(2016) UPSC CIVIL SERVICES EXAMINATION (PRELIMS)

General Instructions

- 1. This Test Booklet contains 100 items (questions). Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each item.
- 2. You have to mark all your responses ONLY on the separate OMR Sheet provided.
- **3.** All items carry equal marks.
- 4. Penalty for wrong answers:
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one-third** (0.33) of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be no penalty for that question.
- 1. With reference to the 'stand up India scheme', which of the following statement is/are correct?
 - 1. Its purpose is to promote entrepreneurship among SC/ST and women entrepreneurs.
 - **2.** It provides for refinance through SIDBI. 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
- 2. The FAO accords the status of 'Globally Important Agricultural Heritage System (GIAHS)' to traditional agricultural systems. What is the overall goal of this initiative?
 - To provide modern technology, training in modern farming methods and financial support to local communities of identified GIAHS so as to greatly enhance their agricultural productivity.
 - 2. To identify and safeguard eco-friendly traditional farm practices and their associated landscapers, agricultural biodiversity and knowledge systems of the local communities.

3. To provide Geographical Indication status to all the varieties of agricultural produce in such identified GIAHS.

Select the correct answer using the code given below:

- (a) 1 and 3 only
- **(b)** 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 3. Which of the following is/are tributary/ tributaries of Brahmaputra?
 - 1. Dibang
 - 2. Kameng
 - 3. Lohit

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
- 4. The term 'Core Banking Solutions' is sometimes seen in the news.

Which of the following statements best describes/describe this term?

1. It is a networking of a bank's branches which enables customers to operate

- their accounts from any branch of the bank on its network regardless of where they open their accounts.
- **2.** It is an effort to increase RBI's control over commercial banks through computerisation.
- **3.** It is a detailed procedure by which a bank with huge non-performing assets is taken over by another bank.

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

5. Consider the following pairs:

Terms		Sometimes their origin seen in the news		
1.	Annex—I	Cartagena Protocol		
	Countries			
2.	Certified	Nagoya Protocol		
	Emissions			
	Reductions			
3.	Clean	Kyoto Protocol		
	Development			
	Mechanism			

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

- (a) 1 and 2 only
- **(b)** 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- 6. In the context of the developments in Bioinformatics, the term transcriptome', sometimes seen in the news, refers to
 - (a) a range of enzymes used in genome editing
 - **(b)** the full range of mRNA molecules expressed by an organism
 - (c) the description of the mechanism of gene expression
 - (d) a mechanism of genetic mutations taking place in cells
- 7. 'Mission Indradhanush' launched by the Government of India pertains to
 - (a) immunisation of children and pregnant women
 - **(b)** construction of smart cities across the country
 - **(c)** India's own search for the Earth-like planets in outer space
 - (d) New Educational Policy

8. Which of the following best describes/ describe the aim of 'Green India Mission' of the Government of India?

- 1. Incorporating environment all benefits and costs into the Union and State Budgets thereby implementing the 'green accounting'.
- 2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future.
- **3.** Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- 9. With reference to pre-packaged items in India, it is mandatoy to the manufacturer to put which of the following information on the main label, as per the Food Safety and Standards (Packaging and Labelling) Regulations, 2011?
 - 1. List of ingredients including additives
 - 2. Nutrition information
 - 3. Recommendations, if any, made by the medical profession about the possibility of any allergic reactions
 - 4. Vegetarian/non-vegetarian

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only (b) 2, 3 and 4 only
- (c) 1, 2 and 4 only (d) 1 and 4 only
- 10. 'Project Loon', sometimes seen in the news, is related to
 - (a) waste management technology
 - **(b)** wireless communication technology
 - (c) solar power production technology
 - (d) water conservation technology
- 11. 'Net metering' is sometimes seen in the news in the context of promoting the
 - (a) production and use of solar energy by the households/consumers
 - **(b)** use of piped natural gas in the kitchens of households
 - (c) installation of CNG kits in motor-cars
 - (d) installation of water meters in urban households

- 12. India's ranking in the 'Ease of Doing Business Index' is sometimes seen in the news. Which of the following has declared that ranking?
 - (a) Organization for Economic Cooperation and Development
 - **(b)** World Economic Forum
 - (c) World Bank
 - (d) World Trade Organization
- 13. Banjaras during the medieval period of Indian History were generally
 - (a) agriculturists
- (b) warriors
- (c) weavers
- (d) traders
- Who of the following had first deciphered 14. the edicts of Emperor Ashoka?
 - (a) George Bilhler (b) James Prinsep
- - (c) Max Muller
- (d) William Jones
- 15. With reference to the 'Gram Nyayalaya Act', which of the following statements is/are correct?
 - 1. As per the Act, Gram Nyayalayas can hear only civil cases and not criminal cases.
 - 2. The Act allows local social activists as mediators/reconciliators.

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
- With reference to 'Trans-Pacific 16. the Partnership', consider the following statements.
 - 1. It is an agreement among all the Pacific Rim countries except China and Russia.
 - It is a strategic alliance for the purpose of maritime security only.

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
- 17. Consider the following statements.

The India-Africa Summit

- held in 2015 was the third such Summit.
- was actually initiated by Jawaharlal Nehru in 1951.

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

- What is/are the purpose/purposes of the 18. 'Marginal Cost of Funds based Lending Rate (MCLR)' announced by RBI?
 - These guidelines help improve the transparency in the methodology followed by banks for determining the interest rates on advances.
 - These guidelines help ensure availability of bank credit at interest rates which are fair to the borrowers as well as the banks.

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
- 19. What is/are unique about 'Kharai Camel', a breed found in India?
 - 1. It is capable of swimming up to three kilometres in seawater.
 - 2. It survives by grazing on mangroves.
 - 3. It lives in the wild and cannot be domesticated.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- Recently, our scientists have discovered a 20. new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered?
 - (a) Andaman Islands
 - **(b)** Anamalai Forests
 - (c) Maikala Hills
 - (d) Tropical rain forests of northeast
- 21. Which one of the following is the best description of 'INS Astradharini', that was in the news recently?
 - (a) Amphibious warfare ship
 - **(b)** Nuclear-powered submarine
 - (c) Torpedo launch and recovery vessel
 - (d) Nuclear-powered aircraft carrier
- 22. What is 'Greased Lightning-10 (GL-10)', recently in the news?
 - (a) Electric plane tested by NASA
 - (b) Solar-powered two-seater aircraft designed by Japan
 - (c) Space observatory launched by China
 - (d) Reusable rocket designed by ISRO

- 23. With reference to 'Initiative for Nutritional Security through Intensive Millets Promotion', which of the following statements is/are correct?
 - 1. This initiative aims to demonstrate the improved production and post-harvest technologies, and to demonstrate value addition techniques, in an integrated manner, with cluster approach.
 - **2.** Poor, small, marginal and tribal farmers have larger stake in this scheme.
 - 3. An important objective of the scheme is to encourage farmers of commercial crops to shift to millet cultivation by offering them free kits of critical inputs of nutrients and microirrigation equipment.

Select the correct answer using the code given below:

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 2 only
- (d) 1, 2 and 3
- 24. The 'Swadeshi' and 'Boycott' were adopted as methods of struggle for the first time during the
 - (a) agitation against the Partition of Bengal
 - **(b)** Home Rule Movement
 - (c) Non-Cooperation Movement
 - (d) visit of the Simon Commission to India
- 25. With reference to the religious history of India, consider the following statements.
 - **1.** The concept of Bodhisattva is central to Hinayana sect of Buddhism.
 - **2.** Bodhisattva is a compassionate one on his way to enlightenment.
 - **3.** Bodhisattva delays achieving his own salvation to help all sentient beings on their path to it.

Which of the statements given above is/are correct?

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 2 only
- (d) 1, 2 and 3
- 26. 'Doctors Without Borders (Medecins Sans Frontieres)', often in the news, is
 - (a) a division of World Health Organization
 - **(b)** a non-governmental international organization
 - (c) an inter-governmental agency sponsored by European Union
 - (d) a specialized agency of the United Nations

- 27. With reference to an initiative called 'The Economics of Ecosystems and Biodiversity (TEEB)', which of the following statements is/are correct?
 - **1.** It is an initiative hosted by UNEP, IMF and World Economic Forum.
 - **2.** It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity.
 - **3.** It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 28. With reference to 'Red Sanders', sometimes seen in the news, consider the following statements.
 - 1. It is a tree species found in a part of South India.
 - 2. It is one of the most important trees in the tropical rain forest areas of South India.

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
- 29. Which of the following statements is/are correct?

Proper design and effective implementation of UN-REDD+ Programme can significantly contribute to

- 1. protection of biodiversity
- 2. resilience of forest ecosystems
- 3. poverty reduction

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 30. What is 'Greenhouse Gas Protocol'?
 - (a) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions.
 - (b) It is an initiative of the United Nations to offer financial incentives to developing countries to reduce greenhouse gas emissions and to adopt eco-friendly technologies.

- (c) It is an inter-governmental agreement ratified by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022.
- (d) It is one of the multilateral REDD+ initiatives hosted by the World Bank
- 31. With reference to 'Financial Stability and Development Council', consider the following statements.
 - 1. It is an organ of Niti Aayog.
 - **2.** It is headed by the Union Finance Minister.
 - 3. It monitors macroprudential supervision of the economy.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 32. With reference to 'Agenda 21', sometimes seen in the news, consider the following statements.
 - **1.** It is a global action plan for sustainable development
 - **2.** It originated in the World Summit on Sustainable Development held in Johannesburg in 2002.

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
- 33. Satya Shodhak Samaj organised
 - (a) a movement for upliftment of tribals in Bihar
 - (b) a temple-entry movement in Gujarat
 - (c) an anti-caste movement in Maharashtra
 - (d) a peasant movement in Punjab
- 34. Which of the following statements is/are correct?

Viruses can infect

- 1. bacteria
- 2. fungi
- 3. plants

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- 35. The term 'Base Erosion and Profit Shifting' is sometimes seen in the news in the context of
 - (a) mining operation by multinational companies in resource-rich but backward areas

- **(b)** curbing of the tax evasion by multinational companies
- **(c)** exploitation of genetic resources of a country by multinational companies
- (d) lack of consideration of environmental costs in the planning and implementation of developmental projects
- 36. Recently, India's first 'National Investment and Manufacturing Zone' was proposed to be set up in
 - (a) Andhra Pradesh
 - (b) Gujarat
 - (c) Maharashtra
 - (d) Uttar Pradesh
- 37. What is/are the purpose/purposes of 'District Mineral Foundations' in India?
 - 1. Promoting mineral exploration activities in mineral-rich districts.
 - **2.** Protecting the interests of the persons affected by mining operations.
 - **3.** Authorising State Governments to issue licences for mineral exploration.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 2 only
- (c) 1 and 3 only (d) 1, 2 and 3
- 38. 'SWAYAM', an initiative of the Government of India aims at
 - (a) promoting the Self Help Groups in rural areas
 - **(b)** providing financial and technical assistance to young start-up entrepreneurs
 - **(c)** promoting the education and health of adolescent girls
 - **(d)** providing affordable and quality education to the citizens for free
- 39. The Montague-Chelmsford Proposals were related to
 - (a) social reforms
 - **(b)** educational reforms
 - (c) reforms in police administration
 - (d) constitutional reforms
- 40. What is/are common to the two historical places known as Ajanta and Mahabalipuram?
 - **1.** Both were built in the same period.
 - **2.** Both belong to the same religious denomination.
 - 3. Both have rock-cut monuments.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- (c) 1 and 3 only
- (d) None of the above
- 41. With reference to 'Bitcoins', sometimes seen in the news, which of the following statements is/are correct?
 - **1.** Bitcoins are tracked by the Central Banks of the countries.
 - 2. Anyone with a Bitcoin address can send and receive Bitcoins from anyone else with a Bitcoin address.
 - **3.** Online payments can be sent without either side knowing the identity of the other.

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- 42. Consider the following statements.
 - **1.** New Development Bank has been set up by APEC.
 - **2.** The headquarters of New Development Bank is in Shanghai.

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
- 43. 'Gadgil Committee Report' and 'Kasturirangan Committee Report', sometimes seen in the news, are related to
 - (a) constitutional reforms
 - (b) Ganga Action Plan
 - (c) linking of rivers
 - (d) protection of Western Ghats
- 44. Consider the following.
 - 1. Calcutta Unitarian Committee
 - 2. Tabernacle of New Dispensation
 - 3. Indian Reform Association

Keshab Chandra Sen is associated with the establishment of which of the above?

- (a) 1 and 3 only
- **(b)** 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- 45. Which of the following is not a member of 'Gulf Cooperation Council'?
 - (a) Iran
- (b) Saudi Arabia
- (c) Oman
- (d) Kuwait

46. What is/are the purpose/purposes of Government's 'Sovereign Gold Bond Scheme' and 'Gold Monetisation Scheme'?

- 1. To bring the idle gold lying with Indian households into the economy.
- To promote FDI in the gold and jewellery sector.
- **3.** To reduce India's dependence on gold imports.

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

47. 'Belt and Road Initiative' is sometimes mentioned in the news in the context of the affairs of

- (a) African Union
- (b) Brazil
- (c) European Union
- (d) China

48. Pradhan Mantri Mudra Yojana is aimed at

- (a) bringing the small entrepreneurs into formal financial system
- (b) providing loans to poor farmers for cultivating particular crops
- (c) providing pensions to old and destitute persons
- (d) funding the voluntary organisations involved in the promotion of skill development and employment generation

49. In which of the following regions of India are shale gas resources found?

- 1. Cambay Basin
- 2. Cauvery Basin
- 3. Krishna-Godavari Basin

Select the correct answer using the code given below:

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

50. 'Global Financial Stability Report' is prepared by the

- (a) European Central Bank
- (b) International Monetary Fund
- (c) International Bank for Reconstruction and Development
- (d) Organisation for Economic Cooperation and Development

51. Regarding 'Atal Pension Yojana', which of the following statements is/are correct?

1. It is a minimum guaranteed pension scheme mainly targeted at unorganised sector workers.

- **2.** Only one member of a family can join the scheme.
- **3.** Same amount of pension is guaranteed for the spouse for life after subscriber's death.

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
- 52. The term 'Regional Comprehensive Economic Partnership' often appears in the news in the context of the affairs of a group of countries known as
 - (a) G20
- (b) ASEAN
- (c) SCO
- (d) SAARC
- 53. On which of the following can you find the Bureau of Energy Efficiency Star Label?
 - 1. Ceiling fans
 - 2. Electric geysers
 - 3. Tubular fluorescent lamps

Select the correct answer using the code given below:

- (a) 1 and 2 only
- **(b)** 3 only
- **(c)** 2 and 3 only
- (d) 1, 2 and 3
- 54. India is an important member of the 'International Thermonuclear Experimental Reactor'. If this experiment succeeds, what is the immediate advantage for India?
 - (a) It can use thorium in place of uranium for power generation.
 - **(b)** It can attain a global role in satellite navigation.
 - (c) It can drastically improve the efficiency of its fission reactors in power generation.
 - **(d)** It can build fusion reactors for power generation.
- 55. In the context of the history of India, consider the following pairs:

Term Description

Eripatti: Land, revenue from which was set apart for the maintenance of the village tank. **Taniyurs:** Villages donated to a single Brahmin or a group of Brahmins.

Ghatikas: Colleges generally attached to the temples.

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

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

56. Consider the following statements.

- **1.** The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
- **2.** The Alliance includes all the member countries of the United Nations.

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

57. 'European Stability Mechanism', sometimes seen in the news, is an

- (a) agency created by EU to deal with the impact of millions of refugees arriving from Middle East
- **(b)** agency of EU that provides financial assistance to eurozone countries
- (c) agency of EU to deal with all the bilateral and multilateral agreements on trade
- (d) agency of EU to deal with the conflicts arising among the member countries

58. Which of the following is/are the advantage /advantages of practising drip irrigation?

- 1. Reduction in weed
- 2. Reduction in soil salinity
- 3. Reduction in soil erosion

Select the correct answer using the code given below:

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

59. Regarding DigiLocker', sometimes seen in the news, which of the following statements is/are correct?

- 1. It is a digital locker system offered by the Government under Digital India Programme.
- 2. It allows you to access your e-documents irrespective of your physical location.

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

60. Recently, linking of which of the following rivers was undertaken?

- (a) Cauvery and Tungabhadra
- (b) Godavari and Krishna
- (c) Mahanadi and Sone
- (d) Narmada and Tapti

- In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air **Quality Index?**
 - Carbon dioxide
 - Carbon monoxide
 - Nitrogen dioxide
 - Sulfur dioxide
 - **5.** Methane

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only (b) 2, 3 and 4 only
- (c) 1, 4 and 5 only (d) 1, 2, 3, 4 and 5
- 62. With reference to 'Astrosat', the astronomical observatory launched by India, which of the following statements is/are correct?
 - 1. Other than USA and Russia, India is the only country to have launched a similar observatory into space.
 - Astrosat is a 2000 kg satellite placed in an orbit at 1650 km above the surface of the Earth.

Select the correct answer using the code given below:

- (a) 1 only
- **(b)** 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- 63. With reference to the economic history of medieval India, the term Araghatta' refers
 - (a) bonded labour
 - **(b)** land grants made to military officers
 - (c) waterwheel used in the irrigation of land
 - (d) wasteland converted to cultivated land
- With reference to the cultural history 64. of India, the memorising of chronicles, dynastic histories and Epictales was the profession of who of the following?
 - (a) Shramana
- (b) Parivraajaka
- (c) Agrahaarika
- (d) Maagadha
- Recently, for the first time in our country, 65. which of the following States has declared a particular butterfly as 'State Butterfly'?
 - (a) Arunachal Pradesh
 - (b) Himachal Pradesh
 - (c) Karnataka
 - (d) Maharashtra
- Consider the following statements. 66.

The Mangalyaan launched by ISRO

- is also called the Mars Orbiter Mission.
- made India the second country to have a spacecraft orbit the Mars after USA.

3. made India the only country to be successful in making its spacecraft orbit the Mars in its very first attempt.

Which of the statements given above is/are correct?

- (a) 1 only
- **(b)** 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- What was the main reason for the split in 67. the Indian National Congress at Surat in 1907?
 - (a) Introduction of communalism into Indian Politics by Lord Minto
 - **(b)** Extremists' lack of faith in the capacity of the moderates to negotiate with the **British Government**
 - (c) Foundation of Muslim League
 - (d) Aurobindo Ghosh's inability to be elected as the President of the Indian **National Congress**
- 68. The plan of Sir Stafford Cripps envisaged that after the Second World War
 - (a) India should be granted complete independence
 - (b) India should be partitioned into two before granting independence
 - (c) India should be made a republic with the condition that she will join the Commonwealth
 - (d) India should be given Dominion status
- 69. Consider the following pairs.

-	Famous place		Region	
	1.	Bodhgaya	Baghelkhand	
	2.	Khajuraho	Bundelkhand	
	3.	Shirdi	Vidarbha	
	4.	Nasik (Nashik)	Malwa	
	5.	Tirupati	Rayalaseema	

Which of the pairs given above are correctly matched?

- (a) 1, 2 and 4 only (b) 2, 3, 4 and 5 only
- (c) 2 and 5 only
- (d) 1, 3, 4 and 5 only
- 70. The Parliament of India acquires the power to legislate on any item in the State List in the national interest if a resolution to that effect is passed by the
 - (a) Lok Sabha by a simple majority of its total membership
 - **(b)** Lok Sabha by a majority of not less than two-thirds of its total membership
 - Rajya Sabha by a simple majority of its total membership
 - (d) Rajya Sabha by a majority of not less than two-thirds of its members present and voting

- 71. Recently, which of the following States has explored the possibility of constructing an artificial inland port to be connected to sea by a long navigational channel?
 - (a) Andhra Pradesh (b) Chhattisgarh
 - (c) Karnataka
- (d) Rajasthan
- 72. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct?
 - 1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
 - 2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2 °C or even 1.5 °C above pre-industrial levels.
 - 3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$ 1000 billion a year from 2020 to help developing countries to cope with climate change.

Select the correct answer using the code given below:

- (a) 1 and 3 only
- **(b)** 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- 73. Consider the following statements.
 - 1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'.
 - **2.** The Sustainable Development Goals have to be achieved by 2030.

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
- 74. A recent movie titled The Man Who Knew Infinity is based on the biography of
 - (a) S. Ramanujan
 - (b) S. Chandrasekhar
 - (c) S. N. Bose
 - (d) C. V. Raman
- 75. Consider the following statements.
 - **1.** The minimum age prescribed for any person to be a member of Panchayat is 25 years.
 - **2.** A Panchayat reconstituted after premature dissolution continues only for the remainder period.

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
- 76. Which of the following statements is/are correct?
 - **1.** A Bill pending in the Lok Sabha lapses on its prorogation.
 - 2. A Bill pending in the Rajya Sabha, which has not been passed by the Lok Sabha, shall not lapse on dissolution of the Lok Sabha.

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
- 77. Which of the following is/are the indicator/ indicators used by IFPRI to compute the Global Hunger Index Report?
 - 1. Undernourishment
 - 2. Child stunting
 - 3. Child mortality

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 1, 2 and 3
- (d) 1 and 3 only
- 78. There has been a persistent deficit budget year after year. Which action/actions of the following can be taken by the Government to reduce the deficit?
 - 1. Reducing revenue expenditure
 - **2.** Introducing new welfare schemes
 - 3. Rationalising subsidies
 - 4. Reducing import duty

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, 3 and 4
- 79. The establishment of 'Payment Banks' is being allowed in India to promote financial inclusion. Which of the following statements is/are correct in this context?
 - 1. Mobile telephone companies and supermarket chains that are owned and controlled by residents are eligible to be promoters of Payment Banks.
 - **2.** Payment Banks can issue both credit cards and debit cards.
 - **3.** Payment Banks cannot undertake lending activities.

Select the correct answer using the code given below:

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

- 80. With reference to 'LiFi', recently in the news, which of the following statements is/ are correct?
 - **1.** It uses light as the medium for high-speed data transmission.
 - **2.** It is a wireless technology and is several times faster than 'WiFi'.

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
- 81. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of
 - (a) pledges made by the European countries to rehabilitate refugees from the waraffected Middle East
 - **(b)** plan of action outlined by the countries of the world to combat climate change
 - (c) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
 - (d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

82. Which one of the following is a purpose of 'UDAY', a scheme of the Government?

- (a) Providing technical and financial assistance to start-up entrepreneurs in the field of renewable sources of energy
- **(b)** Providing electricity to every household in the country by 2018
- (c) Replacing the coal-based power plants with natural gas, nuclear, solar, wind and tidal power plants over a period of time
- (d) Providing for financial turnaround and revival of power distribution companies
- 83. With reference to 'IFC Masala Bonds', sometimes seen in the news, which of the statements given below is/are correct?
 - The International Finance Corporation, which offers these bonds, is an arm of the World Bank.
 - **2.** They are the rupee-denominated bonds and are a source of debt financing for the public and private sector.

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

84. Regarding the taxation system of Krishna Deva, the ruler of Vijayanagar, consider the following statements.

- 1. The tax rate on land was fixed depending on the quality of the land.
- **2.** Private owners of workshops paid an industries tax.

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

85. Which one of the following books of ancient India has the love story of the son of the founder of Sunga dynasty?

- (a) Swapnavasavadatta
- (b) Malavikagnirnitra
- (c) Meghadoota
- (d) Ratnavali

86. In the context of which of the following do you sometimes find the terms 'amber box, blue box and green box' in the news?

- (a) WTO affairs
- (b) SAARC affairs
- (c) UNFCCC affairs
- (d) India-EU negotiations on FTA

87. Which of the following is/are included in the capital budget of the Government of India?

- **1.** Expenditure on acquisition of assets like roads, buildings, machinery, etc.
- **2.** Loans received from foreign governments.
- 3. Loans and advances granted to the States and Union Territories.

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

88. What is/are the importance/importances of the 'United Nations Convention to Combat Desertification'?

- 1. It aims to promote effective action through innovative national programmes and supportive international partnerships.
- 2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilitates the allocation of major portion of financial resources to these regions.
- 3. It is committed to bottom-up approach, encouraging the participation of local people in combating the desertification.

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
- 89. Recently, which one of the following currencies has been proposed to be added to the basket of IMF's SDR?
 - (a) Rouble
- (b) Rand
- (c) Indian Rupee
- (d) Renminbi
- 90. With reference to the International Monetary and Financial Committee (IMFC), consider the following statements.
 - 1. IMFC discusses matters of concern affecting the global economy, and advises the International Monetary Fund (IMF) on the direction of its work.
 - **2.** The World Bank participates as observer in IMFC's meetings.

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

91. Rashtriya Garima Abhiyaan' is a national campaign to

- (a) rehabilitate the homeless and destitute persons and provide them with suitable sources of livelihood
- **(b)** release the sex workers from their practice and provide them with alternative sources of livelihood
- (c) eradicate the practice of manual scavenging and rehabilitate the manual scavengers
- (d) release the bonded labourers from their bondage and rehabilitate them
- 92. With reference to the cultural history of medieval India, consider the following statements.
 - **1.** Siddhas (Sittars) of Tamil region were monotheistic and condemned idolatry.
 - **2.** Lingayats of Kannada region questioned the theory of rebirth and rejected the caste hierarchy.

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

- 93. Which of the following best describes the term 'import cover', sometimes seen in the news?
 - (a) It is the ratio of value of imports to the Gross Domestic Product of a country
 - **(b)** It is the total value of imports of a country in a year
 - (c) It is the ratio between the value of exports and that of imports between two countries
 - (d) It is the number of months of imports that could be paid for by a country's international reserves
- 94. Consider the following pairs:

Community sometimes In the affairs of mentioned in the news

- 1. Kurd : Bangladesh
- 2. Madhesi :
- **3.** Rohingya : Myanmar

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

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

Nepal

- (c) 2 and 3
- (d) 3 only
- 95. With reference to 'Organisation for the Prohibition of Chemical Weapons (OPCW)', consider the following statements.
 - 1. It is an organisation of European Union in working relation with NATO and WHO.
 - **2.** It monitors chemical industry to prevent new weapons from emerging.
 - **3.** It provides assistance and protection to States (Parties) against chemical weapons threats.

Which of the statements given above is/are correct?

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

96. With reference to 'Pradhan Mantri Fasal Bima Yojana', consider the following statements.

- Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year.
- **2.** This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

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

- 97. In which of the following regions of India are you most likely to come across the 'Great Indian Hornbill' in its natural habitat?
 - (a) Sand deserts of northwest India
 - **(b)** Higher Himalayas of Jammu and Kashmir
 - (c) Salt marshes of western Gujarat
 - (d) Western Ghats
- 98. Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)?
 - **1.** River basin is the unit of planning and management.
 - **2.** It spearheads the river conservation efforts at the national level.
 - **3.** One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGRBA on rotation basis.

Select the correct answer using the code given below:

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

- 99. Why does the Government of India promote the use of Neem-coated Urea in agriculture?
 - (a) Release of Neem oil in the soil increases nitrogen fixation by the soil microorganisms
 - **(b)** Neem coating slows down the rate of dissolution of urea in the soil
 - (c) Nitrous oxide, which is a greenhouse gas, is not at all released into atmosphere by crop fields
 - **(d)** It is a combination of a weedicide and a fertilizer for particular crops
- 100. Consider the following statements.
 - **1.** The Chief Secretary in a State is appointed by the Governor of that State
 - 2. The Chief Secretary in a State has a fixed tenure.

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

OMR SHEET

Darken the circle for each question.

Q.No.	R	espo	onse		١
	• • •	oope	,,,,,		
1.	a	b	©	d	
2.	a	b	©	d	
3.	a	b	©	d	
4.	a	b	©	d	
5.	a	b	©	d	
6.	a	b	©	d	
7.	a	b	©	\bigcirc	
8.	a	b	©	\bigcirc	
9.	a	b	©	\bigcirc	
10.	a	b	©	\bigcirc	
11.	a	b	©	d	
12.	a	b	©	d	
13.	a	b	©	d	
14.	a	b	©	\bigcirc	
15.	a	b	©	\bigcirc	
16.	a	b	©	\bigcirc	
17.	a	b	©	d	M
18.	a	b	©	d	
19.	a	b	©	d	
20.	a	b	©	d	
21.	a	b	©	d	
22.	a	b	©	d	
23.	a	b	©	d	
24.	a	b	©	\bigcirc	
25.	a	b	©	d	

Q.No.	R	espo	onse	
26.	(a)	(b)	©	(b)
27.	a	<u>Б</u>	©	(d)
28.	a	b	©	a
29.	a	b	©	a
30.	a	b	©	a
31.	a	b	©	a
32.	a	b	©	a
33.	a	b	©	a
34.	a	b	©	a
35.	a	b	©	a
36.	a	b	©	a
37.	a	b	©	a
38.	a	b	©	a
39.	a	b	©	a
40.	a	b	©	a
41.	a	b	©	a
42.	a	b	©	(1)
43.	a	b	©	(1)
44.	a	b	©	(1)
45.	a	b	©	(1)
46.	a	b	©	a
47.	a	b	©	(1)
48.	a	b	©	(0)
49.	a	b	©	(0)
50.	a	b	©	a

Q.No.	F	lespo	onse	
51.	a	b	©	d
52.	a	b	©	d
53.	a	b	©	d
54.	a	b	©	d
55.	a	b	©	d
56.	a	b	©	d
57.	a	b	©	d
58.	a	b	©	d
59.	a	b	©	d
60.	a	b	©	d
61.	a	b	©	d
62.	a	b	©	(b)
63.	a	b	©	d
64.	a	b	©	d
65.	a	b	©	d
66.	a	b	©	d
67.	a	b	©	d
68.	a	b	©	d
69.	a	b	©	d
70.	a	b	©	d
71.	a	b	©	d
72.	a	b	©	d
73.	a	b	©	d
74.	a	b	©	d
75.	a	b	©	a

Q.No.	Response			
76.	a	b	©	d
77.	a	b	©	(b)
78.	a	b	©	(b)
79.	a	b	©	d
80.	a	b	©	d
81.	a	b	©	d
82.	a	b	©	d
83.	a	b	©	d
84.	a	b	©	d
85.	a	b	©	d
86.	a	b	©	d
87.	a	b	©	(b)
88.	a	b	©	(b)
89.	a	b	©	d
90.	a	b	©	(b)
91.	a	b	©	(b)
92.	a	b	©	(d)
93.	a	b	©	d
94.	a	b	©	(d)
95.	a	b	©	(d)
96.	a	b	©	(d)
97.	a	b	©	d
98.	a	b	©	d
99.	a	b	©	d
100.	a	b	©	d

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ANSWERS WITH EXPLANATION

1. Option (c) is correct.

Explanation: It was launched in April 2016 to promote entrepreneurship at the grass-root level focusing on economic empowerment and job creation.

To leverage the institutional credit structure to reach out to the underserved sector of people such as SCs, STs and Women Entrepreneurs.

The objective of this scheme is to facilitate bank loans between Rs.10 lakh and Rs.1 crore to at least one SC or ST borrower and at least one woman borrower per bank branch of Scheduled Commercial Banks for setting up a Greenfield enterprise.

The offices of SIDBI (Small Industries Development Bank of India) and NABARD (National Bank for Agriculture and Rural Development) are designated Stand-Up Connect Centres (SUCC).

Recently, the Ministry of Finance has extended the Standup India Scheme up to the year 2025.

New Changes:

The margin money requirement for loans under the scheme has been reduced from '25% to 'upto 15%', and activities allied to agriculture have been included in the Scheme.

2. Option (b) is correct.

Explanation: In order to safeguard and support the world's agricultural heritage systems, in 2002 FAO started an initiative for the dynamic conservation of Globally Important Agricultural Heritage Systems (GIAHS). So, clearly, modern practices wouldn't be relevant to the initiative.

The initiative intends to safeguard the social, cultural, economic and environmental goods and services of these heritage systems.

There is no such provision, GI is accorded to products from a certain origin and not to traditional agricultural systems.

Food and Agriculture Organization:

- It is a specialised agency of the United Nations that leads international efforts to defeat hunger.
- The World Food Day is celebrated every year on 16th October to mark the anniversary of the founding of the FAO in 1945.

• It is one of the UN food aid organisations based in Rome (Italy). Its sister bodies are the World Food Programme and the International Fund for Agricultural Development (IFAD).

3. Option (d) is correct.

Explanation: The Brahmaputra (meaning the son of Brahma) originated from the Chemayungdung glacier in southwestern Tibet. Its source is very close to the sources of Indus and Satluj.

Mariam La separates the source of the Brahmaputra from the Manasarovar Lake.

In Tibet, it passes through the depression formed by the Indus-Tsangpo Structure Zone between the Great Himalayas in the south and the Kailash Range in the north.

Dibang, Kameng and Lohit are the tributaries of the Brahmaputra River.

Region	Brahmaputra's Name			
Tibet	Tsangpo (meaning 'The Purifier')			
China	Yarlung Zangbo Jiangin			
Assam Valley	Dihang or Siong, South of Sadiya: Brahmaputra			
Bangladesh	Jamuna River			
Bangladesh	Padma River: Combined Waters of Ganga and Brahmaputra			
Bangladesh	Meghana: From the confluence of Padma and Meghna			

4. Option (a) is correct.

Explanation: The Core Banking Solution (CBS) is the networking of branches, which enables customers to operate their accounts, and banking services from any branch of the bank on the CBS network, regardless of where they open their accounts.

It enables banks to offer a multitude of customer-centric services on a 24×7 basis from a single location.

Almost all branches of commercial banks, including the Regional Rural Banks (RRBs), are brought into the core-banking fold.

By Core Banking Solution, there is no change in RBI's control over commercial banks.

In Core Bank Solution there is no provision related to non-performing assets.

5. Option (c) is correct.

Explanation: Kyoto Protocol (COP 3; UNFCCC Summit 1997):

- It was adopted in Kyoto, Japan in 1997.
- India ratified Kyoto Protocol in 2002.
- It came into force in February 2005. There are currently 192 Parties.
- The Kyoto Protocol aimed to cut emissions of greenhouse gases across the developed world by about 5% by 2012 compared with 1990 levels.
- It is the only global treaty with binding limits on GHG emissions.

Classification of Parties and their commitments – Kyoto Protocol:

Annex I

Developed countries

Annex II

Developed countries (Annex II is a subset of Annex I).

Annex B

Annex I Parties with first or second-round Kyoto greenhouse gas emissions targets.

Non-Annex I

Parties to the UNFCCC not listed in Annex I of the Convention (mostly low-income developing countries).

Nagoya Protocol:

- This protocol is a legal framework for the implementation of one of the objectives of the Convention on Biological Diversity, which is the fair & equitable sharing of benefits arising out of the utilisation of genetic resources.
- The protocol was adopted in 2010 in Nagoya, Japan.
- It entered into force in October 2014. India signed the Nagoya Protocol in 2011 and ratified it in October 2012.

The Cartagena Protocol: It is an international agreement on biosafety as a supplement to the Convention on Biological Diversity (CBD) effective since 2003. The Biosafety Protocol seeks to protect biological diversity from the potential risks posed by genetically modified organisms resulting from modern biotechnology.

6. Option (b) is correct.

Explanation: The transcriptome is the set of all RNA transcripts, including coding and noncoding, in an individual or a population of cells. The term can also sometimes be used to refer to all RNAs or just mRNA depending on a particular experiment. The term transcriptome is a portmanteau of the words transcript and genome; it is associated with the process of transcript production during the biological process of transcription.

Two biological techniques are used to study the transcriptome, namely DNA microarray, a hybridisation-based technique and RNA-seq, a sequence-based approach, but RNA-seq is the preferred method.

7. Option (a) is correct.

Explanation: The Ministry of Health and Family Welfare launched the Immunisation Programme in India in 1978 as the Expanded Programme of Immunisation.

The Programme was modified as a universal Immunization Programme in 1985. It prevents children and pregnant women from 12 vaccine-preventable diseases, lowering mortality and morbidity.

It was established and implemented in 2015 with the goal of rapidly increasing full immunisation coverage to 90 percent.

It protects against 12 Vaccine-Preventable Diseases, including Diphtheria, Whooping Cough, Tetanus, Polio, Tuberculosis, Hepatitis B, Meningitis, Pneumonia, Rotavirus vaccine, Haemophilus influenzae type B infections, Japanese Encephalitis (JE), Pneumococcal Conjugate Vaccine (PCV), and Measles-Rubella vaccine (MR).

Mission Indradhanush has also been identified as a flagship initiative under the Gram Swaraj Abhiyan and Extended Gram Swaraj Abhiyan.

8. Option (c) is correct.

Explanation: The Green India Mission (GIM) is one of the eight missions launched under the National Action Plan on Climate Change (NAPCC).

It was launched in February 2014, is aimed at protecting, restoring and enhancing India's diminishing forest cover and responding to climate change by a combination of adaptation and mitigation measures.

It aims to enhance ecosystem services like carbon sequestration and storage (in forests

and other ecosystems), hydrological services and biodiversity; along with provisioning services like fuel, fodder, and timber and non-timber forest produces (NTFPs); and

To increase forest based livelihood income of about 3 million households.

9. Option (c) is correct.

Explanation: Every pre-packaged item in India should have the following information on the label:

- 1. Name of the food
- 2. List of ingredients
- 3. Declaration of food additives
- 4. Net quantity or net weight
- 5. Batch identification
- 6. Name and address of the manufacturer
- 7. Date marking
- 8. Veg/non veg declaration

10. Option (b) is correct.

Explanation: The Project Loon aims to tap the Earth's stratosphere to provide internet connectivity to the remote parts of the world. The project involves helium-filled balloons that remain in the stratosphere and create aerial wireless networks. The project has collaborated with several countries and their technology partners to provide internet connectivity.

At present, the internet connectivity system consists of only two basic methods, to deliver a connection, namely Signal from Space and Signal from Ground. Lately, the Project Loon has used these balloons as weather monitors.

11. Option (a) is correct.

Explanation: Net metering concept allows to set-off the number of units produced from the total consumption and the consumer pays electricity charges of only what he/she has derived from the grid or distribution company. Net metering is a billing mechanism that credits solar energy system owners for the electricity they add to the grid.

It allows domestic or commercial users who generate their own electricity using solar panels or photovoltaic systems to export their surplus energy back to the grid.

Advantage of Net Metering

 It is a low cost and easily administered method for the customer to invest in renewable energy technologies.

- Giving customers control over their electricity bills.
- Net metering allows utility customers to generate their own electricity cleanly and efficiently.
- Net metering provides substantial economic benefits in terms of jobs, income and investment in the renewable energy sector.
- By encouraging generation near the point of consumption, net metering also reduces the stress on distribution systems and prevents losses in long-distance electricity transmission and distribution.

12. Option (c) is correct.

Explanation: The Ease of Doing Business Index is published by the World Bank. It is an aggregate figure that includes different parameters which define the ease of doing business in a country.

Name of Reports Published by:

- 1. Ease of Doing Business World Bank
- 2. World Development Report World Bank
- 3. Environmental Performance Index World Economic Forum
- 4. Global Competitive Index World Economic Forum
- 5. Global Gender Gap Report World Economic Forum
- 6. Global Information Technology Report World Economic Forum
- 7. Human Capital Report World Economic Forum
- 8. The Global Risk Report. World Economic Forum
- 9. World Trade Outlook Indicator World Trade Organization (WTO)
- The Programme for International Student Assessment (PISA) - Organization of Economic Development and Cooperation (OECD)

13. Option (d) is correct.

Explanation: There were many different tribal groups in Medieval India. Some were huntergatherer nomads.

One such type of nomadic group was that of the banjaras.

They were the most important trader-nomads during the medieval period.

Their caravan was called *tanda*. Sultan Alauddin Khilji's market regulation system could become successful because he relied heavily on the banjaras to transport grains to the city markets.

14. Option (b) is correct.

Explanation: James Prinsep was an English scholar, orientalist, antiquary and the founding editor of the Journal of the Asiatic Society of Bengal. He is best remembered for deciphering the Kharosthi and Brahmi scripts of ancient India. He studied, documented and illustrated many aspects of numismatics, metallurgy, meteorology .

James Prinsep is considered as the first European Scholar to decipher the Ashokan Edicts of Ancient India.

15. Option (b) is correct.

Explanation:

Gram Nyayalayas was established by the Gram Nyayalayas Act, 2008 and came into force on October 2, 2009. Gram Nyayalayas are village courts in rural areas that provide quick and easy access to the legal system at grassroot levels in India. As per Article 39-A of the Indian Constitution, the destitute and weaker sections of society should receive free legal assistance.

Gram Nyayalayas - Features:

- 1. It shall be the court of Judicial Magistrate of the first class and its presiding officer (Nyayadhikari) shall be appointed by the state government in consultation with the High Court.
- 2. It shall be established for every panchayat and intermediate level.
- 3. It shall be a mobile court and shall exercise the powers of both the Criminal and the Civil courts.
- 4. The Gram Nyayalaya shall try to settle the disputes as far as possible by bringing about conciliation between the parties, and for this purpose, it shall make use of the conciliation to be appointed for this purpose and allow local social activists as mediators/reconciliators.

16. Option (d) is correct.

Explanation: The TPP (Trans-Pacific Partnership) was initially formed as an expansion of the Trans-Pacific Strategic Economic Partnership Agreement (TPSEP) signed by Brunei, Chile, New Zealand and

Singapore in 2005. The US President Donald Trump withdrew the US signature from TPP in January 2017, the agreement could not enter into force.

The Trans-Pacific Partnership Agreement was a proposed trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, Vietnam, and the United States signed on 4 February 2016 in Auckland.

The original TPP agreement consisted of measures to lower both non-tariff and tariff barriers to trade, and establish an Investor-State Dispute Settlement (ISDS) mechanism.

17. Option (a) is correct.

Explanation: The India-Africa Summit started in 2008 (first summit) is one of the most spectacular diplomatic exercises hosted by India since the 1983 Non-Aligned Movement (NAM) summit.

The India-Africa Forum Summit (IAFS) is the official platform for the African-Indian relations.

It is held once in every three years beginning from 2008.

India by consistently holding India-Africa Forum Summit (IAFS) in places like New Delhi (2008), Addis Ababa (2011) and New Delhi (2015) has already forged ties with the 54 African states through the African Union (AU).

18. Option (c) is correct.

Explanation: The MCLR will be calculated after factoring in banks' marginal cost of funds (largely, the interest at which banks borrow money), return on equity (a measure of banks' profitability), and other risks and costs.

The MCLR should be revised monthly by considering some new factors, including the repo rate and other borrowing rates.

Banks will also publically publish all kinds of MCLR periodically.

This will surely bring transparency in the calculation methodology.

The RBI expects the new formula to make floating lending rates more responsive to its policy rate cuts.

Based upon this MCLR, interest rate for different types of customers should be fixed in accordance with their riskiness. So, it becomes fair to both borrowers as well as lenders.

19. Option (a) is correct.

Explanation:



Figure: Kharai Camel

It can swim up to three kilometers into the sea in search of mangroves, its primary food.

The breed population has declined drastically in recent years due to loss of mangroves.

Given the breed's ability to survive both on land and sea, the Kharai camel is one of the most preferred choices of graziers in the arid coastal region of Kachchh.

People consume its milk, while male calves are sold for economic returns (females are not sold because they are considered sacred). So, clearly they are domesticated and don't live in the wild. Gujarat is the only home to the Kharai camel.

20. Option (a) is correct.

Explanation:



Figure: Musa Indandamanensis

Musa indandamanensis, a sweet species of banana with orange pulp, has been discovered in the islands of Andamans.

The banana species was found by a team of scientists from the Botanical Survey of India (BSI) from the Krishna Nalah tropical rain forest on the islands.

Musa indandamanensis is thrice the size of a regular banana species and has unique green flowers, and fruit bunch lux (axis).

It is about 11 metres high while, usual banana species is about 3 to 4 metres high.

It is very sweet compared to regular bananas.

21. Option (c) is correct.

Explanation:



Figure: INS Astradharini

INS Astradharini (translated as "she who keeps weapons") is an indigenously designed and built torpedo launch and recovery vessel built by Shoft Shipyard for the Indian Navy. It was commissioned to the Navy Service on 6 October 2015 at the Naval Base in Visakhapatnam and entered the Eastern Naval Command.

22. Option (a) is correct.

Explanation:

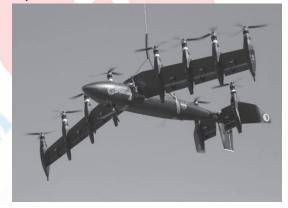


Figure: Greased Lightning-10 (GL-10)

The GL-10 Greased Lightning is a hybrid diesel-electric tiltwing unmanned aircraft.

The Greased Lightning or GL-10 is an electric plane with 10 engines tested by NASA that can take off and land like a helicopter and fly efficiently like an aircraft.

23. Option (c) is correct.

Explanation: The central government launched the Initiative for Nutritional Security through Intensive Millet Promotion (INSIMP) in 2011-12 to promote millets as "nutri-cereals". The scheme aims to catalyse increased production of millets in the country. In doing so, it aims to enhance India's nutritional security. It was launched under the Rashtriya Krishi Vikas Yojana. Certain districts with large crop area

under millets but with productivity less than that of the National Average Yield could be taken up for active promotion of production technologies through block demonstrations.

However, in case of small millets, which have low productivity in general and are taken by resource poor tribal farmers in remote interior areas, the production programme would be organized in all the identified districts irrespective of their productivity levels.

24. Option (a) is correct.

Explanation: When Lord Curzon, then Viceroy of India, announced the partition of Bengal in July 1905, the Indian National Congress, initiated the Swadeshi Movement in Bengal.

The Swadeshi Movement was launched as a protest movement which also gave a lead to the Boycott Movement in the country.

Bal Gangadhar Tilak, Bipin Chandra Pal and Lala Lajpat Rai are the key people in the Swadeshi Movement.

25. Option (b) is correct.

Explanation: Bodhisattva is central to the Mahayana sect of Buddhism. In non-Mahayana Buddhism, it usually refers either to Maitreya, the Buddha of the Future, or to the historical Buddha Gautama prior to his enlightenment.

A Bodhisattva is literally a living being (sattva) who aspires to enlightenment (bodhi) and carries out altruistic practices. The bodhisattva ideal is central to the Mahayana Buddhist tradition as the individual who seeks enlightenment both for him- or herself and for others.

Compassion, an empathetic sharing of the sufferings of others, is the bodhisattva's greatest characteristic.

26. Option (b) is correct.

Explanation: Médecins Sans Frontières (MSF) or Doctors without Borders is a Non-governmental Organisation.

It was founded on 20 December 1971 in France in response to the Biafran War (Nigerian Civil War).

It has no real "headquarters."

It has grown into an international association with 24 independent sections worldwide. It serves populations affected by epidemics, armed conflicts, natural calamities, and manmade disasters.

It delivers health care to some of the most deprived peoples on the planet.

27. Option (c) is correct.

Explanation: It is an international initiative to draw attention to the global economic benefits of biodiversity.

Its objective is to highlight the growing cost of biodiversity loss and ecosystem degradation and to draw together expertise from the fields of science, economics and policy to enable practical actions. It aims to assess, communicate and mainstream the urgency of actions through its five deliverables—

- D0: science and economic foundations, policy costs and costs of inaction,
- D1: policy opportunities for national and international policy-makers,
- D2: decision support for local administrators.
- D3: business risks, opportunities and metrics and
- D4: citizen and consumer ownership. It started from the G8+5 environment ministers since 2007.

It is hosted by the United Nations Environment Programme (UNEP).

28. Option (a) is correct.

Explanation:



Figure: Red Sanders

The Red Sanders (a tree) has highly restrictive distribution in the South Eastern portion of the Indian Peninsula (Eastern Ghats of South India) to which it is endemic.

It occurs in the forest formation which is classified as Southern Tropical Dry Deciduous Forests.

It is generally found at altitudes of 150 – 900 m. It grows on dry, hilly, often rocky ground, and occasionally found on precipitous hill sides. It prefers lateritic and gravelly soil and cannot tolerate water logging.

29. Option (d) is correct.

Explanation: REDD+ goes beyond simply deforestation and forest degradation.

- It aims to incentivise developing countries to reduce emissions from deforestation and forest degradation, conserve forest carbon stocks, sustainably manage forests and enhance forest carbon stocks.
- Conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries will certainly contribute to employment opportunities and help in poverty reduction. REDD+ can also contribute to achieving other SDGs – including those which address poverty reduction, health and well-being, hunger alleviation, and improving institutions.

30. Option (a) is correct.

Explanation: The GHG Protocol establishes comprehensive global standardised frameworks to measure and manage greenhouse gas (GHG) emissions from private and public sector operations, value chains and mitigation actions.

The Greenhouse Gas Protocol (GHG Protocol) is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions.

It is a decade-long partnership between the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

It is working with businesses, governments, and environmental groups around the world to build a new generation of credible and effective programs for tackling climate change.

31. Option (c) is correct.

Explanation: It is a non-statutory apex council under the Ministry of Finance constituted by the Executive Order in 2010.

The Raghuram Rajan Committee (2008) on financial sector reforms first proposed the creation of the FSDC (Financial Stability and Development Council).

It is chaired by the Finance Minister and its members include the heads of all Financial Sector Regulators (RBI, SEBI, PFRDA & IRDA), Finance Secretary, Secretary of Department of Economic Affairs (DEA), Secretary of Department of Financial Services (DFS), and Chief Economic Adviser.

In 2018, the government reconstituted the FSDC to include the Minister of State

responsible for the Department of Economic Affairs (DEA), Secretary of Department of Electronics and Information Technology, Chairperson of the Insolvency and Bankruptcy Board of India (IBBI) and the Revenue Secretary.

The FSDC sub-committee is headed by the Governor of RBI.

32. Option (a) is correct.

Explanation: Agenda 21 is a non-binding action plan of the United Nations with regard to sustainable development.

It is a product of the Earth Summit (UN Conference on Environment and Development) held in Rio de Janeiro, Brazil, in 1992. One major objective of the Agenda 21 initiative is that every local government should draw its own local Agenda 21. Its aim initially was to achieve global sustainable development by 2000, with the "21" in Agenda 21 referring to the original target of the 21st century.

33. Option (c) is correct.

Explanation: Satya Shodhak Samaj was founded with a purpose to give education to the Scheduled Caste, Scheduled Tribes and make them aware of the exploiting tradition of the society. It was founded by Jyotirao Phule in 1873 in Pune. It was a reformational society that promoted education, increased social rights, justice and political access in the deprived sections.

34. Option (d) is correct.

Explanation:

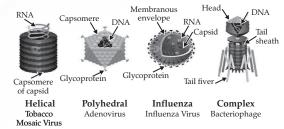


Figure: Types of Viruses

- A virus is a non-cellular, infectious entity made up of genetic material and protein that can invade and reproduce only within the living cells of bacteria, plants, and animals.
- They are called non-cellular because they don't have a cell structure, rather only have the genetic material.
- Viruses did not find a place in

classification since they are not truly 'living', if we understand living as those organisms that have a cell structure.

In addition to proteins, viruses also contain genetic material that could be either RNA or DNA.

No virus contains both, RNA & DNA.

Viruses cause diseases like mumps, smallpox, herpes & influenza. AIDS is also caused by a virus.

35. Option (b) is correct.

Explanation: Base Erosion and Profit Shifting (BEPS) refers to tax avoidance strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations. The Convention is an outcome of the OECD / G20 BEPS Project to tackle base erosion and profit shifting through tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no overall corporate tax being paid.

Double-tax avoidance treaties and tax-information exchange between member nations are used to curb this practice.

36. Option (a) is correct.

Explanation: India's first National Investment and Manufacturing Zone has been proposed to be set up in Andhra Pradesh. It would be constructed in 10 sq km of land in Prakasham district.

37. Option (b) is correct.

Explanation: The District Mineral Foundation (DMF) is set up as a non-profit body in those districts affected by the mining work. It is set up to work for the interest and benefit of persons and areas affected by mining related operations. It is funded through the contributions from miners.

Setting up of District Mineral Foundations (DMFs) was mandated through the Mines and Minerals (Development & Regulation) Amendment Act, (MMDRA) 2015.

Its manner of operation comes under the jurisdiction of the relevant State Government.

38. Option (d) is correct.

Explanation: SWAYAM

The Study Webs of Active Learning for Young Aspiring Minds (SWAYAM), was launched on July 9, 2017 by the Ministry of Human Resource Development to provide one integrated

platform and portal for online courses.

This covers all higher education subjects and skill sector courses.

The objective is to ensure that every student in the country has access to the best quality higher education at the affordable cost.

Academicians from hundreds of institutions throughout the country are involved in developing & delivering massive open online courses (MOOCs) through SWAYAM in almost all disciplines from senior schooling to Post Graduation.

Through this scheme, the Ministry has proposed to provide high quality e-content to all colleges and universities free of cost.

39. Option (d) is correct.

Explanation: Key Provisions:

- The Montague-Chelmsford Proposals were related to constitutional reforms.
- Introduction of Diarchy at the Provincial Level.
- Control over provinces was relaxed by demarcating subjects as 'central subjects' and 'provincial subjects'.
- The provincial government's subjects were separated into two divisions. i.e., reserved list and transferred list.
- Justice Administration, Press, Revenue, Forests, Labour Dispute Settlements, Water, Agricultural Loans, Police, and Prisons were among the items on the Reserved List.
- Bicameralism was introduced in the Central Legislature by this act.
- The legislators, under the new reforms, could now questions, pass adjournment motions and vote a part of the budget, but 75% of the budget was still not votable.

The communal representation was extended to include Sikhs, Europeans and Anglo-Indians. The Franchise (Right of Voting) was also granted but only to a limited number of people.

The Act provided for the establishment of a Public Service Commission in India.

It established an office of the High Commissioner for India in London.

40. Option (b) is correct.

Explanation:



Figure: Ajanta caves



Figure: Mahabalipuram

There is some evidence of architectural activity going back to the period of Mahendravarman-I (AD 600-30), the father of Mamalla, most of the monuments are attributed to the period of Narasimhavarman-I Mamalla (AD 630-68) – the Pallava ruler.

On the other hand Ajanta caves were excavated in different periods (2nd century B.C. to 6th century A.D.) according to necessity.

Mahabalipuram contains rock-cut rathas, sculptured scenes on open rocks like Arjuna's penance, the caves of Govardhanadhari and Mahishasuramardini, the Jala-Sayana Perumal Temple so, it is more linked to the Vaishnavites.

On the other hand, Ajanta is linked more to the Buddhist religious denomination.

Both Ajanta and Mahabalipuram have rockcut monuments because cave cut Chaityas, Viharas and Stupas can be clearly seen at Ajanta. Mahabalipuram is also famous for rock monument as above described.

41. Option (b) is correct.

Explanation: Cryptocurrency is a specific type of virtual currency, which is decentralised

and protected by cryptographic encryption techniques.

Bitcoin, Ethereum, Ripple are a few notable examples of cryptocurrencies.

Bitcoin is a type of digital currency that enables instant payments to anyone. Bitcoin was introduced in 2009. Bitcoin is based on an open-source protocol and is not issued by any central authority.

The system is peer-to-peer and transactions take place between users directly, without an intermediary. So, it is not tracked by the central bank or any intermediary.

Bitcoins can be sent directly to anyone, anywhere in the world. The only requirement is that you should have a Bitcoin address of the recipient. The process doesn't require you to reveal your identity.

42. Option (b) is correct.

Explanation:

- The New Development Bank (NDB) is a multilateral development bank jointly founded by the BRICS countries at the 6th BRICS Summit in Fortaleza, Brazil in 2014.
- It was formed to support infrastructure and sustainable development efforts in BRICS and other underserved, emerging economies for faster development through innovation and cutting-edge technology.
- It is headquartered in Shanghai, China.
- In 2018, the NDB received observer status in the United Nations General Assembly.
- It has committed funding to a number of major infrastructure projects in India, including the Mumbai Metro rail, Delhi-Ghaziabad-Meerut Regional Rapid Transit System and many Renewable Energy projects.

43. Option (d) is correct.

Explanation: The Gadgil Commission, an environmental research commission is named after its chairman. Madhav Gadgil. The commission is formally known as Western Ghats Ecology Expert Panel (WGEEP). The commission submitted the report to the Government of India on 31 August 2011.

The Western Ghats Ecology Expert Panel (WGEEP) designated the entire hill range as an Ecologically Sensitive Area (ESA).

The panel, in its report, has classified the 142 taluks in the Western Ghats boundary into Ecologically Sensitive Zones (ESZ) 1, 2 and 3.

The Kasturirangan Commission has sought to balance the two concerns of development and environment protection, by watering down the environmental regulation regime proposed by the Western Ghats Ecology Experts Panel's Gadgil report in 2012. The Kasturirangan report seeks to bring just 37% of the Western Ghats under the Ecologically Sensitive Area (ESA) zones — down from the 64% suggested by the Gadgil report.

44. Option (b) is correct.

Explanation: The Calcutta Unitarian Committee was established in 1823 by Rammohan Roy, Dwarkanath Tagore, and William Adam.

In 1868, Keshab laid the foundation stone of his new church, the Tabernacle of New Dispensation.

The Indian Reform Association was founded in 1870 with Keshub Chander Sen as president. It represented the secular side of the Brahmo Samaj and included many who did not belong to the Brahmo Samaj.

45. Option (a) is correct.

Explanation:



This map is not to scale and is for reference only.

Figure: Gulf Cooperation Council

The GCC (Gulf Cooperation Council) was established by an agreement concluded in 1981 among Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and UAE.

The structure of the GCC consists of the Supreme Council (the highest authority), the Ministerial Council and the Secretariat General. The Secretariat is located in Riyadh, Saudi Arabia.

It is a political, economical, social, and regional organisation according to its charter.

46. Option (c) is correct.

Explanation: The SGB (Sovereign Gold Bond) scheme was launched in November 2015 with an objective to reduce the demand for physical gold and shift a part of the domestic savings used for the purchase of gold into financial savings.

The Gold Bonds are issued as the Government of India Stock under the Government Securities (GS) Act, 2006.

These are issued by the RBI (Reserve Bank of India) on behalf of the Government of India.

Bonds are sold through commercial banks, Stock Holding Corporation of India Limited (SHCIL), designated post offices and recognised stock exchanges viz. National Stock Exchange of India Limited and Bombay Stock Exchange, either directly or through agents.

The bonds are restricted for sale to resident individuals, Hindu Undivided Families (HUFs), trusts, universities and charitable institutions.

The Gold Bonds come with a maturity period of eight years, with an option to exit the investment after the first five years.

A fixed rate of 2.5% per annum is applicable on the scheme, payable semi-annually.

The interest on Gold Bonds shall be taxable as per the provision of the Income Tax Act, 1961.

Benefit:

- Bonds can be used as collateral for loans.
- The capital gains tax arising on redemption of SGB to an individual has been exempted.
- The scheme doesn't intend to bring FDI in the gold and jewellery sector.

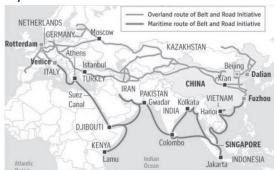
Gold Monetisation Scheme:

- The scheme was launched in November 2015 along with sovereign gold bonds and India gold coins.
- It facilitates the depositors of gold to earn interest on their metal accounts.
- Under the scheme, a depositor gets 2.25% interest annually for a short-term deposit of one year to three years. Medium-and long-term deposits get 2.5% interest rate.

 Both schemes aim at reducing physical demand of gold and thus bring down gold imports.

47. Option (d) is correct.

Explanation:



This map is not to scale and is for reference only.

Figure: Belt and Road Initiative Map

The BRI consisting of the land-based belt, 'Silk Road Economic Belt', and 'Maritime Silk Road', aims to connect the East Asian economic region with the European economic circle and runs across the continents of Asia, Europe and Africa.

The BRI is China's ambitious project announced in 2013. It covers about 65% of the world population, 60% of the world GDP and over 70 countries in six economic corridors.

China wants to revive and renew the overland and maritime trade links between China, Europe, West Asia, and East Africa.

48. Option (a) is correct.

Explanation: Pradhan Mantri Mudra Yojana (PMMY):

- It was launched by the government in 2015 for providing loans up to Rs. 10 lakh to the non-corporate, non-farm small/micro-enterprises. MUDRA, which stands for Micro Units Development & Refinance Agency Ltd., is a financial institution set up by the Government.
- It provides funding (collateral-free loans) through various last-mile financial institutions like Banks, Non-Banking Financial Companies (NBFCs) and Micro Finance Institutions (MFIs).
- MUDRA does not lend directly to microentrepreneurs/individuals.

MUDRA has created three products, i.e., 'Shishu', 'Kishore' and 'Tarun'.

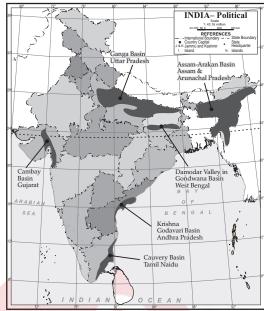
Shishu: Covering loans up to Rs. 50,000.

Kishore: Covering loans above Rs. 50,000 and up to Rs. 5 lakh.

Tarun: Covering loans above Rs. 5 lakh and up to Rs. 10 lakh.

49. Option (d) is correct.

Explanation:



This map is not to scale and is for reference only.

Figure: Shale Gas Region in India

Unlike conventional hydrocarbons that can be extracted from the permeable rocks easily, shale gas is trapped under low permeable rocks. The key difference between shale oil and conventional crude is that the former, also called 'tight oil', is found in smaller batches, and deeper than conventional crude deposits.

The Ministry of Petroleum and Natural Gas (MoPNG) has identified six basins as potentially shale gas bearing. These are Cambay, Assam-Arakan, Gondwana, Krishna-Godavari, Kaveri, and the Indo-Gangetic plain.

50. Option (b) is correct.

Explanation: The formation of the IMF was initiated in 1944 at the Bretton Woods Conference. It came into operation on 27th December 1945. It consists of 189 member countries.

It is headquartered in Washington, D. C. It focuses on fostering global monetary cooperation, securing financial stability, facilitating and promoting international trade, employment, and economic growth around the world.

World Economic Outlook (WEO), Global Financial Stability Report (GFSR), and Fiscal Monitor (FM) are the reports published by IMF.

51. Option (c) is correct.

Explanation: The scheme was launched on 9th May, 2015, with the objective of creating a universal social security system for all Indians,

especially the poor, the under-privileged and the workers in unorganised sector.

It is administered by the Pension Fund Regulatory and Development Authority through the National Pension System (NPS).

Eligibility: Any citizen of India can join the APY (Atal Pension Yojana) scheme.

 The age of the subscriber should be between 18-40 years. The contribution levels would vary and would be low if a subscriber joins early and increases if she/he joins late.

Benefits: It provides a minimum guaranteed pension ranging from Rs. 1000 to Rs. 5000 on attaining 60 years of age.

The amount of pension is guaranteed for lifetime to the spouse on death of the subscriber.

In the event of death of both the subscriber and the spouse, the entire pension corpus is paid to the nominee.

It is open to all bank account holders who are not members of any statutory social security scheme.

52. Option (b) is correct.

Explanation: Regional Comprehensive Economic Partnership (RCEP):

- It is a regional Free Trade Agreement between ASEAN and 6 other countries, viz. India, China, Japan, South Korea, Australia and New Zealand.
- India had been a part of negotiations for almost nine years till it pulled out in November 2019, stating 'inadequate safeguards and lowering of customs duties will adversely impact its manufacturing, agriculture and dairy sectors'.
- Association of South-East Asian Nations (ASEAN): It is a regional grouping of 10 south-east Asian countries.
- The member-nations include Thailand, Myanmar, Singapore, Indonesia, Vietnam, among others.

53. Option (d) is correct.

Explanation: The Government of India set up the Bureau of Energy Efficiency (BEE) on 1st March 2002 under the provisions of the Energy Conservation Act, 2001.

The mission of the Bureau of Energy Efficiency (BEE) is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall

framework of the Energy Conservation Act, 2001 with the primary objective of reducing energy intensity of the Indian economy.

The Standards & Labelling Programme is one of the major thrust areas of BEE.

The scheme targets display of energy performance labels on high energy end -use equipment & appliances and lays down minimum energy performance standards.

Appliances which need to have an energy rating label mandatorily: Frost-free refrigerator, Tubular Fluorescent Lamps, Room Air-Conditioners, Distribution Transformer, Colour TV, CST AC, Direct Cool Refrigerator and Electric Geyser.

The appliances with the lowest energy consumption in a product category are given the most stars and those with the highest energy consumption are given the least.

54. Option (d) is correct.

Explanation: The International Thermonuclear Experimental Reactor (ITER) is a collaboration of 35 nations launched in 1985.

- The ITER members include China, the European Union, India, Japan, South Korea, Russia and the United States.
- It is located in France.
- It aims to build the world's largest tokamak to prove the feasibility of fusion as a large-scale and carbon-free source of energy.
- Tokamak is a magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbonfree source of energy based on the same principle that powers our Sun and stars.
- A fusion power plant uses this heat to produce steam and then electricity by way of turbines and generators.

55. Option (d) is correct.

Explanation: A special category of land, Eripatti or tank land, was known only in south India. This was land donated by individuals, the revenue from which was set apart for the maintenance of the village tank, which indicates the dependence of the village on the tank for irrigation.

Taniyurs were distinct revenue units under Cholas.

In South India, centres of higher learning were known as Ghatikas. There was a famous Ghatika at Kanchi, drawing students from far and near. These Ghatikas were run in temples.

56. Option (a) is correct.

Explanation: It is an Indian initiative that was launched by the Prime Minister of India and the President of France on 30th November 2015 in Paris, France on the side-lines of the UNFCCC Conference of the Parties (COP-21), with 121 solar resource rich countries lying fully or partially between the Tropic of Cancer and Tropic of Capricorn as prospective members.

The alliance includes around 120 countries (not all UN members) that support the "Declaration on the occasion to launch the international solar alliance of countries dedicated to the promotion of solar energy".

It is headquartered in India with its Interim Secretariat being set up in Gurugram.

57. Option (b) is correct.

Explanation: The European Stability Mechanism is a European Union agency that provides financial assistance, in the form of loans, to Eurozone countries or as new capital to banks in difficulty.

58. Option (c) is correct.

Explanation: Weeds usually grow in between the plant rows due to the availability of moisture on that strip of land. In drip irrigation, water is applied directly to the roots, and not the entire field (thus excluding the land space between plants where weeds usually grow). So, weed growth is inhibited.

Generally, excessive logging and flooded fields suffer from higher salinity. So, replacing conventional irrigation may help in curbing water-logged soil salinity, but we cannot claim that if drip irrigation system is installed on a farm land, it would always reduce soil salinity. Drip irrigation reduces soil erosion as water is delivered directly to plant roots at a very slow rate (unlike surface irrigation where water velocity can be fast).

59. Option (c) is correct.

Explanation: DigiLocker is one of the key initiatives under the Digital India Programme. This was released by the Department of Electronics and Information Technology (DEITY), Government of India.

This is the government's effort to create an electronic version of documents, which can be easily verified and stored in the printable format

The users can store their documents such as insurance, medical reports, PAN card, passport, marriage certificate, school certificate

and other documents in the digital format.

The locker can be accessed by individuals, using their mobile number.

60. Option (b) is correct.

Explanation: Pattiseema Lift Irrigation project is the first river-linking project in India, connecting the Godavari with Krishna.

The project has been launched in Andhra Pradesh.

River Kaveri:

- It rises at Talakaveri in the Brahmagiri Hill of the Western Ghats in the state of Karnataka and drains into the Bay of Bengal (Tamil Nadu).
- It is the third-largest river in south India after Godavari and *Krishan*.
- It is also known as the Ganges of the South. Hemavati, Harangi, Amaravati, Shimsha are the few important tributaries.

River Krishna:

- It originates in the Western Ghats near Mahabaleshwar and empties into the Bay of Bengal.
- Ghatprabha, Malprabha, Tungabhadra, Bhima, and Musi are the few important tributaries.

River Godavari:

- It rises from Trimbakeshwar in the Nashik district of Maharashtra and drains into the Bay of Bengal.
- Penganga, Wainganga, Wardha and Manjira are the few important tributaries.

River Narmada:

- It is the largest west flowing river.
- It acts as the natural boundary between North and South India.
- It originates in the Amarkantak plateau and empties into the Arabian sea.

61. Option (b) is correct.

Explanation: The National Air Quality Index was launched in 2014 with the outline 'One Number – One Color – One Description' for the common man to judge the air quality within his vicinity.

The measurement of air quality is based on eight pollutants, namely:

- 1. Particulate Matter (PM10),
- 2. Particulate Matter (PM2.5),
- 3. Nitrogen Dioxide (NO₂),
- 4. Sulphur Dioxide (SO₂),
- 5. Carbon Monoxide (CO),
- 6. Ozone (O_3) ,
- 7. Ammonia (NH_3) , and
- 8. Lead (Pb).

The AQI has six categories of air quality. These are:

- 1. Good,
- 2. Satisfactory,
- 3. Moderately Polluted,
- 4. Poor,
- 5. Very Poor and
- 6. Severe.

It has been developed by the CPCB (Central Pollution Control Board) in consultation with IIT-Kanpur.

62. Option (d) is correct.

Explanation:



Figure: ASTROSAT



Figure: ASTROSAT (Infographic)

ASTROSAT is India's first dedicated multi-wavelength space observatory. ASTROSAT will observe universe in the optical, ultraviolet, low and high energy X-ray regions of the electromagnetic spectrum.

India's observatory will be the fourth in space after the Hubble (USA), Russia's Spektr R and Suzaku of Japan.

63. Option (c) is correct.

Explanation: In Sanskrit, the term Araghatta has been used to define the Persian wheel in ancient texts.

The 'Araghatta' is a result of the combination of the words 'ara' meaning spoke and 'ghatta' meaning pot. There is proof to suggest that this system was possibly developed in India in the past to raise water from open wells. It began to be considered the Persian wheel, with using it in Iran, later in Persia, and maybe its discovery there.

It is usually operated by draught animals like bullocks, buffaloes or camels.

64. Option (d) is correct.

Explanation: Memorising of chronicles, dynastic histories and epic tales was the work of a different group of people, the Sutas and Magadhas, who were the descendants of priestly families of the Vedic period.

Shramana means seeker, one who performs acts of austerity, ascetic.

Agraharika means one who probably looked after the lands given in charity.

Parivraajaka literally means 'one who roams about all round the place.'

65. Option (d) is correct.

Explanation:



Figure: Blue Mormon

Maharashtra has become the first state in the country to have a 'State Butterfly'. The Blue Mormon is a large, swallowtail butterfly found primarily in Sri Lanka and India, mainly restricted to the Western Ghats of Maharashtra, South India and coastal belts. It may occasionally be spotted in the Maharashtrian mainland between Vidarbha and Western Maharashtra. It is the second largest butterfly found in India. First largest butterfly is Southern Birdwing.

66. Option (c) is correct.

Explanation:

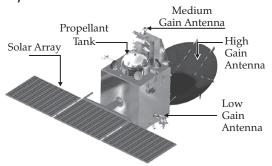


Figure: The Mangalyaan

The Mars Orbiter Mission (MOM) has various achievements to its credit after it was inserted into Mars orbit on September 24, 2014.

The details of significant achievements of MOM include:

- 1. First interplanetary mission realised by India.
- 2. First Indian spacecraft to successfully survive Van Allen belt crossing 39 times.
- 3. First Indian spacecraft to escape the Sphere Of Influence of Earth and orbit Sun.
- 4. First Mars mission in the world to succeed Mars Orbit Insertion in first attempt.
- 5. Most economical interplanetary mission in the world with a budget of Rs. 450 Cr.

Since the first successful flyby in 1965, four entities have successfully made it to Mars:

The NASA, the Soviet Union, the European Space Agency and the Indian Space Research Organisation.

67. Option (b) is correct.

Explanation: Surat Split (1907) refers to the splitting of the Congress party into 'Moderates' and 'Extremists' after a clash at the session.

The extremists were led by Lokmanya Tilak, Lajpat Rai and Sri Aurobindo, and the moderates were led by Gopal Krishna Gokhale, Pherozeshah Mehta and Surendranath Banerjee. They lack faith in the capacity of the moderates to negotiate with the British Government. The divided Congress re-united in the crucial Lucknow session of Congress in 1916.

68. Option (d) is correct.

Explanation: The Cripps Mission was sent to India under the presidentship of Stafford Cripps in March 1942. The intention was to get Indian support for the Britishers in the ongoing World War II. It proposed:

- An Indian Dominion that will be free to decide its relations with the Commonwealth and the United Nations.
- A constituent assembly to be convened to frame a new constitution.
- Any province not willing to join the Union could have a separate constitution.
- The defense of India will remain in British hands.

69. Option (c) is correct.

Explanation: Bagelkhand or Baghelkhand is a region and also a mountain range in central India that covers the northeastern regions of Madhya Pradesh and a small area of the western Uttar Pradesh.

Bodhgaya is in Bihar.

The Khajuraho group of monuments was built during the rule of the Rajput Chandela dynasty of Bundelkhand.

Vidarbha is the eastern region of the Indian state of Maharashtra, comprising Nagpur Division and Amravati Division. Shirdi is a town and falls under Ahmednagar District in Maharashtra. It is not in the Vidarbha region. Tirupati lies in the Rayalaseema region of Andhra Pradesh.

70. Option (d) is correct.

Explanation: If Rajya Sabha passes a resolution by a majority of not less than two-thirds of members present and voting saying that it is "necessary or expedient in the national interest" that Parliament should make a law on a matter enumerated in the State List, Parliament becomes empowered to make a law on the subject specified in the resolution, for the whole or any part of the territory of India. Such a resolution remains in force for a maximum period of one year, but this period can be extended by one year at a time by passing a similar resolution further.

71. Option (d) is correct.

Explanation: Government of Rajasthan is planning to develop an Inland Shipping Port at Jalore which would be connected to the Arabian Sea by developing a channel along the Kutch Creek and was discussed by the officers of the Rajasthan Government with the officials of the Inland Waterways Authority of India (IWAI).

72. Option (b) is correct.

Explanation: 21st Conference of Parties (COP21) also known as Paris Agreement successfully concluded in Paris under the United Nations Framework Convention on

Climate Change (UNFCCC). The agreement is scheduled to go into effect from 2020.

One of the main focuses of the agreement is to hold the increase in the global average temperature below 2°C above pre-industrial level and on driving efforts to limit it even further to 1.5°C. It covers all the crucial areas identified as essential for a comprehensive and balanced agreement, including mitigation, adaptation, loss and damage, finance, technology development and transfer, capacity building and transparency of action and support.

73. Option (b) is correct.

Explanation: The first report of the Club of Rome was the famous "The limits to growth" thesis brought out in 1972.

While the report did talk about the need to reduce our consumption habits and sustainable development, it is hard to conclude that the SDGs were first proposed by them.

This is because SDGs are a comprehensive set of goals that include not only environmental conservation, but also reducing poverty, ensuring education, curbing malnutrition and hunger etc. It is officially known as "Transforming our world: the 2030 Agenda for Sustainable Development".

74. Option (a) is correct.

Explanation: It is a 2015 British biographical drama film based on the 1991 book of the same name by Robert Kanigel.

The film stars Dev Patel as the real-life Srinivasa Ramanujan, a Mathematician who after growing up poor in Madras, India, earns admittance to Cambridge University during World War I, where he becomes a pioneer in Mathematical Theories.

75. Option (b) is correct.

Explanation: The minimum age for contesting elections to panchayats is 21 years. In case of dissolution of Panchayats before expiry of its term, it is mandatory to hold elections within 6 months of its dissolution.

Every panchayat shall continue for full term of 5 years. However, a Panchayat reconstituted, after premature dissolution, shall continue for only the reminder of the period. If the period is less than 6 months, then election is not mandatory.

76. Option (b) is correct.

Explanation: When the Lok Sabha is dissolved, all business including bills, motions, resolutions, notices, petitions and

so on pending before it or its committees lapses. They (to be pursued further) must be reintroduced in the newly-constituted Lok Sabha.

However, some pending bills and all pending assurances that are to be examined by the Committee on Government assurances do not lapse on the dissolution of the Lok Sabha.

The position with respect to the lapsing of bills is as follows:

- A bill pending in the Lok Sabha lapses (whether originating in the Lok Sabha or transmitted to it by the Rajya Sabha).
- A bill passed by the Lok Sabha but pending in the Rajya Sabha lapses.
- A bill not passed by the two Houses due to disagreement and if the president has notified the holding of a joint sitting before the dissolution of Lok Sabha, does not lapse.
- A bill pending in the Rajya Sabha but not passed by the Lok Sabha does not lapse.
- A bill passed by both Houses but pending assent of the president does not lapse.
- A bill passed by both Houses but returned by the president for reconsideration of Houses does not lapse.

77. Option (c) is correct.

Explanation: The Global Hunger Index (GHI) is designed to comprehensively measure and track hunger globally and by country and region. Calculated each year by the International Food Policy Research Institute (IFPRI), the GHI highlights success and failure in hunger reduction and provides insights into the drivers of hunger.

It combines the following four component indicators into one index:

- **1. Undernourishment:** The proportion of undernourished people as a percentage of the population.
- **2. Child wasting:** The proportion of children under the age of five who suffer from wasting (that is, low weight for their height, reflecting acute under nutrition).
- **3. Child stunting:** The proportion of children under the age of five who suffer from stunting (that is, low height for their age, reflecting chronic under nutrition).
- **4. Child mortality:** The mortality rate of children under the age of five.

78. Option (c) is correct.

Explanation: Budget deficit is used to define a status of financial health in which expenditures exceed revenue. Reducing the revenue expenditure will certainly help in bridging the gap. Unnecessary revenue expenditure bloats the fiscal deficit, and since it forms the majority of government spending, its reduction has a very large effect on the fiscal deficit. Subsidies as a part of expenditure and rationalising them would reduce the deficit.

Introducing new welfare schemes will further increase the fiscal deficit.

Reducing import duty reduces tax revenue and thus increases the fiscal deficit.

79. Option (b) is correct.

Explanation: A payments bank (Airtel Payments Bank, India Post Payments Bank, etc.) is like any other bank, but operating on a smaller or restricted scale.

Credit risk is not involved with the Payments Bank. It can carry out most banking operations but cannot advance loans or issue credit cards. It can accept demand deposits only, i.e., savings and current accounts, not time deposits.

The Payment Banks cannot set up subsidiaries to undertake non-banking financial services activities.

There are two kinds of banking licences that are granted by the Reserve Bank of India - universal bank licence and differentiated bank licence.

Payments bank comes under a differentiated bank licence since it cannot offer all the services that a commercial bank offers. In particular, a payments bank cannot lend.

It can take deposits upto Rs. 1 lakh per account and it can issue debit cards but not credit cards.

Eligible promoters (mentioning only some of them):

Existing non-bank Pre-paid Payment Instrument (PPI) issuers; and other entities such as individuals / professionals; Non-Banking Finance Companies (NBFCs), corporate Business Correspondents(BCs), mobile telephone companies, super-market chains, companies, real sector cooperatives; that are owned and controlled by residents; and public sector entities may apply to set up payments banks.

80. Option (c) is correct.

Explanation: Using light to deliver wireless internet will also allow connectivity in environments that do not currently readily

support Wi-Fi, such as aircraft cabins, hospitals and hazardous environments.

The light is already used for data transmission in fibre-optic cables and for point to point links, but Li-Fi is a special and novel combination of technologies that allow it to be universally adopted for mobile ultra -high speed internet communications. Using the visible light spectrum, Li-Fi technology can transmit data and unlock capacity which is 10,000 times greater than that available within the radio spectrum.

81. Option (b) is correct.

Explanation: The Intended Nationally Determined Contribution is associated with UNFCCC (United Nations Framework Convention on Climate Change). It identifies the plan of action outlined by the countries of the world to combat climate change under the Paris Agreement. The Paris Agreement was agreed in December 2015 at the 21st session of the Conference of the Parties (CoP21).

The countries publicly outlined what post-2020 climate actions they intended to take under the new international agreement.

82. Option (d) is correct.

Explanation: The UDAY (Ujwal DISCOM Assurance Yojana) comes under the Ministry of Power. It provides for the financial turn around and revival of Power Distribution companies (DISCOMs) and also ensures a sustainable permanent solution to the problem.

Under UDAY, state governments will take over 75% of the debt held by their DISCOMS as of September 30, 2015. The balance 25% of the debt is to be serviced through state government-guaranteed bonds issued by the DISCOMS.

83. Option (c) is correct.

Explanation: The IFC (International Finance Corporation) is a member of the World Bank Group (WBG), and at the same time it's called the World Bank's private sector lending arm with a stated objective to ensure that any financing does not result in harm to communities and the environment.

Masala Bonds are bonds issued outside India by an Indian entity or corporate. These bonds are issued in the Indian currency. Indian corporates usually issue Masala Bonds to raise funds from foreign investors. As it is pegged into Indian currency, if the rupee rates fall, investors bear the risk. In simpler words, as Masala Bonds are rupee-denominated bonds, the risk goes directly to the investor. The first Masala bond was issued in 2014 by the IFC for the infrastructure projects in India.

84. Option (c) is correct.

Explanation: Land revenue was the chief source of income. Land was divided into four categories for purpose of assessment- wet land, dry land, orchards and woods. Usually, the share was one sixth of the produce. Land revenue could be paid in cash or kind. The rates varied according to the type of the crops, soil, method of irrigation, etc.

Besides, the land tax, many professional taxes were also imposed. There was tax on shopkeepers, farm servants, workmen, posters, shoemakers, musicians etc. There was also a tax on property. Grazing and house taxes were also imposed. Private owners of workshops paid an industries tax.

85. Option (b) is correct.

Explanation: The Malavikagnimitram is a Sanskrit play written by Kalidasa. Based on some events of the reign of Pushyamitra Shunga.

Malavikagnimitram tells the story of the love of Agnimitra, the Shunga Emperor at Vidisha, for the beautiful handmaiden of his chief queen. He falls in love with the picture of an exiled servant girl named Malavika.

Kalidasa was a Classical Sanskrit writer, and his plays and poetry are primarily based on the Vedas, the Ramayana, the Mahabharata and the Puranas.

Kalidasa wrote

Three plays:

- Malavikagnimitram
- Abhijnanasakuntalam (Of the recollection of Shakuntala) tells the story of King Dushyanta who, while on a hunting trip, meets Shakuntala.
- Vikramorvasiyam (Urvashi Won by Valour) tells the story of mortal King Pururavasand celestial nymph Urvashi who falls in love.

Two epic poems:

- Raghuvamsa (poem about the kings of Raghu dynasty).
- Kumarasambhava (describes the birth and adolescence of the goddess Parvati, and her marriage with Lord Shiva).

Two khandakavyas (minor poems):

- Ritusamhara (describes the six seasons)
- Meghaduta (The Cloud Messenger) describes the story of a Yaksha trying to

send a message to his lover through a cloud.

86. Option (a) is correct.

Explanation: In WTO terminology, subsidies in general are identified by "Boxes" which are given the colours of traffic lights: green (permitted), amber (slow down – i.e., be reduced), red (forbidden).

The 'amber box': For agriculture, all domestic support measures considered to distort production and trade (with some exceptions) fall into the amber box.

The 'green box': In order to qualify for the "green box", a subsidy must not distort trade or at the most cause minimal distortion.

The 'blue box': The blue box is an exemption from the general rule that all subsidies linked to production must be reduced or kept within defined minimal ("de minimis") levels.

87. Option (d) is correct.

Explanation: The Capital Budget is an account of the assets as well as liabilities of the central government, which takes into consideration changes in capital. It consists of capital receipts and capital expenditure of the government.

The main items of capital receipts are loans raised by the government from the public which are called market borrowings, borrowing by the government from the Reserve Bank and commercial banks and other financial institutions through the sale of treasury bills, loans received from foreign governments and international organisations, and recoveries of loans granted by the central government.

Capital Expenditure includes expenditure on the acquisition of land, building, machinery, equipment, investment in shares, and loans and advances by the central government to state and union territory governments, PSUs and other parties.

88. Option (c) is correct.

Explanation: The United Nations Convention to Combat Desertification (UNCCD) was established in 1994. It is the only legally binding international agreement that links environment and development to sustainable land management.

It aims to promote effective action through innovative national programmes and supportive international partnerships. It is committed to a bottom-up approach and encourages the participation of local people in combating desertification. It focuses on some

particular areas like Africa, Latin America, Asia and the Caribbean, the Northern Mediterranean and Central and Eastern Europe.

89. Option (d) is correct.

Explanation: The Executive Board of the International Monetary Fund decided to include the Chinese currency, the Renminbi (Yuan), into its basket of currencies (with effect from October 1, 2016) that make up the IMF's Special Drawing Right (SDR). SDRs are artificial currency created to augment international liquidity. It is neither a currency nor a claim on the IMF rather it supplements the existing reserves of member countries of the IMF. To be included as SDR, a currency must be freely usable, widely used and widely traded. U.S. Dollar, the Euro, British Pound and the Japanese Yen form the SDR basket.

90. Option (c) is correct.

Explanation: The **IMFC** (International Monetary and Financial Committee) advises and reports to the IMF Board of Governors on the supervision and management of the international monetary and financial system, including on responses to unfolding events that may disrupt the system, although the IMFC has no formal decision-making powers, in practice, it has become a key instrument for providing strategic direction to the work and policies of the IMF. A number of international institutions, including the World Bank, participate as observers in the IMFC's meetings.

91. Option (c) is correct.

Explanation: Rashtriya Garima Abhiyan (National Campaign for Dignity and Eradication of Manual Scavenging) aims eradication of the inhuman practice of manual scavenging and comprehensive rehabilitation of manual scavengers in India. The campaign started in 2001.

It has proven to be a very innovative and effective program to eliminate manual scavenging practice.

The Ministry of Social Justice and Empowerment has associated NGOs like Safai Karamchari Andolan, Rashtriya Garima Abhiyan, Sulabh International, etc. for the identification of manual scavengers and their rehabilitation.

92. Option (c) is correct.

Explanation: The twelfth century witnessed the emergence of a new movement in Karnataka, led by Basavanna (1106-68) who

was a minister in the court of a Kalachuri ruler. His followers were known as Virashaivas (heroes of Shiva) or Lingayats (wearers of the linga).

Lingayats rejected the caste hierarchy and they also questioned the theory of rebirth. These won them followers amongst those who were marginalised in the society.

Siddhas believe in the oneness of the transcendental being in the world as well as charity towards men. This clearly shows they believed in one God, i.e., monotheism. They condemned idolatry.

93. Option (d) is correct.

Explanation: Import cover is an important indicator of the stability of the currency. It measures the number of months of money available in the national bank to cover the cost of imports or the stock of foreign exchange reserves in terms of months of retained imports of goods as at the end of the year. This is to avoid a BoP (Balance of Payment) crisis, so that early preventive action can be taken. India has an import cover of around 12 months presently.

94. Option (c) is correct.

Explanation: Kurds are an ethnic group in the Middle East. Kurds inhabit a mountainous region straddling the borders of Turkey, Iraq, Syria, Iran and Armenia.

The Madhesi also referred to as Teraibasi Nepali are an indigenous ethnic group of Nepalese people who are natives of the Madhesh plains of Southern Nepal in the Terai belt of South Asia.

Rohingyas Muslims and Buddhist Rakhines have been indulging in fights and riots in Myanmar. Many of their enemies refuse to acknowledge that the Rohingya are an ethnically distinct group.

95. Option (b) is correct.

Explanation: The OPCW is the Hague-based autonomous body which works within the framework of the United Nations. It was established in 1997 by the Chemical Weapons Convention to carry out its mandate.

The OPCW Member states share the collective goal of preventing chemistry from ever again being used for warfare, thereby strengthening international security.

It contains four key provisions:

 Destroying all existing chemical weapons under international verification by the OPCW;

- 2. Monitoring chemical industry to prevent new weapons from re-emerging;
- 3. Providing assistance and protection to States Parties against chemical threats;
- 4. Fostering international cooperation to strengthen the implementation of the Convention and promote the peaceful use of chemistry.

96. Option (b) is correct.

Explanation: The PMFBY (Pradhan Mantri Fasal Bima Yojana) was launched on 13th January 2016.

- It was conceived as a milestone initiative to provide a comprehensive risk solution at the lowest uniform premium across the country for farmers.
- It provides a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers.
- **Scope:** All food & oilseed crops and annual commercial/horticultural crops for which past yield data is available.
- **Premium:** The prescribed premium is 2% to be paid by farmers for all Kharif crops and 1.5% for all rabi crops. In the case of annual commercial and horticultural crops, the premium is 5%.
- Post-Harvest Losses (arising out of cyclones and unseasonal rains) coverage is available only up to a maximum period of two weeks from harvesting.

97. Option (d) is correct.

Explanation:



Figure: Great Indian Hornbill



This map is not to scale and is for reference only.

Figure: Hornbill Location

- The hornbills (*Bucerotidae*) are a family of birds found in tropical and subtropical Africa and Asia.
- India is home to nine species of hornbills.
 The northeastern region has the highest diversity of hornbill species within India.
- The great hornbill is the state bird of Arunachal Pradesh and Kerala.
- The Hornbill festival celebrated in Nagaland is named after the bird – Hornbill which is the most revered and admired bird for the Nagas.
- The great hornbill is evaluated as vulnerable.
- It is protected at the highest level under Schedule I of the Wildlife Protection Act, 1972.

98. Option (a) is correct.

Explanation: The National Ganga River Basin Authority (NGRBA) is a financing, planning, implementing, monitoring and coordinating authority for the Ganges River, functioning under the Jal Shakti ministry of India. Its objective is to safeguard the drainage basin which feeds water into the Ganges by protecting it from pollution or overuse. Union government in a notification issued on 20 September 2016 has formed a new body named "National Council for River Ganga (Rejuvenation, Protection and Management)" NCRG to replace existing NGRBA.

National Ganga Council

• The National Ganga Council is chaired by Prime Minister. The National Ganga Council is formed under the Environment (Protection) Act (EPA), 1986.

- The National Mission for Clean Ganga (NMCG) acts as an implementation arm of the National Ganga Council.
- The aims and objectives of NMCG are to ensure effective control of pollution and rejuvenation of the river Ganga by adopting a river Basin approach to promote inter-sectoral coordination for comprehensive planning and management.

99. Option (b) is correct.

Explanation: Urea is an important supplier of nitrogen, which is necessary for the development of plants. But only 30-40% of the nitrogen present in the urea is utilised by crops. The rest gets degraded in various stages. When ordinary urea is applied, it gets converted to ammonium carbamate. Some of this gets converted to ammonia gas in what is called ammonia volatilisation. About 8-10% nitrogen is lost during volatilisation.

The rest of the ammonium carbamate undergoes chemical transformation, and

nitrates are formed. Some of these are absorbed by the plants.

The rest are either leached into the underground water or are denitrified to gaseous nitrogen and nitrous oxide under anaerobic conditions (absence of oxygen).

Neem has properties that check nitrogen loss at each stage. It slows down the process of nitrate formation, and hence excess nitrate is not available for denitrification.

100. Option (d) is correct.

Explanation: The Chief Secretary in a state is chosen by and appointed by the Chief Minister and the Ministers of that State. The trend is that the Chief Minister consults the Union Government regarding the appointment of the Chief Secretary, but this consultation is not obligatory.

There is no fixed tenure for the post of Chief Secretary. Administrative Reform Commission in 1969 had recommended that a Chief Secretary should have a minimum tenure of three to four years.