

GS SPECIAL MOCK TEST - 92 (ANSWER KEY)

| 1. | (A) | 21. | (C) | 41. | (A) | 61. | (D) | 81. | (C) |
|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| 2. | (B) | 22. | (C) | 42. | (D) | 62. | (D) | 82. | (A) |
| 3. | (B) | 23. | (C) | 43. | (C) | 63. | (A) | 83. | (B) |
| 4. | (A) | 24. | (A) | 44. | (D) | 64. | (A) | 84. | (C) |
| 5. | (D) | 25. | (A) | 45. | (C) | 65. | (B) | 85. | (C) |
| 6. | (D) | 26. | (B) | 46. | (C) | 66. | (C) | 86. | (C) |
| 7. | (A) | 27. | (D) | 47. | (B) | 67. | (B) | 87. | (D) |
| 8. | (B) | 28. | (C) | 48. | (B) | 68. | (B) | 88. | (C) |
| 9. | (B) | 29. | (D) | 49. | (D) | 69. | (D) | 89. | (A) |
| 0. | (A) | 30. | (C) | 50. | (D) | 70. | (A) | 90. | (D) |
| 11. | (A) | 31. | (B) | 51. | (C) | 71. | (D) | 91. | (C) |
| 12. | (B) | 32. | (A) | 52. | (B) | 72. | (D) | 92. | (A) |
| 13. | (C) | 33. | (A) | 53. | (D) | 73. | (B) | 93. | (B) |
| 14. | (C) | 34. | (B) | 54. | (B) | 74. | (C) | 94. | (D) |
| 15. | (D) | 35. | (B) | 55. | (B) | 75. | (D) | 95. | (B) |
| 16. | (C) | 36. | (D) | 56. | (D) | 76. | (D) | 96. | (B) |
| 17. | (B) | 37. | (B) | 57. | (C) | 77. | (D) | 97. | (B) |
| 18. | (D) | 38. | (B) | 58. | (D) | 78. | (B) | 98. | (C) |
| 19. | (B) | 39. | (C) | 59. | (C) | 79. | (D) | 99. | (B) |
| 20. | (D) | 40. | (A) | 60. | (D) | 80. | (D) | 100. | (D) |

Note: If your opinion differ regarding any answer, please message the mock test and Question number to 8860330003

Note: Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of Sunday Mock test.

Note: If you face any problem regarding result or marks scored, please contact 9313111777



GS SPECIAL MOCK TEST - 92 (SOLUTION)

- (A) The Press Freedom Index is an annual ranking of countries compiled and published by Reporters Without Borders based upon the organization's assessment of the countries press freedom records in the previous year. It reflects the degree of freedom that journalists, news organizations, and netizens enjoy in each country, and the efforts made by the authorities to respect and ensure respect for this freedom.
- 2. (B) The Comprehensive Nuclear-Test-Ban Treaty (CTBT) is a multilateral treaty by which states agree to ban all nuclear explosions in all environments, for military or civilian purposes. Non-Proliferation Treaty or NPT, is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to promote cooperation in the peaceful uses of nuclear energy, and to further the goal of achieving nuclear disarmament and general and complete disarmament. India, Pakistan and Israel did not ratified both Non-Proliferation Treaty Comprehensive Nuclear-Test-Ban Treaty (CTBT).
- (B) India has not agreed anything regarding its peak missions. China however has agreed to peak its emissions by 2030.
 - India has agreed for reduction in the emissions intensity of the GDP by 35 per cent by 2030 from 2005 level.
 - There is no such promise about 100% energy from renewable sources.
- (A) Mere presence of large number of voters does not make elections democratic. The voter turnout is good criteria to measure whether elections are democratic or not. Other criteria are:
 - Power and independence of election commission
 - Acceptance of the verdict by the political parties.
- (D) Through the mediation of sir Tej Bhadur sapru and Sri Jayakar, a pact was concluded between Gandhiji and Lord Irwin on March 5, 1931. According to this pact, the Government agreed:
 - (i) to withdraw all ordinances and cases pending against the political workers.
 - (ii) Moustache and beard are added to

Buddha's face

- (iii) The figures of this school follow a given ratio between the size of the face and rest of the body.
- (D) Le Carbusier was a Swisis by origin, but French by Professional.
- (A) Ludwig van Beethoven was a German composer and pianist. A crucial figure in the transition between the classical and Romantic eras in Western art music.
- (B) The concept of dual nationality means that a person is a citizen of two countries at the same time.
- 10. (A) The 42nd Amedment brought about Substantial chargs of for reaching consequences. It was enacted during an emergency imposed by Indira Ganadhi. SOCIALIST, SECULAR and INTERGRITY were added to the Preamble.
- 11. (A) Lucknow is the capital city of the Indian state of Uttar Pradesh. It is situated on 26°30' & 27°10' North latitude and 80°30' and 81° 13' East longitude.
- 12. (B) List I
 - A. Assam 3. Dispur
 - B. Dadra and
 - Nagar havali 1. Silvassa
 - C. Lakshadweep 4. Kavaratti
 - D. Sikkim
- 2. Gangtok

List II

- 13. (C) Gomti
- Lucknow
- Brahmaputra
- Guwahati
- Kaveri
- Tiruchirappali
- Godawari
- Rajahmunadr
- 14. (C) Tungabhadra
- Karnataka
- Lower Bhawani Tamil Nadu

 - Idukki Kerala
 - Nagarjuna Andhra Pradesh
- 19. (B) Light waves are electro-magnetic waves. In this, wave electric and magnetic fields are always perpendicular to the direction of travel of the wave.
- 20. (D) Guwahati oil refinery is the first public sector oil refinery of India, started in January, 1962. It is operated by the Indian Oil Corporation. Barauni refinery lies in the state of Bihar, and was made with the collaboration of the USSR in July, 1975. Mathura oil refinery is also owed by the Indian Oil Corporation. It was started in Mathura (Uttar Pradesh) in October, 1983.

- 21. (C) Tides are periodic rise and fall of sea levels. They are caused by the gravitational forces of the Moon and the Sun, However, they are also influenced by the rotation of the Earth and the relative position of the Moon, which causes the level of tide to change in a given location.
- 22. (C) First Round Table Conference was held on 12th November, 1930to 19th January, 1931.

First Round Table Conference was presided by the head of labour party Ramsay MacDonald.

First Round Table Conference 89 members, participate, in this there were 16 members from British Political Party. Congress did not participated in the First Round Table Conference. Third Round Table Conference was held on 17th November to 24th December, 1932. Only 46 delegates attended the Third Round Table Conference Congress boycotted Third Round Table Conference Samuel Hoare was the secretary of the state. Poona Pact had no provisions for civil services and local bodies reservation.

- 23. (C) Panchayatan is a style of temple construction. A Panchayatan temple has four subordinate shrines on four corners and the main shrine is inthe center of the podium, which comprises their base.

 Examples of Panchayatan temples are Kandariya Mahadeva temple in Khajuraho, Brahmeshwara temple in Bhubaneshwar and Pashavatara temple in Deogarh.
- 24. (A) The 'Ten Degree Channel' is channel that separates the Andaman and Nicobar islands in the Bay of Bengal. The two sets of islands together form the Indian Union Territory (UT) of Andaman and Nicobar Islands. The channel is approximately 10 km wide, running essentially along an East-West orientation. It is so named as it lies on the 10-degree line of latitude, North of the equator.
- 25. (A) Indian rebellion of 1857 urged the British Government to pass the Government of India Act, 1858.
- 26. (B) White label ATMs are owned and run by a company that is not in bank in itself. Non bank entities opening these ATMs are free to choose the location of the ATMs keeping in mind rural-urban ratio. These ATMs accept debit cards of all banks.

- 27. (D) For wetland tube. Declared 'Wetland of International importance it should support vulnerable, endangered or threatened ecological communities
- 28. (C) Mars Orbiter Mission is a spacecraft orbiting Mars in areocentric orbit. With the success of the mission ISRO became the first Asian space agency and fourth agency in the world to reach Mars after NASA, Soviet Space Program and European Space Agency.
- Though Election Commission is an all 29. (D) India body it is not concerned with the elections of the Panchayat and Municipalities in the states. The President of India appoints the. Election Commissioners and Regional Commissioners but they are removed on the basis of resolution passed by both Houses of Parliament with special majority, on the grounds of: proved misbehavior or incapacity. The Constitution hasn't debarred the retiring election commissioners from any further appointment by the government.
- 30. (C) To protect and improve the environment and to safeguard forests and wild life are directive principle of state policy.
- 31. (B) Steve Elworthy, the former South Africa fast bowler, has been appointed as the Managing Director of the 2019 ICC Cricket World Cup, which will be held in England and Wales. He will also oversee the ICC Champions Trophy 2017 and the ICC Women's World Cup 2017.
- 32. (A) The Committees which constitute members from both the Houses are :
 - 1. Committee on Welfare of SC/ST
 - 2. Committee on Empowerment of Women
 - 3. Joint Committee on Office of Profit
 - 4. Joint Committee on Salaries & Allowances of MPs.
- 33. (A)
 - 1. He can act President only for a maximum period of 6 months.
 - 2. He can be removed from the office by introducing a resolution. Resolution for his removal must be passed by special majority in Rajya Sabha and then agreed by Lok Sabha.
 - 3. But no a grounds for his removal have been mentioned in Constitution.
- 34. (B) Dig locker is a "digital locker" launched by the Government of India in February 2015 to provide a secure, dedicated



- personal dichotic space for steering the documents of resident Indian citizens. The storage space (minimum 1 GB) is linked to the unique Identification Authority of Indian (Aadhar number) of the user.
- 35. (B) Badami cave temples are a complex of four Hindu, Jain and possibly Buddhist cave temples located in Badami, a town in the Bagalkot district in northern part of Karnataka. Sittanavasal is a small hamlet in Pudukkottai district of Tamil Nadu.
- 36. (D) Balance between popular participation and elite rule as generally well off only can get to Parliament based on popular support from public.
 - Responsibility of government to the elected representative and not to the public. This responsibility is ensured through No-confidence motion in Lok Sabha.
 - Parliamentarians are designated the responsibility of thinking and acting on behalf of people.
- 37. (B) A political party shall be eligible to be recognised as a National party if
 - It secures at least six percent (6%) of the valid votes polled in any four or more states, at a general election to the House of the People or, to the State Legislative Assembly; and
- 38. (B) Pitts Act of 1784
 - Introduced Dual System of Govt. by the company and by a Parliamentary board of directors.
 - gave the British Government a measure of control over the company's affairs
 - Company became a subordinate department of the State.
 - Reduced the number of members of Executive Council of the GG to three.
- 39. (C) Only Statement 2 is correct. The theosophical society was founded in New York (USA). The theosophical society focused on revival and study of religious philosophies of east and social reforms particularly women's education.
- 40. (A) Statement 1 and 2 are correct. Treaty of Salbai brought a peace clause for the British with the Marathas for 20 years during which British could exert pressure on Mysore with the help of Marathas. Bengal White Mutiny occurred during the reign of Robert Clive.
- 41. (A) Guruprasad Mohapatra, a 1986 batch Gujarat cadre IAS officer, has been appointed as the new chairman of Airports

- Authority of India (AAI). Prior to this appointment, he was posted as the Joint Secretary in Union Ministry of Commerce.
- 42. (D) 1. Under article 310, members of All India Services hold office during the pleasure of President but are given certain safeguards under article 311 which are: they can be removed by an authority which subordinate to which appointed them and they cannot be dismissed or their rank cannot be reduced without an enquiry.
 - 2. The Constitution provisions in part XII, related to All India Services don't apply to Jammu and Kashmir.
- 44. (D) Blotting paper has a large number of pores (tiny holes) on its surface. Each pore acts like a capillary tube. When a drop of ink is placed on a blotting paper, it spreads on the paper due to capillary action.
- 45. (C) When we push a body, the vertical component acts downward and adds up to the weight of the body, increasing the frictional force and the opposite happens while pulling leading to less frictional force.
- 46. (C) CAG compiles and maintains the accounts of State Governments only in 1976 he was relieved of his responsibilities of maintenance and compilation of accounts of Central Government.
 - CAG submits three audit reports : Audit report on Appropriation Account, Report of Finance Account and report on Public Undertakings.
 - He can audit accounts of any other authority, apart from Government, Public Undertakings etc. as requested by President of Governor.
- 47. (B) On November 2, 1929, conference of prominent national leaders issued a "Delhi Manifesto" which demanded
 - 1. That the purpose of the Round Table Conference (RTC) should be to formulate a scheme for implementation of the dominion status and the basic principle of dominion status should be immediately accepted; 3. That the Congress should have majority representation at the conference; 3. Amnesty and a general policy of conciliation; Viceroy Irwin rejected these demands on December 23, 1929.
- 48. (B) Lead is a highly poisonous metal (whether inhaled or swallowed), affecting almost



- every organ and system in the body. Lead are still in used in Paints, PVC Plastics, lead-acid batteries, bullets and shot, weights, as part of solders, pewters, fusible alloys, and as a radiation shield.
- 49. (D) Neem cake organic manure is the byproduct obtained in the process of cold
 pressing of Neem tree fruits and kernels,
 and the solvent extraction process for
 neem oil cake. According to research
 calculations, Neem cake seems to make
 soil more fertile due to an ingredient the
 blocks soil bacteria from converting
 nitrogenous compounds into nitrogen gas.
 It also acts as a natural fertilizer with
 pesticidal properties. Neem cake is widely
 used in India to fertilize paddy, cotton and
 sugarcane.
- 50. (D) Mirages occur on sunny days. The role of the sun is to heat the roadway to high temperatures. This heated roadway in turn heats the surrounding air, keeping the air just above the roadway at higher temperatures than that day's average air temperature. Hot air tends to be less optically dense than cooler air. As such, a non-uniform medium has been created by the heating of the roadway and the air just above it. While light will travel in a straight line through a uniform medium, it will refract when travelling through a non-uniform medium.
- 51. (C) Paul Romer, the American economist, will be the new Chief Economist and Senior Vice-President of the World Bank (WB). Presently, Romer is a professor at New York University (NYU) and director of NYU's Marron Institute of Urban Management.
- 52. (B) In 1740 the War of the Austrian Succession broke out in Europe. The First Carnatic War (1746-1748) was the Indian theatre of the War of the Austrian Succession. First Carnatic war also came to an end. In the treaty of Aix-la-Chapelle (1748). The second Carnatic War ended with the Treaty of Pondicherry, signed in 1754, which recognised Muhammad Ali Khan Walajah as the Nawab of the Carnatic. The third Carnatic War spread beyond southern India and into Bengal where British forces captured the French settlement of Chandernagore (now Chandannagar) in 1757. The war concluded with the signing of the Treaty of Paris in 1763, which returned

- Chandernagore and Pondichery to France.
- 53. (D) The decision to effect the Partition of Bengal was announced in July 1905. The Indian Councils Act 1909, commonly in July, commonly known as the Morley-Minto Reforms (or as the Minto-Morley Reforms), was an Act of the Parliament of the United Kingdom that brought about a limited increase in the involvement of Indians in the governance of British India. Rowlatt Acts, (February 1919), legislation was passed by the Imperial Legislative Council, the legislature was passed by the Simon Commission, group appointed in November 1927 by the British Conservative government under Stanley Baldwin to report on the working of the Indian constitution established by the Government of India of Act of 1919.
- 54. (B) Magnetite is chemically (Fe304) it is an oxide of iron, Malachite is copper carbonare hydroxide, and cassiterite is tin dioxide.
- 55. (B) For many solids dissolved in liquid water, the solubility increase with temperature. The increase in kinetic energy the comes with higher temperatures allows the solvent molecules to move effectively break apart the solute molecules that are held together by intermolecular attractions.

For most chemical reactions, the reaction rate increase with increasing temperature. Temperature affects the corrosion rate of metals. The corrosion of iron and steel is an example of this because temperature affects the corrosion rate by virtue of its effect on the oxygen solubility and oxygen diffusion coefficient.

As temperature increases the diffusion coefficient of oxygen also increases which tends to increase the corrosion rate.

- 56. (D) Christmas is celebrated in summer in Australia because it is located in the southern hemisphere. Only during an equinox is the Earth's 23.5-degree axis not tilting toward or away from the sun: the centre of the sun is in the same plane as the Equator. There are two equinoxes in a year; around March 21 and around Sept. 22. In the Northern Hemisphere, March 21 is the spring or vernal equinox. September 22 is the autumnal equinox.
- 57. (C) It is the state-of-the-art project implemented in selected areas in the country, focused on probing for deep



seated/concealed mineral deposits. Main components of this project are, characterizing India's geological cover, investigating lithospheric architecture, resolving 4D geodynamic and metallogenic evolution, Detecting and characterizing the distal footprints of are deposits.

- 58. (D) All of the above are indicators of phenomenon of climate change and global warming caused due to anthropogenic factors.
- 59. (C) The estimated agriculture growth rate is 0.2% in 2014-15 Statement 2 & 3 are correct.
- 60. (D) Pradhan Mantri Krishi Sinchai Yojana (PMKSY) is a national mission to improve farm productivity and ensure better utilization of the resources in the country. The primary objectives of PMKSY are to attract investments in irrigation system at field level, develop and expand cultivable land in the country, enhance ranch water use in order to minimize wastage of water, enhance crop per drop by implementing water-saving technologies and precision irrigation.
- 61. (D) Janatha Party Morarji Desai Janatha Dal - H. D D Deva Gowda
- 62. (D) State Finance Commission and State Election Commission were created through 73rd Amendment and provisions are giver under art 243-I and 243-K respectively.
 - 73rd and 74th Amendment act empowers states legislature to make provisions for maintenance of accounts and auditing of such accounts and therefore does not prescribe for auditing by CAG.
- 63. (A) A value added tax (VAT) is a form of consumption tax. A VAT is like a sales tax in that ultimately only the end consumer is taxed. It differs from the sales tax in that, with the latter, the tax is collected and purchase by the end consumer. VAT comes under the single tax system based primarily or exclusively on one tax, typically chosen for its special properties. Most of the Indian States have replaced sales tax with value Added Tax (VAT) from 1 April, 2005. VAT is imposed on goods only and not services and it has replaced sales tax.
- 64. (A) Devaluation is reduction in the exchange value of a country's monetary unit in terms of gold, silver, or foreign currency.

- By decreasing the price of the price of imports in the home country, devaluation encourages the home country, devaluation discourages expenditures on imports, thus improving its balance of payments.
- 66. (C) It is a service offered by a securities depository under which the depository maintains book accounts recording the ownership of securities held on behalf of the depository's participants, for eligible securities.
- 67. (B) Monetary policy is the process by which the monetary authority of a country controls the supply of money, often targeting a rate of interest for the purpose of promoting economic growth and stability. The official goals usually include relatively stable prices and low unemployment. The contraction of the monetary supply can be achieved indirectly by authorities in different the nominal interest rates. Monetary authorities in different nations have differing levels of control of economy-wide interest rates.
- 68. (B) Gresham's law is an economic principle that states; "When a government compulsorily overvalues one type of money and undervalues another, the undervalued money will leave the country or disappear from circulation into." It is commonly stated as: "Bad money drives out good."
- 69. (D) Mixed economy is an economic system in which both the state and private sector the economy, reflecting characteristics of both market economies and planned economies. The basic idea of the mixed under private ownership; that markets remain the profit-seeking enterprises and the accumulation of capital remain the fundamental driving force behind economic activity. However, unlike a free-market economy, the government would wield considerable indirect influence over the economy through fiscal and monetary policies designed to counteract economic downturns and capitalism's tendency financial crises toward unemployment, along with playing a role in interventions that promote social
- 70. (A) Bank rate, also referred to as the discount rate, is the rate of interest which a central



bank charges on the loans and advances to a commercial bank. Whenever the banks have any shortage of funds they can borrow it from the central bank. Repo (Repurchase) rate is the rate at which the central bank lends short-term money to the banks against securities. A reduction in the repo rate will help banks to get money at a cheaper rate. When the repo rate increases borrowing from the central bank becomes more expensive. It is more applicable when there is a liquidity crunch in the market.

- 71. (D) Flight of capital refers to the movement of money from one investment to another in search of greater stability or increased movement of money from investments in one country to another in order to avoid country-specific risk (such as high inflation or political turmoil) or in search of higher returns. Capital flight is seen most commonly in massive foreign capital outflows from a specific country, often at times of currency instability.
- 72. (D) The voluntary retirement scheme (VRS) is the most humane technique to provide overall reduction in the existing strength of the employees. It is a technique used by companies for trimming the workforce employed in the industrial unit. It is also known as 'Golden Handshake' as it is the golden route to retrenchment.
- 73. (B) If the supply is less than the demand, the price will increase. Inflation the persistent increase in aggregate demand or decrease in aggregate supply. This suggests two basics sources, causes, or types of inflation-demand-pull inflation and costpush inflation. In general, prices increase as a result of market shortages, which occur when quantity demanded exceeds quantity supplied. Market shortages can be created by either increases in demand or decreases in supply. Translating this to the macro economy suggests that inflation occurs when aggregate demand exceeds aggregate supply.
- 74. (C) All factors of production like land, labour, capital and entrepreneur are required in combination at a time to produce a commodity. Production means creation or an addition of utility. Factors of production (or productive 'inputs' or 'resources') are any commodities or services used to produce goods and service.

- 75. (D) The law of diminishing returns (also law of diminishing marginal returns or law of increasing relative cost) states that in all productive processes, adding more of one factor of production, while holding all others constant ("ceteris paribus"), will at some point yield lower per-unit returns. The law of diminishing returns does not imply that adding more of a factor will decrease the total production, a condition known an negative returns, though in fact this is common.
- 76. (D) Fusus vesiculosus is a brown seaweed and is also known as bladder wrack or red algae, according to the National Institutes of Health (NIH). Red marine algae and other seaweeds are common components of Asian diets and are often used in dietary supplements. The high iodine content in red marine algae can lead to hypothyroidism or hyperthyroidism.
- 77. (D) Chlorophyll, a photo-receptive pigment, allows plants to absorb sunlight and synthesize it into carbohydrates and oxygen. The basic formula for photosynthesis takes 6 molecules of carbon dioxide and 6 molecules of water, reacts them in the presence them into 1 molecules of water, reacts them in the presence of chlorophyll and sunlight (a catalyst), and converts them into 1 molecule of glucose (C6H12O6) and 6 molecules of oxygen, Chlorophyll is a chlorine pigment, which is structurally similar to and produced through the same metabolic pathway as other porphyrin pigments such as heme. At the center of the chlorine ring is a magnesium ion. The molecular formula of C55H70O6N4Mg and a structure of (2-formyl)-chlorophyll has been deduced based on NMR, optical and mass spectra.
- 78. (B) The ostrich is the largest and heaviest bird that is alive today. Although it cannot fly, the ostrich is also the fastest -running bird today; it can run up to about 43 mph (70 kph). It can outrun most predators, but can also kick to protect itself; another strategy against threats is to crouch close to the ground to camouflage itself. The ostrich can grow up to 9 feet (2.7 m) tall and weight up to 345 pounds (156 kg). The ostrich also has the biggest eyeballs of any bird alive today; each eyeball is 2 inches (5 cm) across. It has a long neck that allows it to see predators from far away.



- 79. (D) Neutering involves removing the source of the hormones that control reproduction and that determine the typical physical and behavioral characteristics that distinguish males and females. In dogs and cats, this is usually done by surgically removing the testicles in males (castration) and the ovaries in females (spaying). The primary purpose of neutering is to prevent reproduction.
- 80. (D) Dengue fever also known as break bone fever, is an infectious tropical disease caused by the dengue virus. Symptoms include fever, headache, muscle and joint pains, and a characteristic skin rash that is similar to measles. In a small proportion of cases the disease develops into the lifethreatening dengue hemorrhagic fever, resulting in bleeding, low levels dengue shock syndrome, where dangerously low blood platelets and blood plasma leakage, or into dengue shock syndrome, where dangerously low blood pressure occurs. Dengue is transmitted by several species of mosquito within the genus Aedes, principally A aegypti.
- 81. (C) High-density lipoprotein (HDL) is one of the major groups of lipoproteins, which, in order of sizes, largest to smallest, are chylomicrons, VLDL, IDL, LDL, and HDL, which enable lipids like cholesterol and triglycerides to be transported within the water-based bloodstream. In healthy individuals, about thirty percent of blood cholesterol is carried by HDL. About one -fourth to one-third of blood cholesterol is known as "good" cholesterol, because high levels of HDL seem to protect against heart attack. Low levels of HDL (less than 40 mg/dl) also increase the risk of heart disease. Medical experts think that HDL tends to carry cholesterol away from the arteries and back to the liver, where it's passed from the body. Some experts believe that HDL removes excess cholesterol from arterial plaque, slowing its buildup.
- 82. (A) Thalassemia are forms of inherited autosomal recessive blood disorders that originated in the Mediterranean region. In thalassemia, the disease is caused by the weakening and destruction of red blood cells. Whilst possessing the ability to cause significant complications, including Anemia, Iron overload, bone deformities and cardiovascular illness, thalassemia, which is or was prevalent in

- the regions where the trait is common.
- 83. (B) A food chain is a linear sequence of links in a food web starting from trophic species that eats no other species in the web and ends at a trophic species that is eaten by no other species in the web. Plant, rabbit and tiger form species in the web. Plant represents producer, rabbit and tiger form a food chain where plant represents producer, rabbits represent a vegetarian, while tiger represents a non-vegetarian.
- 84. (C) Keratin is family of fibrous structural proteins. Keratin is the key structural material making up the outer layer of human skin. It is also the key structural component of hair and nails. Keratin monomers assemble into bundles to form intermediate filaments, which are tough and insoluble and form strong unmineralized tissues found in reptiles, birds, amphibians, and mammals. Cells in the epidermis contain a structural matrix of keratin, which makes this outermost layer of the skin almost waterproof, and along with collagen and elastin, gives skin its strength.
- 85. (C) The richest sources of protein are animal foods such as chicken, meat, fish, cheese and eggs. However, plant proteins are believed to be healthier because of their lower fat content. Plant protein is found (e.g.) in beans (esp. soy beans), lentils, nuts, quern and seeds. Fish and seafood are some of the richest sources of protein. One-half of a typical fillet of halibut or salmon provides approximately 41g of protein-rich food option for vegetarians and non-vegetarians alike. One cup of boiled soybeans provides over 28g of protein.
- 86. (C) Around the world, there is an increasing trend in areas of land, surface waters and ground water affected by contamination from industrial, military and agricultural activities due to either ignorance, lack of vision, or carelessness. In the last three decades a special interest in the world is aroused by the potential of using the biological methods in the waste water treatment. Water hyacinth (Eichhornia crassipes) constitutes an important part of an aquatic ecosystem. Water hyacinth as a very promising plant with tremendous application in wastewater treatment is already proved. Water hyacinth is used to treat waste water from dairies, tanneries, sugar factories, pulp



- and paper industries, palm oil mills, distilleries, etc.
- 87. (D) Blood pressure is an important indicator of adrenal health and function. Mild adrenal weakness is usually accompanied by normal to high blood pressure. As Adrenal Fatigue advances, low blood pressure, at rest or related to posture becomes more prevalent.
- 88. (C) The lymphatic system consists of a network of specialized lymphatic vessels and various tissues and organs throughout the body that contain lymphocytes fight infection and disease. The lymphatic vessels are similar to veins but have thinner walls. Some of these vessels are very close to the skin surface and can be found near veins; others are just under the skin and in the deeper fatty tissues near the muscles and can be found near arteries.
- 89. (A) There are two forms of tuberculosis that cause significant disease in mammals. Human tuberculosis, a sometimes acute, but much more commonly, a chronic lung infection is caused by the bacterium, Mycobacterium tuberculosis. Bovine tuberculosis is a very similar disease that infects cattle, as well as deer, goats, elk and many other animals. This infection is caused by related bacterium, Mycobacterium bovis. Human infections with the bovine form of the bacteria are transmitted through milk.
- 90. (D) Ecological productivity refers to the primary fixation of solar energy by plants and the subsequent use of that fixed energy by plant-eating herbivores, animaleating carnivores, and the detritivores that feed upon dead biomass. Ecologists refer to the productivity Deserts, tundra, and the deep ocean are the least productive ecosystems, typically having an energy fixation of less than 0.5 × 103 kilocalories per square meter per year (thousands of kcal/m2/yr; it takes one calorie to raise the temperature of one gram of water by 34°F [1°C] under standard conditions, and there are 1,000 calories in a kcal). Grasslands, montane and boreal forests, waters of the continental shelf, and rough agriculture typically have productivities of 0.5-3.0 ×103 kcal/m2/yr. Moist forests, moist prairies, shallow lakes, and typical agricultural systems have productivities of 3-10 \times 103 kcal/m²/yr. The most

- productive ecosystems are fertile estuaries and marshes, coral reefs, terrestrial vegetation on moist alluvial deposits, and intensive agriculture, which can have productivities of $10\text{-}25 \times 103 \text{ kcal/m}^2/\text{yr}$.
- 91. (C) Presumptive taxation involves the use of indirect means to ascertain tax liability, which differ from the usual rules based on the taxpayer's accounts.
- 92. (A) 1. The SDR was created by the IMF in 1969 as a supplementary international reserve asset, in the context of the Bretton Woods fixed exchange rate system.
 - 2. SDR value is determined on the basis of five currencies namely Euro, Dollar, pound sterling, Japanese Yen and Yuan.
 - 3. SDR forms parts of both India's foreign exchange reserves and external debt.
- 93. (B) Mixture formed by common salt and potassium iodide known as iodized salt. By the use of iodized salt we can prevent the goiter disease which caused by deficiency of iodine.
- 94. (D) The two magnetic lines of force due to bar magnet do not intersect or cross each other because at the point of intersection there will be two directions of there will be two directions of the magnetic field which not possible.
- 95. (B) The Bab-el-or Mandeb Strait is a strait located between Yemen on the Arabian Peninsula, and Djibouti and Eritrea in the Horn of Africa. Bosporus is a natural that forms and separates Asian Turkey from European Turkey. Strait of Juan de Fuca The international boundary between Canada and United States runs down the centre of the Strait. Strait of Gibraltar is a narrow strait that connects the Atlantic Ocean to the Mediterranean Sea and separates Gibraltar and Peninsular Spain in Europe from Morocco and Ceuta (Spain) in Africa.
- 96. (B) For the part of its length, the IDL follows the meridian of 180° longitude, roughly down middle of the Pacific Ocean. To avoid crossing nations internally, the IDL deviates west around the US Aleutian Islands, separating then from islands in the far east of Russia, and further south, it deviates east around various island nations in the Pacific such as Kiribati, Samoa, Tonga and Tokelau, These various deviations, east or west, generally accommodate the political and/or



economic of the affected areas.

- 97. (B) The Tabernas desert is probably the best example of a rea desert in Europe. It is located in the southeast of Spain, in the province of Almeria, in Andalucia. The Taklamakan is located in the northwestern Chinese subdivision of Xinjiang or the Uygur Autonomous Region. The Great Basin desert is a large are arid region in the western states of the US. The Patagonian desert might not be as well known as many other mentioned above, it is the largest desert in the America's and covers a luge area between the Andes Mountains in the west and the Atlantic Ocean to the east.
- 98. (C) The US rail network, with an operating route length over 250,000km, is the biggest in the world. Freight lines constitute about 80% of the country's total rail network, while the total passenger network spans about 35,000km. China's rail network, with route length of over 100,000km, ranks as the second biggest rail network in the world. The extensive network, operated by state-owned China Railway Corporation, carried 2.08 billion passengers (the second highest after Indian Railways). Russia's whole network, operated by state-owned monopoly Russian Railways, runs for over 85,500km. The Indian nationwide rail network includes an

- operating route length of more than 65,000km. The network carried about eight billion passengers (the highest in the world) and 1.01 million tons of freight (fourth highest in the world) in 2013.
- 99. (B) South Sandwich Trench A deep arcuate trench in the Atlantic Ocean that is created by subduction and is the deepest trench in the Southern Atlantic Ocean. Tonga Trench The trench is standing alone in the South Pacific Ocean, the depth of 11.03 kilometers below sea level and lies in the western Pacific Ocean.
- 100.(D) Both AIM and SETU are being overseen by the NITI AAyog. The Atal Innovation Mission (AIM) is being set up under NITI, AIM will be an Innovation Promotion Platform involving academics. entrepreneurs, and researchers drawing upon national and international experiences to foster a culture of innovation, R & D in India. The platform will also promote a network of world-class innovation hubs and grand challenges for India. The Government has established a mechanism to be known as SETU (Self-Employment and Talent Utilisation) under NITI Aayog. SETU will be a Techno-Financial, Incubation and Facilitation Programme to support all aspects of startup businesses, and other self-employment activities, particularly in technologydriven areas.



