarballs are small light-absorbing, carbonaceous particles formed due to burning of biomass or fossil fuels that deposit on snow and ice. Tarballs are formed from brown carbon, emitted during the burning of fossil fuels.

They also form when crude oil floats on the ocean surface. Tarballs are formed by weathering of crude oil in marine environments.

30. Consider the following statements regarding the National Clean Air Programme (NCAP):

1. It aims to achieve 20% to 30% reduction in Particulate Matter concentrations by 2024 keeping 2017 as the base year.
2. The program focuses specifically on the non-attainment cities identified based on the air quality data.

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

Correct Answer: C

Explanation:

Both statements are correct.

The Central Government launched National Clean Air Programme (NCAP) as a long-term, time-bound, national level strategy to tackle the air pollution problem across the country in a comprehensive manner with targets to achieve 20% to 30% reduction in Particulate Matter concentrations by 2024 keeping 2017 as the base year for the comparison of concentration.

Under NCAP, 122 non-attainment cities have been identified across the country based on the Air Quality data from 2014-2018.

The city specific action plans have been prepared which, inter-alia, include measures for strengthening the monitoring network, reducing vehicular/industrial emissions, increasing public awareness etc.

Implementation of the city specific action plans are regularly monitored by Committees at Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee

31. Where is ‘Tigray region’?

- (a) Ethiopia
- (b) Brazil
- (c) Namibia
- (d) Kazakhstan

Correct Answer: A

Explanation:

The Tigray Region is the northernmost of the nine regions of Ethiopia. It is the homeland of the Tigrayan, Irob and Kunama peoples.

–The leaders of Tigray dominated Ethiopia for many years until Mr Abiy came to power in 2018 on the back of anti-government protests and curbed their influence.

–They claim they have been unfairly targeted by purges and allegations of corruption, and say Mr Abiy is an illegitimate leader, because his mandate ran out when he postponed elections due to coronavirus.

–The Tigray People’s Liberation Front (TPLF), defied the nationwide ban on elections, and held a vote which was declared illegal by the central government.

–The UN says there have now been clashes between federal troops and Tigrayan forces in eight different locations.

Mr Abiy won the 2019 Nobel Peace Prize for helping to end a long-standing conflict with Eritrea.ethiopia

32. Which of the following statement correctly defines the Joint Comprehensive Plan of Action (JCPOA)?

- (a) It placed significant restrictions on Iran’s nuclear program
- (b) It proposed lifting of sanctions from North Korea
- (c) It proposed a climate partnership agreement between European Union and USA
- (d) It mandated to keep global temperature rise below one-degree Celsius from pre-industrial levels

Correct Answer: A

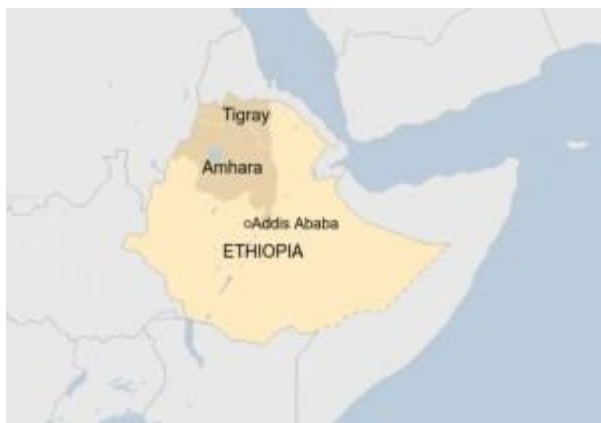
Explanation:

The Joint Comprehensive Plan of Action (JCPOA) signed by China, France, Germany, Iran, Russia, the United Kingdom, and the United States in 2015, placed significant restrictions on Iran’s nuclear program in exchange for sanctions relief.

President Trump unilaterally withdrew the United States from the agreement in 2018, claiming it failed to curtail Iran’s missile program and its influence in the region.

Despite European efforts to salvage the JCPOA, Iran began ignoring limitations on its nuclear program in 2019.

33. Which of the following is/are terms of reference (ToR) to the fifteenth finance commission?



1. To examine whether a separate mechanism for funding of defence and internal security ought to be set up.

2. Recommend performance incentives for States for adoption of Direct Benefit Transfer and solid waste management.

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

Correct Answer: C

Explanation:

Both statements are correct.

The Fifteenth Finance Commission (XVFC) led by Chairman Sh N K Singh have submitted its Report for the period 2021-22 to 2025-26 to the President.

As per the terms of reference (ToR), the Commission was mandated to give its recommendations for five years from 2021-22 to 2025-26 by 30 October, 2020. Last year, the Commission had submitted its report containing recommendations for the year 2020-21 which was accepted by the Union Government and tabled in the Parliament on 30 January 2020.

Apart from the vertical and horizontal tax devolution, local government grants, disaster management grant, the Commission was also asked to examine and recommend performance incentives for States in many areas like power sector, adoption of DBT, solid waste management etc.

The Commission was also asked to examine whether a separate mechanism for funding of defence and internal security ought to be set up and if so, how such a mechanism could be operationalized. The Commission has sought to address all its ToRs in this Report to the Union government

34. Consider the following statements regarding the Anti-Satellite (ASAT) Missile:

1. India conducted a successful ASAT test with Mission Shakti.
2. India is the only Asian country to have demonstrated the anti-satellite weapon technology till date.

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

Correct Answer: A

Explanation:

Statement 1 is correct. ‘Mission Shakti’ was India’s first ever Anti-Satellite (ASAT) Missile Test successfully conducted on 27th March 2019 from Dr AP J Abdul Kalam Island in Odisha, where a fast-moving Indian orbiting target satellite in Low Earth Orbit (LEO) was neutralized with pinpoint accuracy.

Statement 2 is incorrect. China conducted its first acknowledged test of an anti-satellite missile in 2007. Apart from India and China, USA and Russia possess the anti-satellite weapons technology.

35. Consider the following statements regarding the Thirty Meter Telescope project:

1. It is being installed in Maunkea, Hawaii.
2. India is a partner in construction of this the next-generation observatory.

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

Correct Answer: C

Explanation:

Both statements are correct.

The Thirty Meter Telescope is a new class of extremely large telescopes that will allow us to see deeper into space and observe cosmic objects with unprecedented sensitivity. With its 30 m prime mirror diameter, TMT will be three times as wide, with nine times more area, than the largest currently existing visible-light telescope in the world.

The Thirty Meter Telescope (TMT) project being installed at Maunakea in Hawaii is an international partnership between CalTech, Universities of California, Canada, Japan, China, and India; through the Department of Science and Technology (DST) and Department of Atomic Energy (DAE).

Thirty Meter Telescope project

36. Union Government has recently announced Production Linked Incentives for which of the following sectors?

1. Pharmaceuticals
2. Advance Chemistry Cell Battery

3. Solar PV

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) All of the above

Correct Answer: D

Explanation:

The Union Cabinet chaired by the Prime Minister has given its approval to introduce the Production-Linked Incentive (PLI) Scheme in the following 10 key sectors for Enhancing India's Manufacturing Capabilities and Enhancing Exports:

- Advance Chemistry Cell (ACC) Battery: NITI Aayog and Department of Heavy Industries
- Electronic/Technology Products: Ministry of Electronics and Information Technology
- Automobiles & Auto Components: Department of Heavy Industries
- Pharmaceuticals drugs: Department of Pharmaceuticals
- Telecom & Networking Products: Department of Telecom
- Textile Products, MMF segment and technical textiles: Ministry of Textiles
- Food Products: Ministry of Food Processing Industries
- High Efficiency Solar PV Modules: Ministry of New and Renewable Energy
- White Goods (ACs & LED): Department for Promotion of Industry and Internal Trade
- Speciality Steel: Ministry of Steel

37. The Nagorno-Karabakh is a disputed region between which of the following countries?

- (a) Armenia and Azerbaijan
- (b) Turkey and Armenia
- (c) Turkey and Azerbaijan
- (d) Iran and Azerbaijan

Correct Answer: A

Explanation:

The Nagorno-Karabakh enclave is internationally recognised as Azerbaijani but has been run by ethnic Armenians since 1994.

Armenia and Azerbaijan have signed an agreement to end military conflict over the disputed enclave of Nagorno-Karabakh following six weeks of fighting between Azerbaijan and ethnic Armenians.

The peace deal was signed by Russian President Vladimir Putin, Azerbaijani President Ilham Aliyev and Armenian Prime Minister Nikol Pashinyan.



Under the deal, Azerbaijan will hold on to areas of Nagorno-Karabakh that it has taken during the conflict. Armenia has also agreed to withdraw from several other adjacent areas over the next few weeks.

38. Where is Kabartal Wetland located?

- (a) Bihar
- (b) Assam
- (c) Himachal Pradesh
- (d) West Bengal

Correct Answer: A

Explanation:

Kabartal Wetland, also known as Kanwar Jheel, covers 2,620 hectares of the Indo-Gangetic plains in the Bihar State. It has been designated as a wetland of International importance.

It is an important wetland of the Central Asian Flyway for the population of migratory birds and biodiversity. With the new addition, now India has 39 Ramsar sites.

39. As per the recently amended Government of India (Allocation of Business) Rules, 1961 the 'News and current affairs content on online platforms' is under which of the following Ministry?

- (a) Ministry of Electronics and Information Technology
- (b) Ministry of Information and Broadcasting
- (c) Ministry of Home Affairs
- (d) Ministry of Education

Correct Answer: B

Explanation:

Currently, there is no law or autonomous body governing digital content. The Government of India (Allocation of Business) Rules, 1961 have been amended recently to add following items under Ministry of Information and Broadcasting;

Digital/Online media:

–Films and Audio-Visual programmes made available by online content providers.

–News and current affairs content on online platforms

At present, the Press Council of India regulates the print media, the News Broadcasters Association (NBA) represents the news channels, the Advertising Standards Council of India regulates advertising, while the Central Board of Film Certification (CBFC) monitors films.

This will give the government control over OTT platforms, which were unregulated till now.

40. Which of the following fall in category of ‘Over-The-Top’ (OTT) platforms?

1. Newspapers being supplied daily to households
2. Netflix online streaming service
3. TV Cable news network

Select the correct answer using the code given below:

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

Correct Answer: B

Explanation:

An over-the-top media service is a streaming media service offered directly to viewers via the Internet. OTT bypasses cable, broadcast, and satellite television platforms, the companies that traditionally act as a controller or distributor of such content.

A notification from the Cabinet Secretariat on November 9, said that films and audio-visual programs made available by online content providers and news and current affairs content on online platform will be under the purview of the Information and Broadcasting Ministry.

41. With reference to the Bombay blood group, consider the following statements:

1. The individuals with Bombay blood group can only be transfused blood from individuals of Bombay Blood Group (Oh) only which is very rare.
2. This blood type is more common in South Asia than anywhere else because of inbreeding and close community marriages.

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

Correct Answer: C

Explanation:

Statement 1 is correct:

The rare, Bombay blood group was first discovered in Mumbai (then Bombay) in 1952 by Dr Y M Bhende. The Bombay blood group, also called hh, is deficient in expressing antigen H, meaning the RBC has no antigen H. For instance, in the AB blood group, both antigens A and B are found. A will have A antigens; B will have B antigens. In hh, there are no A or B antigens. Often the hh blood group is confused with the O group. The difference is that the O group has Antigen H, while the hh group does not. The individuals with Bombay blood group can only be transfused autologous blood or blood from individuals of Bombay hh phenotype only which is very rare.

Statement 2 is correct:

Globally, the hh blood type has an incidence of one in four million. It has a higher incidence in South Asia; in India, one in 7,600 to 10,000 are born with this type. This blood type is more common in South Asia than anywhere else because of inbreeding and close community marriages. Blood Grouping Basics: When we say someone has blood group A, it means that the person has antigen of type 'A' and antibody of type 'B' in his/her blood. People with AB have both antigen A and B in their blood and no antibodies. People with O blood group have only antibodies A and B and no antigens. However, what is not generally known is that all these groups have an antigen H in the blood as well. There are very few people who do not have this antigen H also in their blood. Instead they have antibody H because of which no other blood can be given to them.

42. Consider the following statements regarding the RNA vaccine technology:

1. The antigen of the pathogen is directly introduced in the body by injecting a serum.
2. The production of RNA-based vaccines is more rapid compared to production of traditional vaccines.

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

Correct Answer: B

Explanation:

Statement 1 is incorrect. For a classical vaccine, the antigen is introduced in the body to produce an immune response. However, in the case of DNA- or RNA-based vaccines, no antigen is introduced, only the RNA or DNA containing the genetic information to produce the antigen. That is, for this specific class of vaccines, introduction of DNA and RNA provides the instructions to the body to produce the antigen itself.

After this step, the mechanism is similar to classical vaccines: the antigen is presented at the surface of a subset of cells and triggers the activation of specific cells of the immune system.

Statement 2 is correct. RNA vaccines are faster and cheaper to produce than traditional vaccines, and an RNA based vaccine is also safer for the patient, as they are not produced using infectious elements

Production of RNA vaccines is laboratory based, and the process could be standardized and scaled, allowing quick responses to large outbreaks and epidemics

43. At present, scientists can determine the arrangement or relative positions of genes or DNA sequences on a chromosome. How does this knowledge benefit us?

1. It is possible to know the pedigree of livestock.
2. It is possible to understand the causes of all human diseases.
3. It is possible to develop disease-resistant animal breeds.

Which of the statements given above is/are correct?

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

(c) 1 and 3 only

(d) 1, 2 and 3

Correct Answer: D

Explanation:

44. If a female child is born to a married couple,

(a) the contribution of mother and father in the determination of sex of the child is equal.

(b) the sex of the child is solely determined by the mother's contribution.

(c) the sex of the child is solely determined by the father's contribution.

(d) neither mother nor father is responsible for the sex of the child.

Correct Answer: C

Explanation:

Men determine the sex of a baby depending on whether their sperm is carrying an X or Y chromosome. An X chromosome combines with the mother's X chromosome to make a baby girl (XX) and a Y chromosome will combine with the mother's to make a boy (XY).

45. With reference to the recent developments in science, which one of the following statements is not correct?

(a) Functional chromosomes can be created by joining segments of DNA taken from cells of different species.

(b) Pieces of artificial functional DNA can be created in Laboratories.

(c) A piece of DNA taken out from an animal cell can be made to replicate outside a living cell in a laboratory.

(d) Cells taken out from plants and animals can be made to undergo cell division in laboratory Petri dishes.

Correct Answer: A

Explanation:

2014, Huffpost: Scientists at University of Texas created First Living Organism With 'Artificial' DNA. So, B is eliminated. (Because we are required to find wrong option, whereas B is right.)

Random google book, page 574: DNA replication can also be performed in vitro (outside a cell). So, C is eliminated.

Random Science website, and highschool lab manuals: Cell division of Chlamydomonas is usually achieved in the laboratory by alternation of light and dark periods. So, D is eliminated.

Thus we are left with answer A.

46. What is Cas9 protein that is often mentioned in news?

- (a) Molecular scissors used in targeted gene editing
- (b) A biosensor used in the accurate detection of pathogens in patients
- (c) A gene that makes plants pest-resistant
- (d) A herbicidal substance synthesized in genetically modified crops

Correct Answer: A

Explanation:

Cas9 (CRISPR associated protein 9) is a protein which plays a vital role in the immunological defense of certain bacteria against DNA viruses, and which is heavily utilized in genetic engineering applications. Its main function is to cut DNA and therefore it can alter a cell's genome.

47. What is the application of Somatic Cell Nuclear Transfer Technology?

- (a) Production of biolarvicides
- (b) Manufacture of biodegradable plastics
- (c) Reproductive cloning of animals
- (d) Production of organisms free of diseases

Correct Answer: C

Explanation:

Somatic cell nuclear transfer (SCNT), technique in which the nucleus of a somatic (body) cell is transferred to the cytoplasm of an enucleated egg (an egg that has had its own nucleus removed). Once inside the egg, the somatic nucleus is reprogrammed by egg cytoplasmic factors to become a zygote (fertilized egg) nucleus. The egg is allowed to develop to the blastocyst stage, at which point a culture of embryonic stem cells (ESCs) can be created from the inner cell mass of the

blastocyst. Mouse, monkey, and human ESCs have been made using SCNT; human ESCs have potential applications in both medicine and research

48. With reference to agriculture in India, how can the technique of 'genome sequencing', often seen in the news, be used in the immediate future?

1. Genome sequencing can be used to identify genetic markers for disease resistance and drought tolerance in various crop plants.
2. This technique helps in reducing the time required to develop new varieties of crop plants.
3. It can be used to decipher the host-pathogen relationships in crops.

Select the correct answer using the code given below:

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

Correct Answer: D

Explanation:

Genome sequencing is figuring out the order of DNA nucleotides, or bases, in a genome the order of As, Cs, Gs, and Ts that make up and organisms data .

Genome sequencing of wild varieties of plants can be used to identify disease resistance and drought tolerance genes in various plants and develop new varieties of crop plants in lesser time.

Genome sequencing of crop plants can be helpful and deciphering and understanding the host-pathogen relationship in crops.

Therefore, all statements are correct.

49. 'RNA interference (RNAi)' technology has gained popularity in the last few years.why?

1. It is used in developing gene silencing therapies.
2. It can be used in developing therapies for the treatment of cancer.
3. It can be used to develop hormone replacement therapies.
4. It can be used to produce crop plants that are resistant to virtual pathogens.

Select the correct answer using the code given below.

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

Correct Answer: A

Explanation:

Using RNA interference technology, Tamil Nadu Agricultural University (TNAU) scientists have made major breakthroughs in introducing resistance to many viruses in various crops. So, #4 is right and we are left with option A or D. In both options, #1 is correct so we need not check its validity, everything boils down to #2's validity.

Britannica: RNAi is being explored as a form of treatment for a variety of diseases, including hepatitis, AIDS, Huntington disease, and cancer. So, #2 is right, therefore answer is A.

50. Which of the following can be one of the reasons of Anaemia

1. Less iron intake
2. Deficiency of folic acid
3. Deficiency of B12

Select the correct answer using the code given below

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

Correct Answer: C

Explanation:

All of the above mentioned reasons can cause Anaemia. Hence, option C is the correct answer.

51. Arrange the RBC, WBC and platelets in increasing order per microlitre of circulating blood

- (a) Erythrocytes > Thrombocytes > Leukocytes
- (b) Erythrocytes < Thrombocytes < Leukocytes
- (c) Thrombocytes > Leukocytes > Erythrocytes
- (d) Leukocytes > Erythrocytes > Thrombocytes

Correct Answer: A

Explanation:

Erythrocytes- most abundant cell in the blood, accounting for about 40-45% of its volume.

Thrombocytes- The normal range (99% of population analyzed) for platelets is 150,000 to 450,000 per cubic millimete

Leukocytes, are cells of the immune system constitute approximately 1% of the blood volume.

52. Which of the following is NOT correctly matched?

- (a) AB+ : universal recipient
- (b) O- : universal donor
- (c) O+ : most common blood group
- (d) A+ : least common blood group

Correct Answer: D

Explanation:

Blood Type Compatibility

Blood Type	Gives	Receives
A+	A+, AB+	A+, A-, O+, O-
O+	O+, A+, B+, AB+	O+, O-
B+	B+, AB+	B+, B-, O+, O-
AB+	AB+	Everyone
A-	A+, A-, AB+, AB-	A-, O-
O-	Everyone	O-
B-	B+, B-, AB+, AB-	B-, O-
AB-	AB+, AB-	AB-, A-, B-, O-

53. Which one of the following genetic diseases is sex-linked?

- A) Royal haemophilia
- B) Tay-Sachs disease
- C) Cystic fibrosis
- D) Hypertension

Correct Answer: A

Explanation:

Haemophilia is a mostly inherited genetic sex linked disorder that impairs the body's ability to make blood clots, a process needed to stop bleeding. This results in people bleeding for a longer time after an injury, easy bruising, and an increased risk of bleeding inside joints or the brain

54. Which one of the following techniques can be used to establish the paternity of a child?

- A) Protein analysis
- B) Quantitative analysis of DNA
- C) Chromosome counting
- D) DNA fingerprinting

Correct Answer: D

Explanation:

DNA finger printing technology is the process of establishing the biological paternal relationship between individual and his alleged child on the analysis of sample cells taken from each of them. DNA finger printing can solve cases of rape murder etc.

55. Assertion [A]: In human beings, the female play a major role in determining the sex of the offspring.

Reason (R): Women have two X-chromosomes.

- A) Both A and R are true and R is the correct explanation of A
- B) Both A and R are true, but R is not a correct explanation of A
- C) A is true, but R is false
- D) A is false, but R is true

Correct Answer: D

Explanation:

Assertion is false. In human, sex determination of offspring depends on male because male sperm contains XY chromosome, whereas female has XX chromosome in their ovum.

56. From heredity point of view which marriage is not suitable?

- A) Man Rh (-) and Woman Rh (+)
- B) Both Rh (+)
- C) Both Rh (-)
- D) Man Rh (+) and Woman Rh (-)

Correct Answer: D

Explanation:

When a Rh-negative mother is impregnated by an Rh-positive father and is carrying an Rh-positive baby, the foetus Rh antigens will be perceived as foreign invaders in mother's body. It can initiate the protective mechanism that can end up harming the child during second pregnancy and is called as erythroblastosis foetalis. So, Rh (+) man and Rh (-) woman should be avoided in biological marriages.

57. Which of the following immunity is obtained during a lifetime?

- (a) Acquired immunity

- (b) Active immunity
- (c) Passive immunity
- (d) None of the above.

Correct Answer: A

Explanation:

Immunity that develops during a person's lifetime. There are two types of acquired immunity: active immunity and passive immunity.

58. The reason why haemophilia is more commonly observed in human males than in females is due to

- (a) the disease is due to Y-linked recessive mutation
- (b) the disease is due to X-linked recessive mutation
- (c) as a huge population of girls die in infancy
- (d) the disease is due to X-linked dominant mutation

Correct Answer: B

Explanation:

Haemophilia is a X-linked recessive disorder. Being a recessive disorder, it is expressed only in homozygous recessive conditions. Human males have one copy of X-chromosome and hence one copy of the affected gene in males in each cell is sufficient to cause the disorder (XcY). Hence, being X-linked recessive mutation, it is more frequent in males. Females carry two X-chromosomes and this females with two copies of the affected gene show the disorder (XcXc). Females heterozygous (XcX) for this trait be normal but serve as a carrier of the disease. If it would have been a Y-linked disorder, It would have been expressed more in males because males carry one copy of Y-chromosome and can express both recessive and dominant Y-linked genes. Option B is correct answer.

59. The probable cause of Erythroblastosis fetalis can be

- (a) Bleeding
- (b) Haemophilia
- (c) Adjoining of RBC
- (d) Diapedesis

Correct Answer: C

Explanation:

Erythroblastosis fetalis is hemolytic anemia in the fetus (or neonate, as erythroblastosis neonatorum) caused by transplacental transmission of maternal antibodies to fetal red blood cells. The disorder usually results from incompatibility between maternal and fetal blood groups, often Rho(D) antigens.

60. Recombinant DNA technology (Genetic Engineering) allows genes to be transferred.

1. across different species of plants.
2. from animals to plants.
3. from microorganisms to higher organisms.

Select the correct Solution using the codes given below.

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

Correct Answer: D

Explanation:

RNA is the technology used for making artificial DNA(genetic modification) by combining different genetic materials(DNA) from different sources. All the given procedures in the question can be performed.

61. Consider the following statements:

1. The Net Domestic product can be lesser than or equal to Gross Domestic Product for the same year.
2. Gross National Product of an economy is always lesser than its Gross Domestic Product for the same year.

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

Correct Answer: D

Explanation:

Net domestic product = gross domestic product - depreciation

Thus, NDP of an economy has to always be lower than its GDP for the same year, since there is no way to cut the depreciation to zero. Hence statement 1 is wrong.

Gross national product is equal to GDP + net factor income from abroad.

Net factor income from abroad can be positive and negative depending on its three components:

1. Trade balance
2. Interest on external loans
3. Private remittances.

Therefore the national product can be greater than or lesser than domestic product. Hence statement 2 is wrong.

62. Which of the following statements is INCORRECT about 'Indicative Planning'?

1. Mixed economies can follow indicative planning.
2. The state does not play any role in indicative planning.
3. It signals liberalization of market forces.
4. No state owned companies are allowed to operate in the economy.

Select the correct answer using the codes below:

(a) 2, 3 and 4 only

(b) 1 and 2 only

(c) 2 and 4 only

(d) 4 only

Correct Answer: C

Explanation:

Statement 2 and 4 are incorrect.

Capitalist economy is do not involve the state in the planning process. and in communist economy is the planning is imperative not indicative in nature. So mixed economies are fit for indicative planning where a plan making body sets broad numerical targets to be achieved with the help of market forces.

Unlike a centrally planned economy, indicators planning works through the market (price system) rather than replacing it. So, it is a move towards liberalization.

Example for statement 4 being wrong: India followed indicated planning, but the PSUs still continue to operate.

63. While computing national income, income of only normal residents of a country is included. In this context, which of the following is an example of 'normal residents of India'?

- (a) Ambassador in India from rest of the world.
- (b) Ambassador for India in rest of the world.
- (c) A foreigner working in the office of WHO located in India for a period of less than one year.
- (d) A foreign technical expert working in India for a period of less than one year.

Correct Answer: B

Explanation:

The term 'normal residents' is a comprehensive term and includes both individuals and institutions, It includes both nationals (such as Indians living in India) and foreigners (non-nationals) residing in a host country (such as Nepalese holding Nepalese passports and citizenship, settled and living in India and having their economic interests in India).

Besides, Indians living abroad will also be regarded as normal residents of India if their economic interest lies in India and their stay in foreign countries is of, less than one year. Thus, normal residents can be of three types. They are:

- (i) Nationals of a country residing in the country of which they are the nationals, such as Indians living in India.
- (ii) Nationals of a country living abroad temporarily (for less than one year) but their interest lie in the country of which they are the nationals such as Indians living temporarily in the foreign countries.
- (iii) Foreigners living in a country for more than one year.

64. With reference to Gross Domestic Product accounting of a country, consider the following statements:

1. The ownership status of goods and services play important role while accounting for GDP.
2. An oil company spills oil in ocean causing the damage in tune of billions. This cost of damage is not accounted in GDP calculation.
3. GDP accounts for the opportunity cost.

Which of the statements given above is/are NOT correct?

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

Correct Answer: B

Explanation:

Statement 1 is incorrect: GDP is the total value of final goods and services produced within a country's border in a year regardless of ownership.

Statement 2 is correct: the failure of GDP to incorporate environmental costs of development is one of its major drawbacks.

Statement 3 is incorrect: GDP does not take into account opportunity cost.

65. Remittances are an important source of financial flows for India. Which of the following factors may lead to an increase in remittance inflows to India?

1. Higher oil prices in the Gulf countries
2. Depreciation of Rupee

Which of the above is/are correct?

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

Correct Answer: C

Explanation:

Statement 1: higher oil prices help the Gulf countries and other oil exporters to earn higher profits/income.

Statement 2: depreciation of rupee increases the value of foreign currency in India and hence the NRIs are at an advantage sending remittances to India.

66. Which of the following forces have strengthened the tendencies of Globalization?

1. Electronic economy
2. Knowledge economy
3. Globalization of finance

Choose the correct answer using the codes below:

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

Correct Answer: D

Explanation:

Self-explanatory/ class XII NCERT

67. Which of the following arguments would most weaken the case for an economic policy of liberalization?

- (a) Market alone would not be able to look after the welfare of people, especially the disadvantaged sections.
- (b) It is important to protect the indigenous industries from outside competition.
- (c) Greater integration into the global market would be beneficial to Indian economy.
- (d) Liberalisation requires a strong private sector and resilient domestic industries – lack of which can negatively affect the domestic economy...

Correct Answer: D

Explanation:

Argument A is more about the idea of a welfare state. A Liberalised state too can look after welfare needs of citizens.

Argument C strengthens the case for globalisation.

Argument D is more complete and clear than Argument B. it is self explanatory as to why liberalisation may not be taken in an economy. Hence the answer is D.

68. To compare GDP across nations, Real GDP is used because

- (a) it calculates GDP at constant prices
- (b) it takes inflation into account
- (c) it excludes the subsidies given by a particular country
- (d) it has been prescribed by IMF

Correct Answer: A

Explanation:

If prices change, then there may be difficulties in comparing GDPs. if we measured the GDP of a country in two consecutive years and see that the figure for GDP of the latter year is twice that of the previous year, we may conclude that the volume of production of the country has doubled. but it is possible that only prices of all goods and services have doubled between the two years whereas the production has remained constant.

Therefore in order to compare the GDP figures of different countries or to compare the GDP figures of the same country at different points of time, we cannot rely on GDPs evaluated at current market prices. For comparison we take the help of real GDP. real GDP is calculated in a way such that the goods and services are evaluated at some constant state of prices. Since these prices remain fixed, if the real GDP changes we can be sure that it is the volume of production which is undergoing changes. Nominal GDP, on the other hand, is simply the value of GDP at the current prevailing prices.

69. Which of the following services are accounted in the Gross Domestic Product of a country?

1. Services rendered by a domestic help
2. Services rendered by a worker from unorganized sector
3. Services produced in Indian embassies located abroad
4. Services produced in military establishments located abroad

Select the correct answer using the codes given below:

- (a) 1 and 2 only

(b) 1, 2 and 3 only

(c) 2, 3 and 4 only

(d) 1, 2, 3 and 4

Correct Answer: D

Explanation:

Gross domestic product: GDP is the money value of all final goods and services produced in the domestic territory of a country in an accounting year.

What domestic (economic) territory includes:

(i) Territory lying within the political frontiers of a country. It includes territorial waters also.

(ii) Ships and aircrafts owned and operated by the residents between two or more countries.

iii) Fishing vessels, oil and natural gas rigs and floating platforms operated by the residents of a country in the international waters or engaged in extraction in areas where the country has exclusive rights of operation

(iv) Embassies, consulates and military establishments of the country located abroad.

NOTE

Here, goods and services which have a market are included.

Services rendered by housewife are excluded from GDP as the services are not marketable.

Services of worker from unorganised sector of domestic help both have a marketable service, hence included.

70. The Gross National Product (GNP) of a nation is NOT affected in the short-run by which of the following?

1. Growing trade deficit

2. Growing flow of remittances

3. Cutting down on interest rates in the economy

Choose the correct answer using the codes below:

(a) 1 and 3 only

(b) 2 and 3 only

(c) 1 and 2 only

(d) It is affected by all of the above

Correct Answer: D

Explanation:

GNP is basically GDP plus factor income from abroad (NFIA). NFIA includes imports, exports, remittances etc. So any change in them will immediately change the GNP. Moreover, lower interest rates in the economy encourage consumption and boost capital investment leading to a higher GDP(hence GNP) in the short run.

71. India's 'openness' with respect to the global economy is measured as

- (a) Ratio of trade in goods and services to GDP
- (b) Ratio of exports in goods and services to NNP at factor cost.
- (c) Ratio of trade in goods, services and assets to GDP.
- (d) Ratio of trade in goods, services and assets to NNP at factor cost.

Correct Answer: A

Explanation:

An open economy is an economy in which there are economic activities between the domestic community and outside.

People and even business can trade in goods and services with other people and businesses in the international community, and funds can flow as investments across the border.

India is an open economy and India's 'openness' with respect to the global economy is measured as ratio of trade in goods and services to GDP.

72. If Gross Domestic Product (GDP) at current prices is growing at 5% every year, what does it necessarily imply?

1. Manufacturing activity must be growing nearly 5% annually.
2. Total volume of goods and services produced must be growing at 5% annually.

Which of the above is/are correct?

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

(d) Neither 1 nor 2

Correct Answer: D

Explanation:

GDP at current prices calculate total value of goods and services produced within a year at market prices and not at their actual cost of production.

So,even if only prices increased by 5% for all final goods and services produced, GDP will increase by 5%, without any 'real' increase in production.

So, both 1 and 2 are incorrect.

73. If the difference between the Gross Domestic Product (GDP) and Net Domestic Product (NDP) is very less for an economy, what can it imply?

- (a) The economy is growing at a very slow rate.
- (b) The economy can be technologically advanced
- (c) The economy has low natural resource base.
- (d) Foreign investments form a major chunk of investments in the economy.

Correct Answer: B

Explanation:

$NDP = GDP - \text{Depreciation}$

So it is basically the GDP - the total value of the wear and tear I.e. depreciation that happened in the assets while the goods and services were being produced.

So, if the depreciation levels are low,it may show the achievements of the economy in the area of research and development which have tried cutting the levels of depreciation in a historical time period.

74. Strategic Sale of a Public Sector Unit (PSU) implies:

- (a) The private sector has not been given any role post-disinvestment of the PSU.
- (b) The Government maintains majority stake in the PSU concerned.
- (c) Many public welfare PSUs have been consolidated and merged.
- (d) Transfer of management control along with substantial share.

Correct Answer: D

Explanation:

Disinvestment means the dilution of stake of the government in a public enterprise. This can be done in two ways:

1. Minority sale: when government sells a part of its equity of a public enterprise less than 50% of its total stock it is called merely disinvestment and in this case control and management of the business enterprise remains in the hands of government.
2. Strategic sale: When the government decides to transfer the ownership and control of a public sector entity to some other entity, either private or public, the process is called strategic disinvestment. The Department of Investment and Public Asset Management (DIPAM) which comes under the Finance Ministry defines Strategic disinvestment as follows: "Strategic disinvestment would imply the sale of a substantial portion of the Government shareholding of a central public sector enterprises (CPSE) of up to 50%, or such higher percentage as the competent authority may determine, along with transfer of management control.

75. If the value of "incremental capital output ratio" (ICOR) grows for an economy, it implies:

- (a) The country must be producing more goods than before
- (b) The country has become more efficient in use of capital
- (c) The country is in a situation of economic depression
- (d) Efficiency of investment capital in the economy has gone down

Correct Answer: D**Explanation:**

ICOR is the marginal amount of investment capital necessary for an equity to generate the next unit of production.

Overall, a higher ICOR value is not preferred because it indicates that the entities production is inefficient (capital output ratio has increased, this means more investment (capital), and low output of that investment)

The measure is used freedom in Italy in determining a country's level of production efficiency.

76. Consider the following pairs "Five Year Plans (FYP)" and "Their respective Features":

1. 2nd FYP: Rapid industrialization
2. 5th FYP: Poverty alleviation
3. 11th FYP: Inclusive Growth

Which of the above pairs are correctly matched?

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

Correct Answer: D

Explanation:

All pairs are correctly matched.

77. Which of the following statements is/are correct in the context of 'Hybrid Annuity Model' (HAM) for infrastructure projects?

1. It is a mix of engineering, procurement and construction (EPC) and build - operate-transfer (BOT) formats.
2. As per this model construction and maintenance risks will be borne by the government.
3. The government and the private companies will share the total project cost in the ratio of 60:40 respectively.
4. The responsibility of revenue collection lies with the government.

Select the correct answer using the code given below:

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

Correct Answer: B

Explanation:

The hybrid annuity model is a mix of EPC and BOT formats. Government and private companies share the total project cost in the ratio of 40:60 respectively. construction and maintenance risks will be borne both by the government and private entities. The government also shoulders the responsibility of revenue collection. the NHAI will collect toll and refund the amount in installments over a period of 10 years in 20 equated installments.

78. Consider the following statement about Foreign Portfolio Investment (FPI)

1. FPI does not provide investor with direct ownership of financial assets.
2. FPI is part of country's current account.
3. FPI is more liquid and more risky than FDI.

Which of the above statements is/are incorrect?

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

Correct Answer: C

Explanation:

FPI consists of securities and other financial assets passively held by foreign investors. It does not provide investor with direct ownership of financial assets. (Statement 1)

In India, FPIs are allowed to invest in various debt market instruments such as government bonds, treasury bills, state development loans (SDLs) and corporate bonds, but with certain restrictions and limits.

FPI is part of country's capital account and shown on its balance of payments (BOP). (Statement 2)

FPI is more liquid and less risky than FDI. (Statement 3)

79. With reference to the review of Foreign Direct Investment (FDI) policy by the Union Cabinet, consider the following statements:

1. It has been decided to permit 26% FDI under government route for uploading/ streaming of News & Current Affairs through Digital Media, on the lines of print media.
2. It has been decided to permit 100% FDI under automatic route for sale of coal, for coal mining activities including associated processing infrastructure.

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

Correct Answer: C

Explanation:

The Union Cabinet has approved the proposal for Review of Foreign Direct Investment (FDI) policy on various sectors.

Amendments to the FDI Policy:

Digital Media: It has been decided to permit 26% FDI under government route for uploading/streaming of News & Current Affairs through Digital Media, on the lines of print media.

Contract Manufacturing: It has been decided to allow 100% FDI under automatic route in contract manufacturing in India as well.

Coal Mining: It has been decided to permit 100% FDI under automatic route for sale of coal, for coal mining activities including associated processing infrastructure.

Single Brand Retail Trading (SBRT):

All procurements made from India by the SBRT entity for the single brand shall be counted towards local sourcing, irrespective of whether the goods procured are sold in India or exported.

Further, the current cap of considering exports for 5 years only is proposed to be removed, to give an impetus to exports.

As per UNCTAD's World Investment Report 2019, global foreign direct investment (FDI) flows slid by 13% in 2018, to US \$1.3 trillion from US \$1.5 trillion the previous year - the third consecutive annual decline. However, India remains a preferred and attractive destination for global FDI flows. In fact, total FDI in 2018-19 i.e. US \$ 64.37 billion (provisional figure) is the highest ever FDI received for any financial year. The above amendments to the FDI Policy are meant to liberalize and simplify the FDI policy to attract far more foreign investment.

80. With reference to 'GDP deflator', a measure of general price inflation, consider the following statements:

1. GDP deflator is more comprehensive measure of inflation than consumer price index and wholesale price index.
2. Unlike WPI and CPI, monthly change in inflation cannot be tracked using GDP deflator.
3. A GDP deflator value of zero implies no change in price levels from the base year.

Which of the statements given above is/are correct?

(a) 1 only

(b) 1 and 2 only

(c) 2 and 3 only

(d) 1, 2, and 3

Correct Answer: B

Explanation:

Statement 3 is wrong: is GDP at current prices is equal to GDP at constant prices, GDP deflator will be 'one'(not zero), imply no change in price level.

NOTE:

GDP deflator is a measure of general price inflation. It is calculated by dividing 'nominal GDP' (GDP at current prices) by 'real GDP' (GDP at constant prices) and then multiplying by 100.

81. If the suppliers are willing to supply whatever amount consumers will demand at that price, the "elasticity of supply" is:

(a) zero

(b) one

(c) infinite

(d) negative

Correct Answer: C

Explanation:

If the suppliers are willing to supply whatever amount consumers will demand at that price, in such case, the elasticity of supply is infinite.

82. Which of the following was/were the correct reason(s) for slowed industrial development in India till the beginning of the Second Plan?

1. Absence of capital goods industry.
2. Limited area of operation of the public sector.
3. Lack of capital to invest.
4. Lack of demand of consumer goods.

Select the correct answer using the code given below:

(a) 1, 2, and 3 only

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

Correct Answer: A

Explanation:

The main reasons slowed industrial development in India till the beginning of the second plan were:

1. absence of capital goods industry which was needed to promote for the industrialisation in India.
2. Limited area of operation of public sector, which was limited to few sector, like railways, power generation etc.
3. Lack of capital (or savings) for setting of industries.

NOTE:

There was not lack of demand. In fact the demand increased which was made by good supplied by British industrialists. Hence, 4th statement is incorrect.

83. Investment in the economy can be boosted by:

1. Lowering interest rates
2. Strengthening the security markets

Which of the above is/are correct?

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

Correct Answer: C

Explanation:

Statement 1: lower interest rates means lower borrowing costs for the investor, leading to greater investment.

Statement 2: funds for investment are borrowed from banks in security markets, which include bonds, stocks, debentures, treasury bills etc. Improving security market is improving the borrowing base of investors. So, 2 is also correct

84. Public goods are those goods that are:

- (a) Subsidized by the government to reduce the cost to the consumer
- (b) To be ideally provided by the government since private enterprises may not find it economically viable
- (c) Produced by the state owned enterprises in strategic interest
- (d) Provided by the nature and environment and are free of cost

Correct Answer: B

Explanation:

A public good is a product that one individual can consume without reducing its availability to another individual and from which no one is excluded. for example clean air, National defence, law and order, flood control system, lighthouses etc.

Even LPG is subsidized but it is not a public good. So, (a) is incorrect.

Poses produce Steel, defence equipment and weapons too, but none of them are public goods. So, (c) is also incorrect.

85. Consider the following statements regarding the strategic disinvestment or strategic sale:

1. It implies the sale of the Government shareholding of central public sector enterprises (CPSE) of up to 50%, or such higher percentage.
2. It is approved by the Ministry of Finance.

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

Correct Answer: A

Explanation:

When the government decides to transfer the ownership and control of a public sector entity to some other entity, either private or public, the process is called strategic disinvestment.

• The Department of Investment and Public Asset Management (DIPAM) which comes under the Finance Ministry defines Strategic disinvestment as follows:

- “Strategic disinvestment would imply the sale of a substantial portion of the Government shareholding of central public sector enterprises (CPSE) of up to 50%, or such higher percentage as the competent authority may determine, along with transfer of management control.”
- The Cabinet Committee on Economic Affairs (CCEA) approves the strategic divestment of government holdings.

86. Consider the following statements regarding the economic conditions in India at the time of independence:

1. The structural distortions in industrial sector.
2. The unilateral transfer of investible capital to Britain.
3. Agriculture sector growth is positive in nature

Which of the statements given above is/are correct?

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

Correct Answer: B

Explanation:

The economic profile of India was in complete distress at the time of Independence.

Being a typical case of colonial economy, India was serving a purpose of development not for herself but for a foreign land—the United Kingdom.

Both agriculture and industry were having structural distortions while the state was playing not even a marginal role.

During the half century before India became independent, the world was having accelerated development and expansion in its agriculture and industry on the shoulders of the active role being played by the states, with the same happening in the UK itself.

There was not only the unilateral transfer of investible capital to Britain by the colonial state (the ‘drain of wealth’), but the unequal exchange was day by day crippling India’s commerce, trade and the thriving handloom industry, too.

87. Consider the following statements regarding the “gig economy”:

1. It undermines the traditional economy of full-time workers who rarely change positions and instead focus on a lifetime career.
2. India is the 5th largest country for flexi-staffing.

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

Correct Answer: C

Explanation:

Gig economy can be defined as a work engagement where on one side, there is a service seeker i.e. a consumer with a demand for a specific task, and on the other side, and there is a service provider i.e. a gig worker who can perform that specific task.

A gig economy undermines the traditional economy of full-time workers who rarely change positions and instead focus on a lifetime career.

In this economy, tech-enabled platforms connect the consumer to the gig worker to hire services on a short-term basis.

Gig workers include self-employed, freelancers, independent contributors and part-time workers.

The digital gig economy generated a gross volume of approximately \$204 bn from worldwide customers in 2018.

Transportation-based services contributed to over 50% of this value. The size of the gig economy is projected to grow by a 17% CAGR and generate a gross volume of ~\$455 bn by 2023.

India has emerged as the 5th largest country for flexi-staffing after US, China, Brazil and Japan.

Haryana, Madhya Pradesh, Andhra Pradesh, Gujarat and Telangana have most opportunities in terms of growth for the flexi-workers.

88. Consider the following statements:

1. A cyclical slowdown is a period of lean economic activity that occurs at regular intervals.
2. A structural slowdown is a more deep-rooted phenomenon that occurs due to a one-off shift from an existing paradigm.

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

Correct Answer: C

Explanation:

A cyclical slowdown is a period of lean economic activity that occurs at regular intervals.

Such slowdowns last over the short-to-medium term, and are based on the changes in the business cycle.

Generally, interim fiscal and monetary measures, temporary re-capitalisation of credit markets, and need-based regulatory changes are required to revive the economy.

A structural slowdown, on the other hand, is a more deep-rooted phenomenon that occurs due to a one-off shift from an existing paradigm.

The changes, which last over a long-term, are driven by disruptive technologies, changing demographics, and/or change in consumer behaviour.

89. After which 5-year plan government declared plan holiday?

- (a) 5th
- (b) 1st
- (c) 2nd
- (d) 3rd

Correct Answer: D

Explanation:

3rd. Due to miserable failure of the Third Plan the government was forced to declare “plan holidays” (from 1966–67, 1967–68, and 1968–69). Three annual plans were drawn during this intervening period. During 1966–67 there was again the problem of drought. Equal priority was given to agriculture, its allied activities, and industrial sector. The government of India declared “Devaluation of Rupee” to increase the exports of the country. The main reasons for plan holidays were the war, lack of resources, and increase in inflation after that plan holiday was created.

90. Consider the following statements regarding the Economic reforms in India:

1. On July 23, 1991, India launched a process of economic reforms in response to a fiscal and balance of payment (BoP) crisis.
2. The reforms of the 1980s witnessed rather limited nature of deregulation and ‘partial liberalization of only a few aspects of the existing control regime.
3. The reforms started in early 1990s in the fields of industries, trade, investment and later to include agriculture, were much ‘wider and deeper’.

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

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

Correct Answer: D

Explanation:

On July 23, 1991, India launched a process of economic reforms in response to a fiscal and balance of payment (BoP) crisis. The reforms were historic and were going to change the very face and the nature of the economy in the coming times.

Back in the mid-1980s, the Governments had taken its first steps to economic reforms. While the reforms of the 1980s witnessed rather limited nature of deregulation and ‘partial liberalisation of only a few aspects of the existing control regime, the reforms started in early 1990s in the fields of industries, trade, investment and later to include agriculture, were much ‘wider and deeper’.

91. Consider the following statements regarding the term, liberalisation which show the direction of reform undertaken by Indian Economy:

1. The term liberalisation has its origin in the political ideology ‘liberalism’ which took its form by early nineteenth century.
2. The term liberalisation is sometimes portrayed as a meta-ideology capable of embracing a broad range of rival values and beliefs.
3. The meta-ideology ideology was the product of the breakdown of feudalism and the growth of a market or capitalist society in its place which became popular in economics via the writings of Adam Smith.

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

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

Correct Answer: D

Explanation:

The term liberalisation has its origin in the political ideology ‘liberalism’ which took its form by early nineteenth century (it developed basically in the previous three centuries). The term is sometimes portrayed as a meta-ideology capable of embracing a broad range of rival values and

beliefs. The ideology was the product of the breakdown of feudalism and the growth of a market or capitalist society in its place which became popular in economics via the writings of Adam Smith (its founding father in the USA) and got identified as a principle of laissez-faire.

92. Consider the following statements regarding the term ‘privatization’, one of the facets of economic reforms in India:

1. Privatization in its purest sense and lexically means de-nationalization i.e. transfer of the state ownership of the assets to the private sector to the tune of 100 per cent.
2. Privatisation in its purest sense and lexically means de-nationalisation i.e. transfer of the state ownership of the assets to the private sector to the tune of 100 per cent. Such bold moves took place only once anywhere in the world without any political fallout—in the early 1980s of the UK under the Thatcher regime.
3. The process of privatisation includes selling of the shares of the state-owned enterprises to the private sector.

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

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

Correct Answer: D

Explanation:

Privatisation in its purest sense and lexically means de-nationalisation i.e. transfer of the state ownership of the assets to the private sector to the tune of 100 per cent. Such bold moves took place only once anywhere in the world without any political fallout—in the early 1980s of the UK under the Thatcher regime.

The sense in which privatisation has been used is the process of disinvestment all over the world. This process includes selling of the shares of the state-owned enterprises to the private sector. Disinvestment is de-nationalisation of less than 100 per cent ownership transfer from the state to the private sector.

If an asset has been sold out by the Government to the tune of only 49 per cent the ownership remains with the state though it is considered privatisation. If the sale of shares of the state-owned assets has been to the tune of 51 per cent, the ownership is really transferred to the private sector even then it is termed as privatisation.

93. Consider the following statements regarding the concept of term ‘Globalization’:

1. Globalisation is generally termed as ‘an increase in economic integration among nations’.

2. The globalisation lasted from 1800 to almost 1930, interrupted by the Great Depression and the two Wars which led to retrenchment and several trade barriers were erected since early 1930s.
3. The concept was popularised by the Organisation of Economic Cooperation and Development (OECD) in the mid-1980s again after the Wars.

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

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

Correct Answer: D

Explanation:

The process of Globalisation has always been used in economic terms though it has always taken the political and cultural dimensions. Once economic changes occur it has several socio political manifestations. Globalisation is generally termed as ‘an increase in economic integration among nations’. Even before several nation-states were not even born, the countries around the world had gone for globalisation i.e. ‘a closer integration of their economies’.

This globalisation lasted from 1800 to almost 1930, interrupted by the Great Depression and the two Wars which led to retrenchment and several trade barriers were erected since early 1930s.

The concept was popularised by the Organisation of Economic Cooperation and Development (OECD) in the mid-1980s again after the Wars. In its earlier deliberation, the organisation had defined globalisation in a very narrow and business-like sense— ‘any cross-border investment by an OECD company outside its country of origin for its benefit is globalisation’.

94. Which 5-year plan was introduced by The Janata Party government?

- (a) 5th
- (b) 4th
- (c) Rolling plan
- (d) 3rd

Correct Answer: C

Explanation:

Rolling plan. The Janata Party government rejected the Fifth Five-Year Plan and introduced a new Sixth Five-Year Plan (1978–1980). This plan was again rejected by the Indian National Congress government in 1980 and a new Sixth Plan was made. The Rolling Plan consists of three

kind of plans that were proposed. The First Plan is for the present year which comprises the annual budget and Second is a plan for a fixed number of years, which may be 3, 4 or 5 years.

95. With reference to Gini Index, consider the following statements:

1. Gini Index is a graphical representation of the distribution of income or of wealth.
2. Higher the value of Gini Index, the greater the degree of income equality.
3. The value of Gini Index has increased amongst regular workers while it has decreased among casual workers.

Which of the statements given above is/are correct?

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

Correct Answer: C

Explanation:

The Gini index/ Coefficient is a simple measure of the distribution of income across income percentiles in a population. While the Lorenz curve is a graphical representation of the distribution of income or of wealth. Hence, statement 1 is incorrect.

Gini coefficient is a commonly-used measure of income inequality that condenses the entire income distribution for a country into a single number between 0 and 1. The higher the value of Gini Index/coefficient, the greater the degree of income inequality.

A higher Gini index indicates greater inequality, with high income individuals receiving much larger percentage of the total income of the population. Hence, statement 2 is also not correct.

Between 1993 and 2011, the average real wages increased in India, with the fastest growth recorded for casual labour, women's labour, and rural/agricultural labour (ILO 2018).

Despite these increases, the existing wage inequality measured by the Gini coefficient remains very high by international standards and it is seen that this inequality has increased amongst regular workers while it has decreased among casual workers. Hence, statement 3 is correct.

96. A “closed economy” is an economy in which

- (a) the money supply is fully controlled
- (b) deficit financing takes place

- (c) only exports take place
- (d) neither exports nor imports take place

Correct Answer: D

Explanation: Self explanatory

97. Which of the following can aid in furthering the Government's objective of inclusive growth?

1. Promoting Self-Help Groups
2. Promoting Micro, Small and Medium Enterprises
3. Implementing the Right to Education Act

Select the correct answer using the codes given below:

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

Correct Answer: D

Explanation:

All of the statements are correct.

98. The main objective of the 12th Five-Year Plan is

- (a) inclusive growth and poverty reductions
- (b) inclusive and sustainable growth
- (c) sustainable and inclusive growth to reduce unemployment
- (d) Faster, sustainable and more inclusive growth

Correct Answer: D

Explanation:

The main objective of the 12th Five-Year Plan is Faster, sustainable and more inclusive growth

99. Consider the following statements:

1. The input tax credit is tax reduced from output tax payable on account of it being already paid at the time of buying raw material.

2. Goods and Services Tax (GST) is not applicable on the mobility aids used by disabled citizens.

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

Correct Answer: A

Explanation:

Statement 1 is correct. Input tax credit (ITC) is the tax paid by the buyer on purchase of goods or services. Such tax which is paid at the purchase when reduced from liability payable on outward supplies is known as input tax credit.

ITC is one of the key features of Goods and Services Tax. ITC is a mechanism to avoid cascading of taxes.

Statement 2 is incorrect. The mobility aids used by disabled citizens are not exempt from GST at present. It is subject to five percent GST.

On October 27, the Supreme Court of India heard an appeal on the constitutional validity of the levy of Goods and Services Tax (GST) on mobility aids used by disabled citizens. But it said that the taxation was a matter of policy over which the judiciary ought not to ordinarily interfere and advised petitioner to appeal to the GST Council.

100. Consider the following statements regarding laws of demand and supply:

1. The law of demand says that at higher prices, buyers will demand less of an economic good.
2. Producers supply more at a higher price because the higher selling price justifies the higher opportunity cost of each additional unit sold.

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

Correct Answer: C

Explanation:

Statement 1 is correct. The law of demand states that, if all other factors remain equal, the higher the price of a good, the less people will demand that good. In other words, the higher the price, the lower the quantity demanded.

The amount of a good that buyers purchase at a higher price is less because as the price of a good goes up, so does the opportunity cost of buying that good.

Statement 2 is correct. The law of supply says that at higher prices, sellers will supply more of an economic good.

From the seller's perspective, the opportunity cost of each additional unit that they sell tends to be higher and higher. Producers supply more at a higher price because the higher selling price justifies the higher opportunity cost of each additional unit sold.