Q1 launches 'One Panchayat, One Playground' to revive sports culture.  (a) Punjab  (b) Karnataka  (c) Kerala  (d) Haryana
Q2. Which state has topped the list in the first-ever waterbody census?  (a) Sikkim  (b) West Bengal  (c) Maharashtra  (d) Uttar Pradesh
Q3. Which film won the Best Film Award at the Dadasaheb Phalke Award 2023?  (a) Gangubai Khatiawadi  (b) The Kashmiri Files  (c) RRR  (d) Bhediya
Q4. APJ Abdul Kalam Satellite Launch Vehicle Mission-2023 launched from which state in India? (a) Odisha (b) Tamil Nadu (c) Karnataka (d) Kerela
Q5. What is the title of the new book written by Piyush Babele? (a) "The Life and Times of Mahatma Gandhi" (b) "Gandhi: A Spiritual Journey" (c) "Gandhi: Siyasat aur Sampradaiykta" (d) "Gandhi and India's Freedom Struggle"
Q6. Which organization introduced the International Day of Conscience? (a) International Criminal Court (b) United Nations General Assembly (c) World Health Organization (d) Amnesty International
Q7. International Lusophone Festival is being held from 3 to 6 December 2022 in which of the following state?  (a) Maharashtra  (b) Tamil Nadu  (c) Goa  (d) Andhra Pradesh  (e) Kerala
Q8. The 12th Edition of Exercise Agni Warrior, a bilateral exercise between the & Indian Army.  (a) Singapore (b) Japan (c) France (d) USA (e) Isreal

- Q9. Union Minister for Agriculture and Farmers' Welfare Narendra Singh Tomar has inaugurated the three-day 'North East Krishi Kumbha-2023' in which state?
- (a) Tripura
- (b) Sikkim
- (c) Assam
- (d) Meghalaya
- Q10. Who has been conferred with Assam State's highest civilian award 'Assam Baibhav' for his contribution in cancer treatment?
- (a) Dr. V. G. Somani
- (b) Dr. S. Eswara Reddy
- (c) Dr. P.B.N. Prasad
- (d) Dr. Tapan Saikia
- Q11. The first-of-its-kind inclusive festival in India, 'Purple Fest: Celebrating Diversity' took place in which state of India?
- (a) Goa
- (b) Maharashtra
- (c) Uttar Pradesh
- (d) Kerala
- Q12. NMDC has appointed whom as its brand ambassador?
- (a) Harleen Deol
- (b) Nikhat Zareen
- (c) Mary Kom
- (d) Smriti Mandhana
- (e) PV Sindhu
- Q13. Who has been appointed as the new Vice Chief of the Indian Air Force?
- (a) Air Marshal A P Singh
- (b) Air Marshal Sandeep Singh
- (c) Air Marshal Amar Preet Singh
- (d) Air Marshal Harjit Singh Arora
- (e) Air Marshal Anil Khosla
- Q14. Name the author of the book "The Poverty Of Political Economy: How Economics Abandoned the Poor".
- (a) Vinayak Patil
- (b) Shashi Tharoor
- (c) Meghnad Desai
- (d) Jigyasa Malik
- (e) Sachin Tiwari
- Q15. When was the Pradhan Mantri Kisan Samman Nidhi Yojana launched in India?
- (a) 24th February 2020
- (b) 24th February 2019
- (c) 24th February 2022
- (d) 24th February 2023

Q16. 'Barisu Kannada Dim Dimava' Festival is organized to celebrate the culture of which state?  (a) Karnataka (b) Odisha (c) Assam (d) Manipur
Q17. Which one of the following statements about gravitational force is NOT correct?  (a) It is experienced by all bodies in the universe  (b) It is a dominant force between celestial bodies  (c) It is a negligible force for atoms  (d) It is same for all pairs of bodies in our universe
Q18. Which among the following gases is also known as 'Laughing Gas'? (a) Carbon dioxide (b) Carbon monoxide (c) Nitrogen oxide (d) Sulphur dioxide
Q19. Which of the following element found in haemoglobin? (a) Calcium (b) Iron (c) Sodium (d) Potassium
Q20. Cryogenics is a branch of Physics that deal with .  (a) very high temperatures (b) very low temperatures (c) growth of extremely small crystals (d) growth of extremely large crystals
Q21. Which one of the following was the capital of the sultanate during the reign of Iltutmish?  (a) Agra (b) Lahore (c) Badaun (d) Delhi
Q22. The shape of chromosome is clearly visible at (a) prophase (b) anaphase (c) metaphase (d) telophase
Q23. Bone forming cells are (a) osteoclasts (b) osteoblasts (c) chondroblast (d) chondroclasts
Q24. Who was the founder Panwar Dynasty? (a) Ajai Pal (b) Kanak Pal

(c) Kanak Rao

(d) Jagat-Pal
Q25. The Horse-Shoe arch was first introduced in the- (a) Tomb of Iltumish (b) Tomb of Ghiyas-ud-din tughlaq (c) Alai Darwazah (d) Quwwat-ul-islam Mosque
Q26. The kingdom Protista is primarily made up of organisms that are (a) eukaryotic and multicellular (b) prokaryotic and multicellular (c) prokaryotic and single-celled (d) eukaryotic and single-celled
Q27. Bhangar and Khadar are subtypes of which soil in India?
(a) Black Soil
(b) Yellow Soil
(c) Laterite Soil
(d) Alluvial Soil
Q28. What is the current year's economic growth is estimated at the Union budget 2023? (a) 4% (b) 8% (c) 7% (d) 6%
Q29. Pablo Picasso, the famous painter was (a) French (b) Italian (c) Flemish (d) Spanish
Q30. Who among the following was the first Speaker of the Lok Sabha? (a) M. A. Ayyangar (b) G. V. Mavalankar (c) Sardar Hukam Singh (d) N. Sanjiva Reddy
Q31. When was the first Union Budget of India presented? (a) 1947 (b) 1948 (c) 1949 (d) 1950
Q32. The Swadeshi Boycott Movement is related to - (a) Partition of Bengal in 1947 (b) Partition of Bengal in 1905

- (c) Non-cooperation movement in 1921
- (d) Partition of Punjab in 1947
- Q33. The Mutiny of 1857 was described as the First Indian War of Independence by -
- (a) Bal Gangadhar Tilak
- (b) Subhash Chandra Bose
- (c) Bhagat Singh
- (d) V. D. Savarkar
- Q34. Among the biotic components of the ecosystem the producer system is
- (a) Cow
- (b) Peacock
- (c) Tiger
- (d) Green plants
- Q35.Under Article 365 what are the duties of the Union Government with respect to State Governments—
- (a) Ensure that every State Minister should act in accordance with the advice of Chief Minister
- (b) Ensure that Governor acts under advice of the Chief Minister
- (c) Ensure that Governance in the State is in accordance with the Constitution
- (d) All of the above
- Q36. Under which Constitutional Article review of Judgments or orders lies with the Supreme Court—
- (a) Article 139
- (b) Article 137
- (c) Article 140
- (d) Article 141
- Q37. The entire country has been divided into
- (a) Three Zonal Councils
- (b) Four Zonal Councils
- (c) Five Zonal Councils
- (d) Six Zonal Councils
- Q38. What is CRISIL?
- (a) Bank
- (b) Insurance Company
- (c) Depository
- (d) Credit Rating Agency
- Q39. Which of the following sectors contributes the most to India's GDP?
- (a) Agriculture
- (b) Manufacturing
- (c) Services
- (d) Mining
- Q40. Inflation is caused by
- (a) Increase in supply of goods
- (b) Increase in cash with the government
- (c) Decrease in money supply
- (d) Increase in money supply

- Q41. Which country is called the 'Coffee Bowl of the World'?

  (a) Mexico
  (b) India
  (c) Serbia
  (d) Brazil
- Q42. Article 48A of the Indian Constitution "Protection and improvement of environment and safeguarding of forests and wild life" deals with
- (a) the State Government
- (b) the Union Government
- (c) the Fundamental Rights of the Indian Citizen
- (d) the Directive Principles of State Policy
- Q43. In which of its sessions did the Indian National Congress declare 'Purna Swaraj' as its specific goal -
- (a) Tripuri Session, 1939
- (b) Lahore Session, 1929
- (c) Surat Session, 1905
- (d) Special Session in Calcutta, 1920
- Q44. 'Prithvirajraso' was written by
- (a) Jaideva
- (b) Bhavabhuti
- (c) Chand Bardai
- (d) Banabhatta
- Q45. Which among the given deserts have been named after the phrase 'The Great Thirst' -
- (a) Mojave Desert
- (b) Namib Desert
- (c) Kalahari Desert
- (d) Sahara Desert
- Q46. If the position of President and Vice-President are vacant, who officiates as the President of India?
- (a) The Prime Minister
- (b) The Chief Justice of India
- (c) The Speaker of Lok Sabha
- (d) None of these
- Q47. The office of the President does not characterize the combination of governmental systems of
- (a) Parliamentary and Federal
- (b) Republican and Parliamentary
- (c) Presidential and Republican
- (d) Democratic and Republican
- Q48. How many times can the President of India seek re-election to his post?
- (a) Once
- (b) 2 times
- (c) 3 times
- (d) Any numbers of time

Q49. In India, the Prime Minister remains in office so long as he enjoys the

- (a) Support of armed forces
- (b) Confidence of Rajya Sabha
- (c) Confidence of Lok Sabha
- (d) Support of the people

Q50.Consider the following statements regarding The Indian Councils Act of 1892

- 1. It had increased the number of "additional members" in the Central Legislative Council to 16'
- 2. It increased the functions of legislative councils and gave them the power of discussing the budget.

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

Q51. The principle of representation in the provincial legislative and central legislative councils was first time introduced by?

- (a) Indian councils act 1861
- (b) Indian councils act 1892
- (c) Morley Minto Reforms
- (d) Govt. Of India act 1935

Q52. Which among the following laws and commissions set up by Britishers can be considered as an

Achievement of the Moderates?

- 1. Welby Commission
- 2. Aitchison Commission

Select the correct code from below:

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

Q53. Consider the following statements regarding demands of moderators

- 1. They Criticized an aggressive foreign policy which resulted in the annexation of Burma
- 2. They called for Greater opportunities for Indians in higher posts by holding the ICS examination simultaneously in England and in India
- 3. They called for the Abolition of salt tax and sugar duty

Which of the statements given above is/are correct?

(a) 1 and 2

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

Q54. The Minimum Support Price and procurement prices for agriculture products are fixed by the Government on the recommendations of

- (a) Competition Commission of India
- (b) National Development Council
- (c) Planning Commission
- (d) Commission for Agricultural Costs and Prices (CACP)

Q55. In India, agriculture income is calculated by

- (a) output method
- (b) input method
- (c) expenditure method
- (d) commodity flow method

Q56. The farmers are provided credit from a number of sources for their short and long term needs. The main sources of credit to the farmers include:

- 1. the Primary Agricultural Co-operative Societies, Commercial Banks, RRBs and Private money lenders.
- 2. the NABARD, RBI, Commercial banks and Private money lenders.
- 3. the District Central Co-operative Banks (DCCB), the lead banks, IRDP and JRY
- 4. the Large Scale Multi-purpose programme, DCCB, IFFCO and Commercial banks.
- (a) All of the above
- (b) 1 and 2 only
- (c) 1 only
- (d) 3 and 1 only

Q57. Scheduled bank is a bank which is....

- (a) Nationalized
- (b) Not Nationalized
- (c) Based in foreign Country
- (d) Included in the second schedule of RBI

Q58. Green Revolution in India started from

- (a) UP
- (b) Puniab
- (c) Delhi
- (d) Gujarat

Q59. The Green Revolution in India has contributed to

- (a) inter-regional inequality
- (b) inter-class inequality
- (c) inter-crop inequality
- (d) All of the above

Q60. The national Income accounting equation is a sum of-

- 1. Private Investment
- 2. Government Spending
- 3. Personal consumption expenditure

4. Net Exports less Net imports
Select the correct code from below:
(a) 2,3 and 4
(b) 1,2 and 4
(c) 1 and 2
(d) 1,2,3 and 4

Q61. Which among the following are transfer payments?

- 1. MNREGA Subsidies
- 2. Traffic Fines
- 3. Provident fund

Select the correct code from below:

- (e) 1 and 2
- (f) 2 and 3
- (g) 1 and 3
- (h) 1,2 and 3

Q62.which among the following gives us the correct picture of the economic performance of an economy?

- (a) Real GDP
- (b) Nominal GDP
- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

Q63. Nanda lake is the first ever designated Ramsar site (wetland of international importance as per Ramsar convention), located in

- (a) Kerala
- (b) Odisha
- (c) Goa
- (d) Tamilnadu

Q64. Consider the following pairs regarding organism's response to abiotic factors:

Species Response

- 1. Fish Diapause
- 2. Zooplankton Aestivation
- 3. Bears Hibernation
- 4. Plants Dormancy

Which of the pairs given above are correctly matched?

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

Q65. Which one of the following is the correct sequence in the decreasing order of contribution of global greenhouse gas emissions?

- (a) China-United States-India-European Union
- (b) United States-China-India-European Union
- (c) European Union -United States-China-India
- (d) European Union-United States-India-China

Q66. Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions is launched by which one of the following?

- (a) Climate & Clean Air Coalition and UNEP
- (b) United Nations Framework Convention on Climate Change.
- (c) Intergovernmental Panel on Climate Change and Blue Green Alliance
- (d) Clean Air Task Force.

Q67. Which organelle in the cell, other than the nucleus contains DNA?

- (a) Centriole
- (b) Golgi apparatus
- (c) Lysosome
- (d) Mitochondrion

Q68. Which of the items above given is/are suitable for the production of 'Bio-fuels'?

- 5. Jatropha
- 6. Sugarbeet
- 7. Sorghum
- 8. Pongamia

Select the correct code from below:

- (e) 1 only
- (f) 2 and 4 only
- (g) 1, 2 and 3 only
- (h) 1, 2, 3 and 4

Q69.Consider the following statements regarding 'Black Carbon',

- 1. Black Carbon absorbs more solar energy than carbon dioxide and reduces albedo.
- 2. Black Carbon provides a large amount of nutrients to the tropical soils.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both are correct
- (d) None of the above

Q70. With reference to the Attorney General, which of the following statements is/are correct?

- (a) He is the first Law Officer of the Government of India
- (b) He is appointed by the President and holds office during the pleasure of the President
- (c) He must have the same qualifications as required to be a Judge of the Supreme Court.
- (d) All of the above

Q71. Right to information became an Act in

- (a) 2005
- (b) 2009
- (c) 2007

(d) 2006 Q72. The Vice President is elected indirectly, by an electoral college consisting of (a) Members of Lok Sabha only (b) Members of Lok Sabha, Rajya Sabha & State Legislative Assemblies (c) Members of both Houses of Parliament
<ul><li>(d) Members of Rajya Sabha only</li><li>Q73. Which Article of the Indian constitution deals with residuary powers?</li><li>(a) Article 248</li><li>(b) Article 250</li><li>(c) Article 246</li></ul>
(d) Article 244 Q74. China has the longest border with which of the following country? (a) Russia (b) India (c) Myanmar
(d) Mongolia  Q75. The distance between the two latitudes is approximately
(a) 111 miles (b) 121 miles (c) 111 km (d) 121 km
Q76. Meanders are the features formed by (a) rivers (b) glaciers (c) winds (d) ocean waters
Q77. Who was the founder of the Theosophical Society?  (a) Justice Ranade  (b) Madam Blavatsky  (c) Annie Besant  (d) Bal Gangadhar Tilak
Q78. Keoladeo National Park is in- (a) Karnataka (b) Madhya Pradesh (c) Maharashtra (d) Rajasthan
Q79. In which one of the following physiological processes, excess water escapes in the form of droplets from a plant?  (a) Transpiration (b) Guttation (c) Secretion (d) Excretion
Q80. Which one of the following places is not located on the bank of river Ganga?  (a) Uttarkashi (b) Kanpur (c) Fatehpur (d) Bhagalpur
Q81. Which of the following three rivers of the peninsula India have the Amarkantak region as

#### their source?

- (a) Narmada, Krishna Godavari
- (b) Son, Mahanadi, Narmada
- (c) Godavari, Krishna, Cauvery
- (d) Chambal. Betwa, Luni

## Q82. The place located at the confluence of Alaknanda and Bhagirathi rivers is

- (a) Badrinath
- (b) Rishikesh
- (c) Rudraprayag
- (d) Devprayag

# Q83. Surface water resources are highest in

- (a) Ganga plains
- (b) North-Eastern India
- (c) Peninsular India
- (d) Indus plains

# Q84. Which one among the following lakes is situated on the west coast of India?

- (a) Chilika
- (b) Ashtamudi
- (c) Pulicat
- (d) Kolleru

# Q85. Which of the following were regarded as the hub of Aryan culture during the later Vedic period?

- (a) Anga and Magadh
- (b) Kosal and Videha
- (c) Kuru and Panchal
- (d) Matsya and Surasena

## Q86. Which of the following inscriptions tells about the Aryan's movement from Iran to India?

- (a) Mansehra
- (b) Shahbajgarhi
- (c) Boghazkoi
- (d) Junagarh

#### Q87. Who among the following British persons admitted the Revolt of 1857 as a national revolt?

- (a) Lord Dalhousie
- (b) Lord Canning
- (c) Lord Ellenborough
- (d) Disraelli

# Q88. Which of the following statements above Ryotwari settlement is/are correct?

- 1. It recognised the cultivators as the owner of land.
- 2. It was a temporary settlement.
- 3. It was introduced later than the permanent settlement.

Select the correct answer using the codes given below

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

Q89. Which one of the following Co-Operative societies is responsible for the production of fertilizers?  (a) NAFED  (b) IFFCO  (c) NCDC  (d) TRI FED
Q90. The impact of the Green Revolution was felt most in the production of (a) rice (b) pulses (c) oilseeds (d) wheat
Q91. The Blue Revolution is related with (a) Fish production (b) Food grain production (c) Oilseed production (d) Milk production
Q92. Finger prints on a piece of paper may be detected by sprinkling fluorescent powder on the paper and then looking it into (a) mercury light (b) sunlight (c) infrared light (d) ultraviolet light
Q93 When light passes from one medium to another medium, which one of the following does not change? (a) Intensity (b) Velocity (c) Wavelength (d) Frequency
Q94. The Chauri Chaura incident took place in? (a) 1902 (b) 1912 (c) 1922 (d) 1932
Q95. In Indian Parliamentary System, Gram Panchayat is elected for how many years? (a) Two years (b) Three years (c) Four years (d) Five years
Q96. The famous Lagoon Lake of India is: (a) Dal Lake (b) Chilka Lake (c) Bhimtal Lake (d) Mansarover
Q97. If objects appear enlarged and inverted in a rear-view mirror, then which type of mirror is used?

(a) Concave

- (b) Convex
  (c) Cylindrical
  (d) Plane
  Q98. Which state does not share its boundary with Myanmar?
  (a) Sikkim
  (b) Manipur
  (c) Mizoram
- Q99. Harsha moved his capital from.....to.....to
- (a) Thaneshwar, Kannauj

(d) Arunachal Pradesh

- (b) Delhi, Deogiri
- (c) Kamboj, Kannauj
- (d) Valabhi, Delhi
- Q100. Mahatma Gandhi formed the Natal Indian Congress in the year .........
- (a) 1854
- (b) 1863
- (c) 1894
- (d) 1874

# **Solutions**

# S1. Ans.(c)

Sol. The 'One Panchayat, One Playground' project was inaugurated by Kerala Chief Minister Pinarayi Vijayan at Kallikkad here where he said that a good sports culture was essential for building a healthy and happy society.

# S2. Ans.(b)

Sol. West Bengal has the highest number of water bodies in India, with 7.47 lakh water bodies, according to the Census of Water Bodies by the Ministry of Jal Shakti.

S3. Ans.(b)

Sol. The Kashmiri Files won the Best Film Award at the Dadasaheb Phalke Award 2023.

#### S4. Ans.(b)

Sol. APJ Abdul Kalam Satellite Launch Vehicle Mission-2023 launched from Tamil Nadu.

# S5. Ans.(c)

Sol. A new book in Hindi titled Gandhi: Siyasat aur Sampradaiykta ('Gandhi: Politics and Communalism') written by journalist-turned-author Piyush Babele, who currently heads the Madhya Pradesh Congress' media department.

## S6. Ans.(b)

Sol. The International Day of Conscience is a relatively new observance, having been established by the United Nations General Assembly in 2019.

# S7. Ans.(c)

Sol. International Lusophone Festival is being held from 3 to 6 December 2022 in Goa. The Ministry of External Affairs is organizing the festival in partnership with the Indian Council of Cultural Relations and the Goa government.

## S8. Ans.(a)

Sol. The 12th Edition of Exercise Agni Warrior, a bilateral exercise between the Singapore & Indian Army, which had commenced on 13 November 2022 concluded at Field Firing Ranges, Devlali (Maharashtra).

# S9. Ans.(d)

Sol. Union Minister for Agriculture and Farmers' Welfare Narendra Singh Tomar has inaugurated the three-day 'North East Krishi Kumbha-2023' in Meghalaya.

#### S10. Ans.(d)

Sol. Mumbai-based physician Dr. Tapan Saikia has been honored with the highest state civilian award, 'Assam Baibhav', for his contribution to cancer treatment.

## S11. Ans.(a)

Sol. The first-of-its-kind inclusive festival in India, 'Purple Fest: Celebrating Diversity' is set to begin in Goa on 5th January.

#### S12. Ans.(b)

Sol. NMDC signs up Champion Boxer Nikhat Zareen as its Brand Ambassador. Nikhat Zareen represents the strength, courage, agility and national pride associated with the brand NMDC.

#### S13. Ans.(a)

Sol. Air Marshal A P Singh has been appointed as the new Vice Chief of the Indian Air Force. He will succeed Air Marshal Sandeep Singh, who will retire from service.

# S14. Ans.(c)

Sol. India-born naturalised British economist Meghnad Desai has authored a new book titled "The Poverty Of Political Economy: How Economics Abandoned the Poor" which highlights how the discipline of economics, since the time it evolved from the late 18th century, systematically kept the interests of the poor at the periphery.

#### S15. Ans.(b)

Sol. The Pradhan Mantri Kisan Samman Nidhi Yojana was launched on 24th February 2019.

#### S16. Ans.(a)

Sol. 'Barisu Kannada Dim Dimava' Festival is organized to celebrate Karnataka's culture, traditions, and history.

## S17.Ans.(d)

Sol. The gravitational force is a force that attracts any objects with mass. This is called Newton's Universal Law of Gravitation. The gravitational force on Earth is equal to the force the Earth exerts on you. At rest, on or near the surface of the Earth, the gravitational force equals your weight.

# S18.Ans.(c)

Sol.Nitrous oxide (N2O) was invented in 1772 AD by a scientist name Joseph Pristley of Britain. This gas was used as anesthetic in 1844 AD by Hares Valls. When a person smell lot of this gas he starts laughing loudly, due to this property nitrous oxide is known as laughing gas.

## S19.Ans. (b)

Sol. Iron is an essential element for blood production. About 70 percent of your body's iron is found in the red blood cells of your blood called hemoglobin and in muscle cells called myoglobin. Hemoglobin is essential for transferring oxygen in your blood from the lungs to the tissues.

# S20.Ans. (b)

Sol. Cryogenics is a branch of physics that studies the application of extremely low temperature and its applications. Cryogenics fuel is used in rockets and spacecraft hence their engines are called cryogenic rocket engines. In such rocket engines extremely cold and liquid gases are used as fuel and oxidizer.

# S21.Ans.(d)

Sol. Iltutmish was a slave of Qutb-ud-din Aibak. He was also his son-in law and the governor of Badaun. In AD 1211, he deposed aram Shah, the successor of Qutb-ud-din and become king himself. Iltutmish made Delhi as his capital on the place of Lahore.

## S22.Ans.(c)

Sol. The shape of chromosome is clearly visible at the metaphase stage of mitosis. In Prophase stage of mitosis, the chromatin condenses into two rod-shaped structures called chromosomes, Anaphase is a stage of mitosis where the sister chromatids are separated from each other and more towards the opposite poles; telophase is the last stage of cell division where the two daughter cells are separated from each other and form a new cell.

#### S23.Ans.(b)

Sol. Bone forming cells are osteoblasts. Oeteoclast is a large multinucleate bone cell which absorbs bone tissue during growth and healing. Chondroblast or perichondrial cells, is the name given to mesenchymal progenitor cells in situ which, from endochondral ossification, will form chondrocytes in the growing cartilage matrix; Chondroclasts are mature osteoclasts which are capable of cartilage matrix resorption.

#### S24.Ans.(b)

Sol. Kanak Pal was the founder Panwar Dynasty.

#### S25.Ans.(c)

Sol. The Alai Darwaza is a perfect specimen of architecture belonging to the period of the Delhi Sultanate. The three doorways on the east, west, and south are lofty pointed arches, in the shape

of a horseshoe, which rise above the flanking side bays. It is the first example of this type of architect in India.

## S26.Ans.(d)

Sol. All single – celled eukaryotes are placed under Protista. This kingdom forms a link with others dealing with plants, animals and fungi.

# S27.Ans(d)

Sol. In India, two different types of alluvial soils have developed viz. bhangra and khaddar. Khadar and Bangar are terms used in the Indo-Gangetic plains of North India and Pakistan to differentiate between two types of river plains and alluvial soils.

# S28. Ans.(c)

Sol. In the 75th year of our Independence, the world recognised the Indian economy as a 'bright star'. Our current year's economic growth is estimated to be at 7 per cent.

#### S29. Ans.(d)

Sol. Pablo Picasso (25 October 1881 – 8 April 1973) was a Spanish painter, sculptor, printmaker, ceramicist, stage designer, poet, and playwright who spent most of his adult life in France.

#### S30. Ans.(b)

Sol. Ganesh Vasudev Mavalankar was the first Speaker of Lok sabha.

- Ganesh Vasudev Mavalankar was popularly known as Dadasaheb.
- G.V Mavalankar's term was from 15 May 1952 27 February 1956
- M. A. Ayyangar was the second Speaker of Lok Sabha.

## S31. Ans.(a)

Sol. The first Finance Minister of independent India was R. K. Shanmukham Chetty. He presented the first Union budget of India on 26 Nov.1947. The first mini-budget was presented by T. T. Krishnamachari on November 30, 1956.

# S32. Ans.(b)

Sol. The Swadeshi Boycott Movement is related to the Partition of Bengal in 1905. The Indian National Congress began the Swadeshi movement that included boycotting British goods and public institutions.

# S33. Ans.(d)

Sol. The Mutiny of 1857 was described as the First Indian War of Independence by V D Savarkar. It began on May 10, 1857.

#### S34.Ans. (d)

Sol. Green plants act as producers in the ecosystem. Due to process of photosynthesis green plants produce their own food and also known as autotrophs. Animals are categorized as consumers in the ecosystem and are dependent upon producers for nutrients.

#### S35. Ans.(c)

Sol. ARTICLE 365-When any State has failed to comply with, or to give effect to, any directions given in the exercise of the executive power of the Union under any of the provisions of this Constitution, it shall be lawful for the President to hold that a situation has arisen in which the

Government of the State cannot be carried on in accordance with the provisions of the Constitution.

## S36. Ans.(b)

Sol.

Article 137 of Constitution of India – Review of judgments or orders by the Supreme Court Subject to the provisions of any law made by Parliament or any rules made under Article 145, the Supreme Court shall have power to review any judgment pronounced or order made by it.

#### S37. Ans.(d)

Sol.

The Zonal Councils are the statutory bodies. They are established by an Act of the Parliament, that is, States Reorganisation Act of 1956. In India, at present, there are 6 Zonal Council. Originally five councils were created as per the States Reorganization Act 1956. Main objective of the Zonal Councils is to ensure cooperation between states.

#### S38. Ans.(d)

Sol. CRISIL is the Credit Rating Agency of India. CRISIL's majority shareholder is Standard and Poor's (S&P). CRISIL: It is a global analytical company providing ratings, research and risk and policy advisory services. It was founded in 1987, Headquarters (Mumbai).

# S39.Ans.(c)

Sol. The services sector contributes the most to India's GDP, accounting for more than 50% of the country's total economic output. This sector includes a wide range of activities such as banking, insurance, telecommunications, transportation, and hospitality. The manufacturing sector is the second-largest contributor to the GDP, followed by agriculture and mining.

#### S40.Ans. (d)

Sol. Inflation is increased in the prices of commodities. It is caused due to decrease in supply and increase in demand of commodities. So when money supply in the economy increases it means people have more purchasing capacity and thus demand increases which results in inflation.

## S41.Ans. (d)

Sol. Brazil is the leading producer and exporter of coffee in the world, a position that the country has held since the last hundred and fifty years. Thus, it is known as 'the coffee pot of the world'.

#### S42.Ans. (d)

Sol. Articles 36-51 under Part IV of Indian Constitution deals with the Directive Principles of State Policy, in which Article 48A is related with the "protection and improvement of environment and safeguarding of forests and wildlife". It was added to the Constitution of India by 42nd Amendment Act, 1976.

## S43.Ans. (b)

Sol. The Lahore session of the Congress passed a resolution declaring Poorna Swaraj to be its goal on 31 December 1929. It established the goal of the Congress as Purna Swaraj, or complete independence, rather than limited autonomy or dominion status.

#### S44.Ans. (c)

Sol.The Prithviraj Raso is an epic poem composed by court poet, Chand Bardai, on the life of Prithviraj III, a Chauhan king who ruled Ajmer & Delhi between 1165 & 1192.

# S45.Ans.(c)

Sol. Kalahari Desert of southern Africa is named after the Tswana word Kgala, meaning "the

great thirst", or Kgalagadi, meaning "a waterless place".

## S46.Ans. (b)

Sol. Chief Justice of India officiates position of President and Vice-President when there seats vacant.

# S47.Ans. (c)

Sol. President does not characterize the combination of Presidential and Republican governmental system.

## S48.Ans. (d)

Sol. There is no restriction for President of India seeking for re-election. Thus a person can become President any number of times.

## S49.Ans. (c)

Sol. The prime minister remains in office so long as he enjoys the confidence of Lok sabha.

## S50.Ans.(c)

Sol. Indian Councils Act of 1892 The Indian Councils Act of 1892 was the first achievement of the Indian National Congress. It had increased the number of "additional members" in the Central Legislative Council. They were to be not less than 10 and not more than 16. It had also increased the proportion of non-officials – 6 officials and 10 non-officials. The members were allowed to discuss the budget and criticize the financial policy of the government. In the provinces also the number of additional members was increased with additional powers

# S51.Ans.(c)

Sol. Indian Councils Act 1892: The non-official members of the Indian legislative council were to be nominated by the Bengal Chamber of Commerce and provincial legislative councils. The members could be recommended by universities, municipalities, zamindars, and chambers of commerce. So the principle of representation was introduced

#### S52.Ans.(c)

Sol. Welby commission was appointed to inquire income and expenditure of the British Government in India. This was done when moderates exposed the drain of wealth through their books and findings. Their accusation as it reached the masses forced Britishers to set up the commission. Moderated had always demanded to give Indians a place in higher civil services. Aitchison commission was set up to review the situation of civil services in India. The outcome of the commission was the establishment of two-tier civil services in India i.e. Union & Provincial.

#### S53.Ans.(d)

Sol.

Main Demands of Moderates

- They Criticised an aggressive foreign policy which resulted in the annexation of Burma, attack on Afghanistan, and suppression of tribals in the North-West—all costing heavily for the Indian treasury
- Expansion and reform of legislative councils.
- Greater opportunities for Indians in higher posts by holding the ICS examination simultaneously in England and in India. Separation of the judiciary from the executive.
- More powers for the local bodies.
- Reduction of land revenue and protection of peasants from unjust landlords.

- Abolition of salt tax and sugar duty.
- Reduction of spending on the army.
- Freedom of speech and expression and freedom to form associations

# S54.Ans. (d)

Sol. The Commission for Agricultural Costs & Prices (CACP) came into existence in January 1965. Minimum Support Price (MSP) is a form of market intervention by the Government of India to insure agricultural producers against any sharp fall in farm prices.

## S55.Ans. (a)

Sol. In India, agriculture, forestry and logging, fishing, mining and quarrying, registered manufacturing and construction units are included in category A.

The output method is applied to category A. The value added by this category is found by subtracting the value of raw materials and other inputs from the aggregate of commodity-wise output.

Expenditure Method-This method measure National income sum total of final expenditure incurred by household, business firm, Govt. & Foreigners.

Commodity flow method - This method is used to estimate purchase of commodity by intermediate or final users. This method generally begins with an estimate of the total supply of a commodity available for domestic users.

#### S56.Ans. (c)

Sol. Statement 1 lists all the main and primary sources of agricultural credit institutions exclusively for farmers.

## S57.Ans.(d)

Sol. Scheduled Banks refers to those banks in India which have been included in 2nd schedule of Reserve Bank of India Act, 1934. Banks not under this schedule are called non-schedule Banks.

#### S58.Ans. (b)

Sol. The Green Revolution in India was a period where Agriculture in India increased its yield due to improved agronomic technology, the main development was higher yielding varieties of wheat. It started mainly from Punjab.

#### S59.Ans. (d)

Sol. The Green Revolution in India has contributed to interregional, inter-class and inter-crop inequality as certain regions like UP and Punjab which used HYVs performed much better than others and become more advanced than other states.

# S60.Ans.(d)

Sol. The national income accounting equation is an equation that shows the relationship between income and expense of an economy and other categories. It is represented by the following equation: Y = C + I + G + (X - M)

Where Y = National income C = Personal consumption expenditure I = Private investment G = Government spending X = Net exports M = Imports

#### S61.Ans. (c)

Sol. Governments use such payments as means of income redistribution by giving out money under social welfare programs such as social security, old age or disability pensions, student grants, unemployment compensation, etc. The traffic fines are transfer income Not Transfer Payment. India has four types of social transfer payments – old age and disability benefits,

sickness and maternity benefits, work injury transfers, and unemployment benefits. Most sources of payments are employers via provident funds, by the government

# S62.Ans. (a)

Sol. When the money value of goods and services included in GDP is estimated on the prices of the current year, it is called GDP at current prices or nominal GDP. Here current prices mean the prices of the year of which GDP is estimated. For example, for estimating GDP for the year 2012-13 if we use the prices prevailing in the year 2012-13, we shall get nominal GDP. On the other hand, when the value of goods and services included in GDP is estimated on the prices of the base year, we get GDP at constant prices or real GDP. An increase in real GDP implies increase in the production of goods and services. Therefore, the calculation of GDP at constant prices or real GDP gives us the correct picture of the economic performance of an economy

S63.Ans.(a)

Sol. Nanda Lake is Goa's first Ramsar Site

# S64.Ans.(b)

Sol. Option (b) is correct: In bacteria, fungi and lower plants, various kinds of thickwalled spores are formed which help them to survive unfavourable conditions – these germinate on availability of suitable environment. In higher plants, seeds and some other vegetative reproductive structures serve as means to tide over periods of stress besides helping in dispersal – they germinate to form new plants under favourable moisture and temperature conditions. They do so by reducing their metabolic activity and going into a state of 'dormancy'. In animals, the organism, if unable to migrate, might avoid the stress by escaping in time. The familiar case of bears going into hibernation during winter is an example of escape in time. Some snails and fish go into aestivation to avoid summer–related problems-heat and desiccation. Under unfavourable conditions many zooplankton species in lakes and ponds are known to enter diapause, a stage of suspended development.

S65.Ans.(a)

Sol

According to the Emissions Gap Report 2022 of the United Nations Environment Programme, the following is the decreasing order of global nations' contribution with respect to Green House Gas emissions. It is China, the United States of America, India, European Union.So, Option (a) is correct.

S66.Ans.(a)

Sol.

Global Methane Assessment, a report released by the Climate and Clean Air Coalition (CCAC) and the United Nations Environment Programme (UNEP), shows that human-caused methane emissions can be reduced by up to 45 percent this decade. The Climate and Clean Air Coalition is a voluntary partnership of governments, intergovernmental organizations, businesses, scientific institutions and civil society organizations committed to improving air quality and protecting the climate through actions to reduce short-lived climate pollutants. So, Option (a) is correct.

S67. Ans. (d)

Sol.

DNA is found in mitochondria other than the nucleus. The DNA is called mitochondrial DNA.

S68. Ans. (d)

Sol

Biofuels are liquid or gaseous fuels primarily produced from biomass, and can be used to replace or can be used in addition to diesel, petrol or other fossil fuels for transport, stationary, portable

and other applications. Crops used to make biofuels are generally either high in sugar (such as sugarcane, sugarbeet, and sweet sorghum), starch (such as maize and tapioca) or oils (such as soybean, rapeseed, coconut, and sunflower).

#### **Sources of Biofuel:**

- Jatropha curcas is multipurpose non-edible oil yielding perennial shrub. This is a hardy and drought-tolerant crop can be raised in marginal lands with lesser input. The crop can be maintained for 30 years economically.
- Sugarbeet (Beta vulgaris Var. Saccharifera L.) is a biennial sugar-producing tuber crop, grown in temperate countries. Now tropical sugarbeet varieties are gaining momentum in tropical and sub-tropical countries, as a promising alternative energy crop for the production of ethanol.
- Sorghum is the most important millet crop occupying largest area among the cereals next to
  rice. It is mainly grown for its grain and fodder. Alternative uses of sorghum include
  commercial utilization of grain in the food industry and utilization of stalk for the production
  of value-added products like ethanol, syrup and jaggery and bio enriched bagasse as fodder
  and as a base material for cogeneration.
- There are several non-edible oil yielding trees that can be grown to produce biofuel. Karanja (Pongamia) is one of the most suitable trees. It is widely grown in various parts of the country. Thus, Option D is correct.

## S69. Ans. (c)

Sol.

**Statement 1 is correct**: Black Carbon is highly effective in absorbing solar energy and can absorb a million times more energy than Carbon Dioxide. It adds to global atmospheric heating by reducing the albedo which is the property of snow and ice to reflect sunlight.

**Statement 2 is correct**: It comprises about 30% of the total carbon component of soils. It serves as a major reservoir of nutrients for tropical soils. Thus, Option C is correct.

#### S70.Ans.(d)

Sol. The Attorney General is the first Law Officer of the Government of India. Under Article 76, the Attorney General for India is appointed by the President and holds office during the pleasure of the President. He must have the same qualifications as required to be a Judge of the Supreme Court. The Attorney General for India is not a member of the Cabinet. But he has the right to speak in the Houses of Parliament or in any Committee thereof, but he has no right to vote. He is entitled to the privileges of a Member of Parliament. In the performance of his official duties, the Attorney General has the right of audience in all Courts in the territory of India.

# S71.Ans.(a)

Sol. Right to information became an Act in 2005. The aim is to make the governments more transparent in its working. It came into operation on 12th October, 2005. The Chief Information Commissioner and other Information Commissioners shall be appointed by the President on the recommendation of a committee consisting of the Prime Minister. The leader of the opposition in Lok Sabha and a Union Cabinet Minister are to be nominated by the PM.

# S72.Ans.(c)

Sol. The Vice President is elected indirectly, by an electoral college consisting of members of both houses of the Parliament. The election is held in accordance with the system of proportional representation by means of the single transferable vote & the voting in such election is by secret ballot. The election of the Vice President is slightly different from the election of the President—the members of state legislatures are not part of the electoral college for Vice Presidential election.

## S73.Ans.(a)

Sol. Article 248 of the Constitution deals with residuary powers. Parliament has exclusive power to make any law with respect to any matter not enumerated in the Concurrent List or State List. Such power shall include the power of making any law imposing a tax not indicated in either of those Lists.

# S74.Ans.(d)

Sol. Mongolia shares the longest land border with China. The border between China and Mongolia stretches over 4,677 kilometers (2,917 miles), making it the longest land border that China shares with any other country.

# S75.Ans.(c)

Sol. The distance between the two latitudes is approximately 111 kilometers (69 miles) per degree of latitude. This distance is constant around the globe because the Earth is nearly spherical in shape.

The distance between two longitudes, on the other hand, varies with the latitude because the lines of longitude converge towards the poles. At the equator, the distance between two longitudes is approximately 111 kilometers (69 miles) per degree, just like the distance between two latitudes, but at the poles, the distance between two longitudes becomes zero.

## S76.Ans.(a)

Sol. A meander, in general, is a bend in a sinuous watercourse or river. Meandering rivers erode sediment from the outer curve of each meander bend & deposit it on an inner curve further downstream. A meander forms when moving water in a river erodes the outer banks & widens its valley. When a meander gets cut off from the main stream, an oxbow lake forms.

## S77. Ans.(b)

Sol.The Theosophical Society was founded by Madam H.P. Blavatsky and Colonel Olcott in New York in 1875. In 1882, the headquarters of the society was established in Adyar near Chennai in India. In 1889, Mrs. Annie Besant joined the Society in England. This movement was popularised by Annie Besant in India.

## S78.Ans.(d)

Sol. Keoladeo National Park or Keoladeo Ghana National Park is a famous bird sanctuary in Bharatpur, Rajasthan. It was formely known as the Bharatpur Bird Sanctuary. It was declared as protected sanctuary in 1971 and later in 1985 it was declared as a World Heritage Site.

#### S79.Ans.(b)

Sol. Guttation is the process of secreting water droplets from the pores of some vascular plants like grass. Guttation is often confused with dew droplets that condense from the atmosphere on to the plants surface.

## S80.Ans (c)

Sol. Fatehpur is not located on the banks of the sacred rivers Ganges.

# S81.Ans (b)

Sol. Son, Mahanadi and Narmada rivers originate from Amarkantak region.

#### S82.Ans (d)

Sol. Devprayag is located in Tehri Garhwal district in Uttarakhand. At this place, Alaknanda and Bhagirathi rivers meet and take the name Ganga.

#### S83.Ans (a)

Sol. Ganga plains has highest Surface water resources.

## S84.Ans (b)

Sol. Ashtamudi lake is situated in the Kollam District of Kerala

# S85.Ans.(c)

Sol. The Aryans further moved towards east in the later Vedic period. The Satapatha Brahmana refers to the expansion of Aryans to the eastern Gangetic plains. During the later Vedic civilization, the Aryans occupied the Upper Gangetic Valley and the Madhyadesa. The Kurus and Panchalas, the Fasas and Usimaras lived in this region. Towards the east the Aryans penetrated into Kosala, Kasi and Videha, Magadha and Anga.

#### S86.Ans.(c)

Sol. One of the Boghazkoi inscriptions proves that the Aryans are from CentralAsia and their movements from Iran to India. Other given inscriptions are not related to Aryans.

#### S87.Ans. (d)

Sol. Disraelli admitted the Revolt of 1857 as a national revolt.

## S88.Ans. (d)

Sol. The Ryotwari system, instituted in some parts of British India, was one of the two main systems used to collect revenues from the cultivators of agricultural land. Features of Ryotwari System:

- Government claimed the property rights to all the land, but allotted it to the cultivators on the condition that they pay taxes. In other words, it established a direct relation between the landholder and the government.
- Farmers could use, sell, mortgage, bequeath, and lease the land as long as they paid their taxes. In other words Ryotwari system gave a proprietary right upon the landholders.
- If they did not pay taxes, they were evicted 4. Taxes were only fixed in a temporary settlement for a period of thirty years and then revised.
- Government had retained the right to enhance land revenue whenever it wanted
- Provided measures for revenue relief during famines but they were seldom applied in real life situation.

# S89.Ans. (b)

Sol. Indian Farmers Fertilizer cooperative Ltd (IFFCO) is the co-operative society responsible for the production of fertilizers. IFFCO was registered on November 3, 1967 as a Multi-unit Cooperative Society. NCDC: National Co-operative Development Co-operation was established by the Act of parliament in 1963 as a statutory co-operation under the ministry of Agriculture.

#### S90.Ans. (d)

Sol. The introduction of high-yielding varieties of seeds and the increased use of chemical fertilizers and irrigation are known collectively as the Green Revolution. The impact of the Green Revolution was felt most in the production of wheat. India saw annual wheat production rise from 10 million tons in the 1960s to 73 million in 2006.

## S91.Ans. (a)

Sol. The Blue Revolution is similar to the green revolution as it deals with aquaculture, fish and water preservation for human use.

Blue Revolution- Fish Production

Green Revolution - Food grains White Revolution - Milk production Yellow Revolution - Oil seed production

#### S92.Ans. (d)

Sol. The primary application of forensic light source is for enhancing the detection of fingerprints. The use of fluorescent enhancement processes that compliment a light source greatly increasesthe type of surfaces from which a fingerprint can be detected. Fingerprints on a piece of paper can be detected by sprinkling powder on the paper and then looking it into ultraviolet light.

#### S93.Ans. (d)

Sol. When light passes from one medium to another medium frequency does not change.

# S94. Ans.(c)

Sol. The Chauri Chaura incident occurred at Chauri Chaura in the Gorakhpur district of the United Province, (modern Uttar Pradesh) in British India on 5 February 1922, when a large group of protesters, participating in the Non-cooperation movement, clashed with police, who opened fire.

# S95. Ans.(d)

Sol. The members of the gram panchayat are elected for a period of five years by the members of the Gram Sabha.

#### S96. Ans.(b)

Sol. Chilika lake is a brackish water lagoon, spread over the Puri, Khurda, and Ganjam districts of Odisha state on the east coast of India, at the mouth of the Daya River, flowing into the Bay of Bengal, covering an area of over 1,100 km<sup>2</sup>.

#### S97.Ans.(a)

Sol. Concave mirrors are used to provide a magnified and inverted image in the rear-view mirror.

# S98. Ans. (a)

Sol. Sikkim does not share its boundary with Myanmar, but it shares its boundary with Nepal, Tibet China, Bhutan and with Indian states of West-Bengal. Four Indian states namely Arunachal Pradesh, Nagaland, Manipur and Mizoram share boundary with Myanmar.

#### S99.Ans.(a)

Sol. Harshavardhan (606-647 AD) (Vardhana Dynasty) established a strong empire in Northern India. He was the last Hindu emperor who ruled over the rest of the Northern India except Punjab. His earliest capital was Thaneswar, present day Haryana. After his accession, He united the two Kingdom Thaneshwar & Kannauj and also shifted his capital from Thaneshwar to Kannauj.

## S100.Ans.(c)

Sol. Natal Indian Congress was an organization that aimed to fight discrimination against Indians in South Africa, Natal India Congress was founded by Mahatma Gandhi in 1894. Gandhi ji also founded Tolstoy Farm and Phoenix Ashram in South Africa.