Q1. The Rowlatt Act was passed in:
(a) 1905
(b) 1913
(c) 1919
(d) 1925

Ans: c

Q2. Mahatma Gandhi launched Kheda Satyagraha on Gujarat in 1918 to support the cause of:
(a) Mill Owners
(b) Land Lords
(c) The peasants
(d) Kol Rebellion

Ans: c

Q3. Who called Subhash Chandra Bose as Desh Nayak?
(a) Lala Lajpat Rai
(b) Rabindranath Tagore
(c) Mahatma Gandhi
(d) Bal Gangadhar Tilak

Ans: b

Q4. The first President of Indian National congress was:
(a) Sir Wyomesh Chandra Banerjee
(b) Annie Besant
(c) Dadabhai Naoroji
(d) George Yule

Ans: a

Q5. Lord Curzon announced the partition of Bengal on:
(a) 16 October, 1911
(b) 16 October, 1896
(c) 16 October, 1907
(d) 16 October, 1905

Ans: d

Q6. Garampani sanctuary is located at
(a) Gangtok, Sikkim
(b) Kohima, Nagaland
(c) Diphu, Assam
(d) Junagarh, Gujarat

Ans: c

Q7. Human Rights Day is on
(a) 24-Feb
(b) 10-Dec
(c) 15-May
(d) 21-Jul

Ans: b

Q8. Hygrometer is used to measure
(a) purity of milk
(b) relative humidity
(c) specific gravity of liquid
(d) None of the above

Ans: b

Q9. India became a member of the United Nations in
(a) 1945
(b) 1947
(c) 1959
(d) 1960

Ans: a

Q10. ISRO Satellite launching station is located at
(a) Sriharikotta (Andhra Pradesh)
(b) Salem (Tamil Nadu)
(c) Solapur (Maharashtra)
(d) Warangal (Andhra Pradesh)

Ans: a

Q11. India won its first Olympic hockey gold in?
(a) 1928
(b) 1932
(c) 1936
(d) 1948

Ans: a

Q12. The Manhattan Project was started by President Roosevelt in 1942 to ensure that the U.S. beat the Germans in developing a nuclear bomb Whom did Roosevelt appoint as scientific head the Manhattan Project?
(a) Robert Oppenheimer
(b) James Conant
(c) Leslie R. Groves
(d) Vannevar Bush

Ans: a

Q13. Who is the author of book 'We Indians'?
(a) Nirad Choudry
(b) Subramaniya Swamy
(c) Khushwant Singh
(d) Muluk Raj Anand

Ans: c

Q14. Professor Amartya Sen is famous in which of the fields?
(a) Biochemistry
(b) Electronics
(c) Economics
(d) Geology

Ans: c

Q15. Raja Ravi Verma, was famous in which of the fields?
(a) Painting
(b) Politics
(c) Dance
(d) Music

Ans: a

Q16. Who is the first Asian Winner of Nobel Prize?
(a) V. Raman
(b) Rajiv Gandhi
(c) Rabindranath Tagore
(d) Mother Teresa

Ans: c

Q17. Which country is known as the 'Sugar Bowl' of the world?
(a) Cuba
(b) China
(c) Australia
(d) India

Ans: a

Q18. Where is the National Institute of Virology situated?
(a) Pune
(b) Delhi
(c) Kolkata
(d) Madra

Ans: a

Q19. 25th January is celebrated as
(a) National Voters Day
(b) National Youth Day
(c) International Teachers Day
(d) World Day of Social Justice

Ans: a

Q20. The element common to all acids is
(a) Hydrogen
(b) Carbon
(c) Sulphur
(d) Oxygen

Ans: a

Q21. Non-stick cooking utensils are coated with
(a) Black paint
(b) PVC
(c) Teflon
(d) polystyrene

Ans: c

Q22. The main examples of Rabi crop are
(a) wheat, barley, peas, rapeseed, mustard, grams
(b) rice, jowar, barley, wheat
(c) peas, maize, cotton and jute
(d) All of the above

Ans: a

Q23. The highest mountains on earth namely Mount Everest, K2, Kanchenjanga are located in
(a) the greater Himalayas
(b) the Lesser Himalayas
(c) the outer Himalayas
(d) None of the above

Ans: a

Q24. What are the denominations of the Commemorative coins to mark India's G20 presidency?
(a) Rs 75 and Rs 100
(b) Rs 100 and Rs 200
(c) Rs 200 and Rs 500
(d) Rs 500 and Rs 1000

Ans: a

Q25. Shakti' scheme, which aims to provide free bus travel to women, is implemented in which state?
(a) Kerala
(b) Karnataka
(c) Odisha
(d) West Bengal

Ans: b

Q26. India recently organised its first 'Investment Forum 2023' with which country?
(a) UAE
(b) Saudi Arabia
(c) Australia
(d) Germany

Ans: b

Q27. Which institution developed the 'Astra' indigenous air-to-air missile?
(a) ISRO
(b) DRDO
(c) HAL
(d) BHEL

Ans: b

Q28. What is the rank of India in the 'World Happiness Index 2023'?
(a) 126
(b) 121
(c) 118
(d) 108

Ans: a

Q29. 'Nilgiri Tahr' is the state animal of which state/UT?
(a) Karnataka
(b) Kerala
(c) Tamil Nadu
(d) Andhra Pradesh

Ans: c

Q30. Narges Mohammadi, who won 2023 Nobel Prize for Peace, is from which country?
(a) Israel
(b) Iran
(c) UAE
(d) Oman

Ans: b

Q31. What is the name of the Sikkim's first railway station, recently inaugurated by Prime Minister of India?
(a) Gangtok railway station
(b) Namchi railway station
(c) Rangpo railway station
(d) Pelling railway station

Ans: c

Q32. Who is the first cricketer in the history to be given a "timed out" dismissal?
(a) Hardik Pandya
(b) Angelo Mathews
(c) Pat Cummins
(d) Rashid Khan

Ans: b

Q33. Mount Etna, which was seen in the news, is located in which country?
(a) Philippines
(b) Italy
(c) Indonesia
(d) Japan

Ans: b

Q34. What are 'Moidams', recently seen in news?
(a) Ancient temples
(b) Mound-burial sites
(c) Invasive plant
(d) Black Hole

Ans: b

Q35. Who assumed the title of 'Gangaikondachola'?
(a) Vijjayalay Chola
(b) Rajendra Chola I
(c) Rajadhiraja Chola
(d) Rajaraja Chola I

Ans: b

Q36. On which committee recommendation NABARD was established?
(a) Lakhadwala commitee
(b) Sivaraman committee
(c) Tarapore committee
(d) Brown committee

Ans: b

Q37. What is INS Vikrant, recently seen in news?
(a) Submarine
(b) Aircraft carrier
(c) Tankers
(d) Frigates

Ans: b

Q38. "Hoollongapar Gibbon Sanctuary, recently seen in the news, is located in which state?
(a) Nagaland
(b) Manipur
(c) Assam
(d) Mizoram

Ans: c

Q39. "If the mass of an atom is 37 and atomic number is 17, then what shall be number of neutrons and protons in it?
(a) 17 Neutrons, 17 Protons
(b) 20 Neutrons, 17 Protons
(c) 17 Neutrons, 20 Protons
(d) 37 Protons, 17 Neutrons

Ans: b

Q40. Which state government recently introduced first witness protection scheme for better justice delivery?
(a) Assam
(b) Manipur
(c) Sikkim
(d) Nagaland"

Ans: a

Q41. Which article of the Indian Constitution provides for free legal aid to the poor and weaker sections of the society?
(a) Article 32
(b) Article 39A
(c) Article 21
(d) Article 44

Ans: b

Sol: Article 39A of the Constitution of India provides for free legal aid to the poor and weaker sections of the society to ensure justice for all.

Q42. Which organization released the 'National Multidimensional Poverty Index: A Progress Review 2023'?
(a) Reserve Bank of India
(b) Ministry of Statistics and Programme Implementation
(c) NITI Aayog
(d) National Sample Survey Office

Ans: c

Sol: The NITI Aayog released the 'National Multidimensional Poverty Index: A Progress Review 2023'.

Q43. Under which article of the Indian Constitution are the Council of Ministers collectively responsible to the Lok Sabha?
(a) Article 74(1)
(b) Article 75(3)
(c) Article 77(3)
(d) Article 79

Ans: b

Sol: Article 75(3) of the Constitution of India specifies that the Council of Ministers are collectively responsible to the Lok Sabha.

Q44. What is the primary aim of the PM SHRI Yojana?
(a) To build new schools across the country
(b) To upgrade and develop existing schools
(c) To provide scholarships to students
(d) To introduce new subjects in the curriculum

Ans: b

Sol: The PM SHRI Yojana is a centrally sponsored scheme aimed at upgrading and developing more than 14,500 existing schools across the country.

Q45. Which ministry is responsible for implementing the Pradhan Mantri Ujjwala Yojana (PMUY) scheme?
(a) Ministry of Health and Family Welfare
(b) Ministry of Rural Development
(c) Ministry of Petroleum and Natural Gas

(d) Ministry of Women and Child Development

Ans: c

Sol: The PMUY scheme is implemented by the Ministry of Petroleum and Natural Gas (MoPNG).

Q46. What recent change is proposed in the Election Commissioners Bill, 2023, regarding the selection committee for the CEC and ECs?
(a) Including the Chief Justice of India
(b) Including a Cabinet Minister nominated by the Prime Minister
(c) Including the Speaker of the Lok Sabha
(d) Including the President of India

Ans: b

Sol: The Election Commissioners Bill, 2023, proposes to replace the Chief Justice of India with a Cabinet Minister nominated by the Prime Minister in the committee for the selection of the Chief Election Commissioner and Election Commissioners.

Q47. When was the Women's Reservation Bill first introduced in the Indian Parliament?
(a) 1990
(b) 1995
(c) 1996
(d) 2000

Ans: c

Sol: The Women's Reservation Bill was first introduced in the Parliament in 1996.

Q48. Which new Article in the Constitution reserves 33% seats for women in the Lok Sabha?
(a) Article 330
(b) Article 331
(c) Article 330A
(d) Article 332A

Ans: c

Sol: Article 330A reserves 33% seats for women in the Lok Sabha.

Q49. Which Article of the Indian Constitution defines a Money Bill?
(a) Article 100
(b) Article 101
(c) Article 110
(d) Article 112

Ans: c

Sol: Article 110 of the Indian Constitution defines a Money Bill.

Q50. What major announcement did Prime Minister Narendra Modi make during the opening ceremony of the 141st IOC session?
(a) India will host the 2028 Summer Olympics
(b) India aspires to host the 2036 Summer Olympics
(c) India will host the next IOC session in 2024
(d) India plans to bid for the Winter Olympics

Ans: b

Sol: During the opening ceremony, Prime Minister Narendra Modi announced that India aspires to host the 2036 Summer Olympics.

Q51. Who won the Sahitya Akademi Award for Assamese language recently in 2023?
(a) Dr Pranavjyoti Deka
(b) Nandeswar Daimari
(c) Judhabir Rana
(d) None of the above

Ans: a

Sol: Dr. Pranavjyoti Deka won the Sahitya Akademi Award for his short-story collection in Assamese titled "Dr Pranavjyoti Dekar Srestha Galpa."

Q52. By what percentage does the Assam government aim to have electric vehicles (EVs) as part of new vehicle registrations by 2026?
(a) 15%
(b) 20%
(c) 25%
(d) 30%

Ans: c

Sol: The policy aims for 25% of all new vehicle registrations to be electric vehicles by 2026.

Q53. What is the maximum jail term prescribed under the new ordinance for cheating in public examinations in Assam?
(a) 5 years
(b) 7 years
(c) 10 years
(d) 15 years

Ans: c

Sol: The new ordinance stipulates a maximum jail term of 10 years for individuals involved in cheating during public examinations.

Q54. What is the main objective of the Orunodoi 2.0 scheme introduced by Assam?
(a) To improve infrastructure in rural areas
(b) To provide financial aid for education
(c) To enhance the poverty alleviation program
(d) To promote industrial development

Ans: c

Sol: Orunodoi 2.0 is an upgraded version of Assam's poverty alleviation scheme aimed at enhancing its reach and effectiveness.

Q55. As of the current news, how does Assam rank in terms of loan disbursal under the PM SVANIDHI scheme?
(a) Second best in the country
(b) Best in the country
(c) Third best in the country
(d) Last among the northeastern states

Ans: a

Sol: Assam has emerged as the second best in the country for loan disbursal under the PM SVANIDHI scheme, with an achievement of 89% loan disbursal.

Q56. Which two prestigious awards did Bhupen Hazarika receive?
(a) Jnanpith Award and Sahitya Akademi Award
(b) Bharat Ratna and Dada Saheb Phalke Awards
(c) Padma Bhushan and Padma Shri
(d) Nobel Prize and Grammy Award

Ans: b

Sol: Bhupen Hazarika was awarded the Bharat Ratna and the Dada Saheb Phalke Awards for his contributions to music and cinema.

Q57. Who will chair the district delimitation commission as per the 'The Assam Panchayat (Amendment) Bill, 2023'?
(a) Chief Minister of Assam
(b) District Commissioner
(c) Chief Executive Officer of the Zila Parishad
(d) Relevant Election Officer

Ans: b

Sol: The District Commissioner will chair the district delimitation commission.

Q58. Which of the following rice varieties has recently earned a GI (Geographical Indication) tag for its distinctiveness?
(a) Basmati rice
(b) Sali rice
(c) Bodo rice
(d) Chokuwa rice

Ans: d

Sol: Chokuwa rice, also known as Magic rice, recently earned a GI tag for its distinctiveness.

Q59. Which states are hosting the 132nd edition of the Durand Cup?
(a) West Bengal and Assam
(b) Punjab and Haryana
(c) Gujarat and Maharashtra
(d) Uttar Pradesh and Rajasthan

Ans: a

Sol: The 132nd edition of the Durand Cup is being organized this year by West Bengal and Assam.

Q60. Which of the following is true about the Namrup Fertiliser Plant?
(a) It is the country's first super-phosphate plant.
(b) It is Asia's oldest gas-based fertiliser plant.
(c) It is the newest fertilizer plant established in India.
(d) It was established by the Indian Council of Agricultural Research.

Ans: b

Sol: The Namrup Fertiliser Plant is Asia's oldest gas-based fertiliser plant. It was set up in the early 1960s.

Q61. Which of the following tribes are provided livelihood opportunities through the Chandubi Festival?
(a) Bodos, Kacharis, and Misings
(b) Rabhas, Garos, Gorkhas, and tea tribes
(c) Nagas, Karbis, and Dimasa
(d) Manipuris, Meiteis, and Mizo

Ans: b

Sol: The festival provides livelihood opportunities to various tribes including Rabhas, Garos, Gorkhas, and tea tribes.

Q62. Who was referred to as the "Pitamaha" of Assamese literature?
(a) Jadav Payeng
(b) Krishna Kanta Handique
(c) Padmanath Gohain Baruah
(d) Nilmani Phookan

Ans: c

Sol: Padmanath Gohain Baruah was referred to as the "Pitamaha" of Assamese literature.

Q63. Which season in Assam experiences fog, particularly in the mornings?
(a) Monsoon Season
(b) Pre-Monsoon Season
(c) Retreating Monsoon Season
(d) Dry Winter Season

Ans: c

Sol: The Retreating Monsoon Season in Assam experiences fog, particularly in the mornings.

Q64. Who presided over the first meeting of the Assam Legislative Council in 1913?
(a) Sir Archdale Easle
(b) Lt. Babu Basanta Kumar Das
(c) Sri Biswajit Daimari
(d) None of the above

Ans: a

Sol: Sir Archdale Easle presided over the first meeting of the Assam Legislative Council in 1913.

Q65. Who founded the Jorhat Sarbajanik Sabha in 1884?
(a) Padmanath Gohain Baruah
(b) Jagannath Baruah
(c) Maniram Dewan
(d) Raja Naranarayan Singha

Ans: b

Sol: Jagannath Baruah founded the Jorhat Sarbajanik Sabha in 1884.

Q66. u: v = 4:7 and v: w = 9:7. If u = 72, then what is the value of w?
(a) 98
(b) 77
(c) 63
(d) 49

Ans: a

Q67. How much should be added to each term of 4:7, so that it becomes 2: 3?
(a) 2
(b) 3
(c) 4
(d) 1

Ans: a

Q68. If the ratio of ages between A and B is 4 : 5 and A's age is 20 years, what is B's age?
(a) 45 years
(b) 15 years
(c) 25 years
(d) 35 years

Ans: c

Q69. The ratio of the present ages of a man and his wife is 5: 8. After 10 years, the ratio of the man and his wife will be 2:3. What will be the ratio of their ages after 20 years?
(a) 9/10
(b) 3/5
(c) 4/9
(d) 7/10

Ans: d

Q70. The ratio of milk and water in a mixture of 240 litres is 3:2.40 litres of the mixture is taken out and 9 litres of milk to be added. Find the final ratio between milk and water.
(a) 93:15
(b) 45:24
(c) 8:7
(d) 129:80

Ans: d

Q71. How much pure alcohol must be added to 400 ml of a solution containing 16% of alcohol to change the concentration of alcohol in the mixture to 40%.
(a) 160 ml
(b) 100 ml
(c) 128 ml
(d) 68 ml

Ans: a

Q72. A marked price of an article is 20% above than the cost price of an article. A shopkeeper allows a discount of 10%. A selling price of an article is 2160. Find the profit percentage.
(a) 11%
(b) 5%
(c) 8%
(d) one of the above

Ans: c

Q73. A dishonest merchant sells goods at a 12.5% loss on the cost price, but uses 28 g weight instead of 36 g. What is his percentage profit or loss?
(a) 6.25% loss
(b) 12.5% gain
(c) 18.75% gain
(d) 10.5% loss

Ans: b

Q74. In an exam, a student got 40 marks and still failed by 20 percent marks. If the passing percentage is 40 percent, then what are the maximum marks of the exam?
(a) 160
(b) 250
(c) 200
(d) 180

Ans: c

Q75. If 200% of k - (k + 2) % of 50 = k, then what is the value of k?
(a) 2/3
(b) 100/149
(c) 2
(d) 1

Ans: c

Q76. The average salary of the entire staff in Reliance Company is Rs.15000 per month. The average salary of officers is Rs.45000 per month and that of non-officers is Rs.10000 per month. If the number of officers is 20 then find the number of non-officers in the Reliance company.
(a) 160
(b) 120
(c) 60
(d) 180

Ans: b

Q77. The average of mark of 14 student was calculated as 71. But it was later found that the marks of one student had been wrongly inserted as 42 instead of 56 and of another as 74 instead of 32. The correct average is.
(a) 66
(b) 67
(c) 68
(d) 69

Ans: d

Q78. Three friends A, B, C invested in a business in the ratio 3:2:6. After 6 months C withdraw half his capital. If the total profit earned for the year is Rs.53010 (in Rs.). Then Profit made by A is
(a) 16740
(b) 19740
(c) 17740
(d) 18740

Ans: a

Q79. A sum of 12540 is divided among A, B and C in such a way that the ratio between the share of A and that of B and C together is 3 : 7 and that of B and that of A and C together is in the ratio 2: 9. What is the share of C?
(a) 2280
(b) 3762
(c) 6389
(d) 6498

Ans: d

Q80. A, B, and C can complete a work in 40, 60, and 80 days respectively. They started working together. If A and B left 11 days and 8 days before the completion of work. In how many days they will complete the work.
(a) 13 days
(b) 26 days
(c) 39 days
(d) 52 days

Ans: b

Q81. If 'A' is 6 times more efficient than 'B', 'B' takes 32 days to complete the task, then find the number of days required to finish the whole work by A' and 'B' working together. '
(a) 2 days
(b) 4 days
(c) 6 days
(d) 8 days

Ans: b

Q82. A boy inside a train counts 51 telephone poles in one min and the distance between two consecutive poles is 6 m. Find the length of the train if it takes 50 sec to cross the stationary pole.
(a) 200 m
(b) 250 m
(c) 300 m
(d) More than one of the above

Ans: b

Q83. A man travels from A to B at a speed of 36 km/hr in 74 minutes and he travels a distance from B to C with a speed of 45 km/hr in 111 minutes. Find the average speed of whole journey.
(a) 41.4km/hr
(b) 39.8 km/hr
(c) 40.8 km/hr
(d) 36.2km/hr

Ans: a

Q84. Aman had Rs.10,000 with him. He lent a part of it at 8% per annum simple interest and the remaining at 10% per annum. His total annual income was Rs. 880 Find the sum lent at 8%
(a) 5500
(b) 6000
(c) 5000
(d) 6500

Ans: b

Q85. A sum becomes Rs. 10650 in 5 years. and Rs. 11076 in 6 years at simple interest. What is the sum?
(a) Rs. 8946
(b) Rs. 8740
(c) Rs. 8520
(d) Rs. 8800

Ans: c

Q86. Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?
(a) 1/2
(b) 3/4
(c) 3/8
(d) 5/16

Ans: b

Q87. A large tanker can be filled by two pipes A and B in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from

empty state if B is used for half the time and A and B fill it together for the other half?
(a) 15 min
(b) 20 min
(c) 27.5 min
(d) 30 min

Ans: d

Q88. The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is:
(a) 2.3 m
(b) 4.6 m
(c) 7.8 m
(d) 9.2 m

Ans: d

Q89. A two-digit number is such that the product of the digits is 8. When 18 is added to the number, then the digits are reversed. The number is:
(a) 18
(b) 24
(c) 42
(d) 81

Ans: b

Q90. A man walked diagonally across a square lot. Approximately, what was the percent saved by not walking along the edges?
(a) 20
(b) 24
(c) 30
(d) 33

Ans: c

Q91. What least number must be added to 1056, so that the number is completely divisible by 23?
(a) 2
(b) 3
(c) 18
(d) 21

Ans: a

Q92. How many of the following numbers are divisible by 132?
264, 396, 462, 792, 968, 2178, 5184, 6336
(a) 4
(b) 5
(c) 6
(d) 7

Ans: a

Q93. The value of cot77° cot 63° cot 60° cot27° cot13°:
(a) 0
(b) 1
(c) 2
(d) None of These

Ans: d

Q94. If $\tan^2\Theta + \sec^2\Theta = 5/3$, find $\tan 2\Theta$
(a) 1
(b) 2
(c) 3
(d) None of These

Ans: d

Q95. Cost of 5 pen and 3 eraser is 140. What is the cost of 30 pen and 18 eraser:
(a) 480
(b) 840
(c) 760
(d) None of these

Ans: b

Q96. 100, 136, 352, 452, ?
(a) 604
(b) 500
(c) 2028
(d) 2180
(e) 840

Ans: d

Q97. If 'ENDLESS' is coded as FRMLUWM then what will 'ABANDON' be coded as?
(a) CFINPSL
(b) DFINPQT
(c) ZWETGOH
(d) ANTDBOY
(e) None of the above

Ans: a

Q98. A,B,C,D,E,F,G and H are seated in a straight line facing north but not necessarily in the same order. B sits third to the left of E. Neither B normal E sits at an extreme end of the line. Only one person sits between E and G. G is not an immediate neighbour of B. C sits third to the right of A. A is not an immediate neighbour of B. Only one person sits between H and D. C is not an immediate neighbour of H.
What is the position of F with respect to D?
(a) Third to the left
(b) Fourth to the right
(c) Second to the right
(d) Second to the left
(e) Third to the right

Ans: a

Q99. Point S is 4m to the north of M. Point C lies exactly between point M and point P. Point W is 8m to the east of point T. Point M is 16m to the East of point P. Point T is 6m to the south of point P.
In which direction is point W with respect to point S?
(a) North
(b) North-east
(c) South
(d) South-west
(e) Cannot be determined

Ans: d

Q100. P, Q, R, S, T, U and V are friends. P is taller than Q and T but not the tallest. Q is not shorter than T. U is shorter than only one person. S is taller than only V.
Who is the third tallest?
(a) P
(b) U
(c) V
(d) R
(e) S

Ans: a

Q101. In a row of 86 students Paresh is 15 from the left, then what will be his rank from the right end?
(a) 71
(b) 72
(c) 70
(d) 75
(e) None of the above

Ans: b

Q102. "Blood" is related to "vein" in the same way is "oil" is related to?
(a) Car
(b) Engine
(c) Pipelines
(d) Liquid
(e) Petrol

Ans: c

Q103. 25 : 625 :: 35 : ?
(a) 1775
(b) 935
(c) 1552
(d) 1999
(e) 1225

Ans: e

Q104. 1 # 3 g 7 + / h q l & 0 @ 5 j k ! ? 6 © * : d m n z 8 0 O ^
Which element is 12th from the right end?
(a) ?
(b) !
(c) 6
(d) ©
(e) None of the above

Ans: c

Q105. How many times does the minute hand and the hour hand comes to a position of straight line in a period of 12 hours starting from 12 O' clock?
(a) 10
(b) 11
(c) 22

(d) 24
(e) 12

Ans: c

Q106. At what time the hands of clock makes and angle of 45° between 7pm – 8pm.
(a) 7:30
(b) 7:44
(c) 8:00
(d) 7:50
(e) None of the above

Ans: a

Q107. How many leap years does first 100 years have?
(a) 25
(b) 24
(c) 40
(d) 26
(e) None of the above

Ans: b

Q108. Which day of the week is 1st march 1944?
(a) Monday
(b) Tuesday
(c) Friday
(d) Saturday
(e) Wednesday

Ans: e

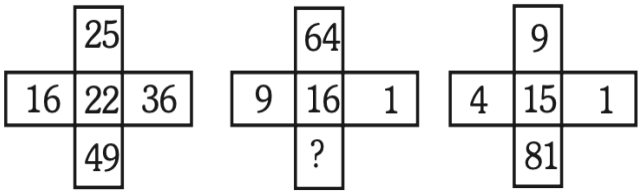
Q109. The last day of a century can never be?
(a) Monday
(b) Wednesday
(c) Friday
(d) Thursday
(e) Can't be determined

Ans: d

Q110. A man introduced the boy coming with him as 'He is son of the father of my wife's daughter'. What relation did the boy bear to the man?
(a) Father
(b) Brother
(c) Son
(d) Son-in-law
(e) None of the above

Ans: c

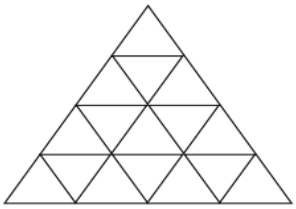
Q111. Select the missing number from the given responses



(a) 4
(b) 2
(c) 16
(d) 32

Ans: c

Q112. How many Triangles are there?

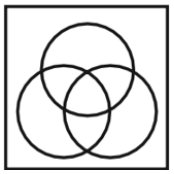


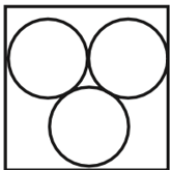
(a) 20
(b) 22
(c) 24
(d) NONE

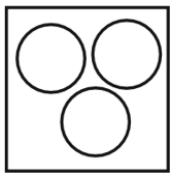
Ans: d

Q113. Identify the diagram that best represents the relationship among classes given below:

Social Science, History and Geography

(a) 

(b) 

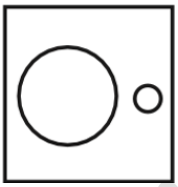
(c)  (d) 

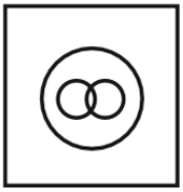
Ans: d

Q114. If the mirror image of a clock shows quarter past three, then what is the original time?
(a) 9:15
(b) 8:15
(c) 3:15
(d) 8:45

Ans: d

Q115. Which of the following diagrams represents the correct relationship between Herbivores, Tigers and an Animals?

(a)  (b) 

(c)  (d) 

Ans: a

Direction (Q116 – Q120): Fill in the blank with the most appropriate word.

Q116. In the present scenario, _____ of India are part of the global village.
(a) the rich and the poor
(b) rich and the poor
(c) rich and poor
(d) the rich and poor

Ans: a

Q117. Radha does not like _____.
(a) me coming so late
(b) my coming so late
(c) I coming so late
(d) me comes so late

Ans: b

Q118. Rahul _____ in Srinagar for three years when his parents came to visit.
(a) has lived
(b) had lived
(c) was living
(d) had been living

Ans: d

Q119. Sita asked Rohan if she _____ borrow his book for a week.
(a) will
(b) could
(c) can
(d) should

Ans: b

Q120. The 1982, Asian Games _____ a major change in India.
(a) brought after
(b) bring after
(c) bring around
(d) brought about

Ans: d

Directions (Q121-125): Error correction

Q121. In a recent post on social media, Shilpa Shetty wrote that integrity of her husband is beyond doubt.
(a) In a recent post on social media,
(b) Shilpa Shetty wrote that integrity of her husband
(c) is beyond doubt.
(d) No error

Ans: b

Q122. The Ramayana tells us a story of love and respect wherein Mahabharata deals with more grave political intricacies.
(a) The Ramayana tells us a story of
(b) love and respect wherein Mahabharata deals with
(c) more grave political intricacies
(d) No error

Ans: b

Q123. Sea seems calm and full to the brim in the months of October and November.
(a) full to the brim in the months of
(b) Sea seems calm and
(c) October and November
(d) No error

Ans: b

Q124. I have read his two novels but the second one is better of the two.
(a) No error
(b) I have read his two novels
(c) but the second one
(d) is better of the two

Ans: d

Q125. More he earns, the more his greed flexes its arms.
(a) More he earns,
(b) the more his greed
(c) flexes its arms
(d) No error

Ans: a

READING COMPREHENSION & ENGLISH LANGUAGE

Directions (Q1-25): Read the following passage and answer the questions that follows.

Passage-1

America's original map-based cruise-missile guidance system came in two parts. The first, Terrain Contour Matching or TERCOM, took a missile to the general area of its target using a radar altimeter and a series of digital maps that showed the elevation of the ground under sections of the planned route. By comparing the missile's actual altitude above this terrain with its expected altitude, TERCOM could follow contours and find its way. Once it was close to the target, a second system, the Digital Scene Matching Area Correlator (DSMAC), compared the view from a video camera with a set of stored images, in order to locate the bullseye.
Such a combined system was awkward and expensive, but at least it was the best available before GPS. Now, though, huge improvements in electronics have **turned the tables**. Israel is in the forefront, with a system which it calls Spice. Like JDAM, Spice is an add-on kit that turns unguided bombs into smart ones. It is designed and built by Rafael Advanced Defense Systems, an Israeli weapons company, and comes into service this month.
Spice contains an "electro-optical scene matching system" that resembles DSMAC's in as much as its memory is loaded with pictures of the target area, taken beforehand by aircraft (piloted or unpiloted) or by satellite. Spice's pictures, though, are of much higher resolution than those of DSMAC. On top of this the cameras that generate the real-time images with which those pictures are compared as the bomb falls towards its target work both in the visible and the infra-red parts of the spectrum. That means Spice can operate in darkness, and can penetrate smoke and fog. Moreover, unlike DSMAC, Spice stores enough data to cover the entire route to a target. It has no need of an accompanying system similar to TERCOM. Instead, it picks out and compares, en route, features like roads and buildings to find its way. Spice's claimed performance is impressive. Rafael says it can guide a bomb released 100km

from a target to a strike point within two metres of that target. The firm says, too, that its device is not confused by minor changes in the scenery around a target, which it can find even if some nearby areas have been **obscured**—say, by **camouflage**. Spice also has the advantage over GPS-guided weapons of working when a target's exact position is unknown, or if the **co-ordinates** have been misreported. All you need is a picture of what is to be hit, and an approximate location, for Spice to find and hit it.

Other countries, in particular America, are following Israel's lead. In January of this year, America's air force signed a contract with Scientific Systems, a firm in Woburn, Massachusetts, to develop what that company calls its Image-Based Navigation and Precision Targeting (ImageNav) system. Like Spice, this is a bolt-on system that works by comparing images from a camera with those in a database on board. If all goes well, development and testing should be completed by January 2018 and the result will, its makers hope, be able to strike within three metres of its intended target. The initial plan is to fit ImageNav to the air force's Small Diameter Bomb, a free-fall weapon at present guided by GPS. If this is successful, deployment on cruise missiles and drones will follow. Meanwhile Lockheed Martin, the world's biggest aerospace firm, is working on an optical-navigation system called Northstar. This is based on a piece of non-military software called Hydra Fusion, which was developed by Lockheed Martin's Canadian subsidiary. Hydra Fusion creates a high-resolution, three-dimensional terrain map from ordinary video, by comparing successive frames of that video in light of information about how fast the vehicle carrying the camera was travelling. Though this is a trick which has been managed in the past, Hydra can do it on the fly, on a laptop computer. Previous systems have required hours of processing on high-end machines. Once an area has been mapped, Northstar provides precise navigation information for bombs or missiles (or, indeed, for manned or unmanned aircraft). Crucially, the intelligence can be fresh because of the system's rapid processing time. Fitting bombs and missiles with vision in this way thus looks like the future. That does not mean GPS will not be used as well—**a belt-and-braces approach** is often wise in war. But bombs that can see their targets, rather than blindly following their noses to a set of co-ordinates, are always likely to have the edge.

Q1. What, according to the passage, is true about The Spice System?
(a) It is loaded with pictures of targeted area.
(b) It can operate in darkness and penetrate in smog.
(c) It can compare en-route features.
(d) Only a and b
(e) All of these.

Ans: e

Q2. What is the meaning of the phrase "turn the tables"?
(a) to overcome hurdles
(b) to put impediments
(c) to cause reversal
(d) to betray someone
(e) to knock

Ans: c

Q3. Optical navigation system Northstar based on Software Hyrda Fusion. What is true about hydra?
(i) It creates 3D terrain map
(ii) It is versatile enouh to capture images from videos
(iii) It is a part of Hi-tech defense system
(a) Only (i)
(b) Both (i) and (ii)
(c) Only (ii)
(d) All (i), (ii), (iii)
(e) None of these.

Ans: b

Q4. Write the appropriate synonym of "camouflage":
(a) Uncover
(b) Divulge
(c) Betray
(d) Facade
(e) Exhibit

Ans: d

Q5. What is the similarity between Spice and "DSMAC & TERCOM"?
(a) add-onkit and unguided system
(b) Scene matching and accompanying system
(c) picture capturing and en-route features
(d) Only a and b
(e) Not mentioned in the passage

Ans: b

Q6. Write the appropriate antonym for "Co-ordinate":
(a) key
(b) groove
(c) consert
(d) jar
(e) schadenfreude

Ans: d

Q7. What is true according to the given passage?
(a) Northstar provides precise navigation information
(b) Hydra captures images from the vehicle carrying the camera was travelling
(c) Spice can guide a bomb released 100km from a target
(d) Only A and C
(e) All of the above

Ans: e

Q8. Write the meaning of the phrase "a belt-and-braces approach"
(a) approach based on belts
(b) using belts and bracelets
(c) using approaches with tools
(d) using two belts
(e) using more than one method

Ans: e

Q9. Write the synonym of "Obscured":
(a) agleam
(b) unlit
(c) lambent
(d) moony
(e) beamy

Ans: b

Q10. What is the appropriate title of the given passage?
(a) Advance Intelligence
(b) Cyber security
(c) Smart Weapons
(d) Defensive Weapons
(e) The vision thing

Ans: c

Passage-2

EXPERIMENTS that go according to plan can be useful. But the biggest scientific advances often emerge from those that do not. Such is the case with a study just reported in the Proceedings of the National Academy of Sciences. When they began it, Hector DeLuca of the University of Wisconsin, Madison, and his colleagues had been intending to examine the effects of ultraviolet (UV) light on mice suffering from a rodent version of multiple sclerosis (MS). By the project's end, however, they had in their hands two substances which may prove valuable drugs against the illness. Multiple sclerosis is an autoimmune disease. This means it is caused by a victim's immune system **turning on** and destroying parts of his own body. In the case of MS the targets of these attacks, which may continue for years, are the fatty sheaths that insulate nerve cells and thus help nervous impulses to **propagate**. People suffering from MS are often weakened, and sometimes physically disabled by it, and may also become blind. What drives the immune system to behave in this way remains mysterious, but in the 1970s researchers uncovered a promising clue when they noticed that MS is rarer near the equator than it is at high latitudes. The first hypothesis proposed to explain this observation was that vitamin D (a substance created by sunlight's action on precursor molecules in the skin) might be helping to prevent MS. That made sense, since those living in the tropics receive more sunlight than do those in temperate zones. Sadly, follow-up experiments failed to support the notion. Those experiments did, though, lead Dr DeLuca to discover that the

preventive effect is associated with a particular sort of sunlight—UV with a wavelength of between 300 and 315 nanometres (billionths of a metre). His latest experiment was intended to dig deeper into this observation, by using this type of light to irradiate mice that had been injected with chemicals known to cause the rodent equivalent of MS. In a preliminary study he and his colleagues therefore shaved the backs of 12 of these mice and exposed them to UV of the appropriate wavelength every day for a month. To be useful, an experiment like this needs controls with which its results can be compared. Dr DeLuca devised three of these. In one, he applied one of six types of sunscreen to a dozen other shaved mice before exposing them to the ultraviolet rays. To another dozen he applied the sunscreen but not the ultraviolet. And a final 12, though also shaved, were neither exposed to UV nor **slathered** with sunscreen. He then monitored all four groups for signs of murine multiple sclerosis, such as loss of tail tone, unsteady gait and limb paralysis. When the experiment began, he and his colleagues expected that the disease would progress more slowly in the experimental group than in the control groups, and that its rate of progress in all three control groups would be the same, since any effect of exposure to ultraviolet would be negated by the sunscreen. But that was not what happened. Instead, three of the six types of sunscreen served to suppress the disease's progression by themselves—that is, even in animals not exposed to UV. Indeed, one of them, Coppertone, was as effective at doing so as ultraviolet light alone.

In light of this Dr DeLuca and his colleagues carried out further experiments, which confirmed the initial findings. They also studied the ingredients lists of the three protective sunscreens and tested each of the compounds therein, one at a time, on other batches of mice. This revealed that two of these compounds, homosalate and octisalate, were particularly effective at keeping the rodent version of multiple sclerosis in check. Why these particular substances suppress MS remains to be discovered. Dr DeLuca suspects that it has to do with their ability to inhibit production of cyclooxygenase, an enzyme commonly found in the lesions characteristic of multiple sclerosis. But regardless of the mechanism, if homosalate and octisalate, or other molecules similar to them, can suppress the progression of the disease in people as effectively as they do in rodents it will be a signal example both of the role of serendipity in science and of the crucial importance of doing proper controls.

Q11. Why Multiple Sclerosis is a rare phenomenon near Equator
(a) Equatorial region receive more sunlight
(b) Vitamin D is sufficiently available at Equator
(c) Both a & d
(d) UV sunrays of wavelength 300~315nm available at equator
(e) Both b & d

Ans: d

Q12. Compounds help in keeping rodent version of Sclerosis at check are:
(a) homosalate
(b) octisalate
(c) pesto salate
(d) Both a & b
(e) None of these.

Ans: d

Q13. What is the most appropriate synonym of "slathered":
(a) couple
(b) sprinkle
(c) boatload
(d) dab
(e) spread

Ans: e

Q14. Which of the following is incorrect according to the passage?
(a) Hector DeLuca belongs to University of Wisconsin
(b) Sclerosis is low at Temperate regions and high at tropicals.
(c) Multiple sclerosis is an autoimmune disease
(d) vitamin D is a substance created by sunlight's action
(e) All are false.

Ans: b

Q15. How many dozens of mice is being used for the main experiment?
(a) Two
(b) Three
(c) Four
(d) Five
(e) None of these.

Ans: c

Q16. What according to the passage is true about Dr. DeLuca.
(a) She devised five experiments in controlled manner.
(b) Discovered that UV with a wavelength of between 300 and 315 is effective on mice
(c) She was born in Madison
(d) All are true.
(e) None of these.

Ans: b

Q17. What are the causes of Multiple Sclerosis?
i. turning on immune system
ii. propagation of nerve impulse
iii. destroying self body parts
(a) Only i
(b) All of these
(c) Both i & iii
(d) All except iii
(e) Not mentioned in the passage

Ans: c

Q18. The phrase "turning on" means:
(a) arouse
(b) enchant
(c) thrill
(d) get started
(e) None of these.

Ans: d

Q19. What is the most possible antonym of "propagate":
(a) beget
(b) transmit
(c) rear
(d) procliam
(e) conceal

Ans: e

Q20. What is the suitable title for the passage?
(a) Know Yourself
(b) Know Scleoris
(c) Unexpected protection
(d) MS: a propagating dilemma
(e) None of these.

Ans: c

Passage-3

The Indian farmer has always been like an areca nut in a nutcracker. There are about 145 million landholdings in the country. With about 92% of them being wholly owned and self-operated, we may assume that we have about 130 million farmers. With more than 40% of our cultivated area of 175 million hectares being irrigated, there is a clear distinction between farmers with irrigation and those with rain-fed **acreages**. The most disadvantaged are the farmers who own patches of the 20 million hectares of unproductive saline land in the country. While farmers who have access to irrigation are better placed, those who are in rain-fed and drought-prone areas are most vulnerable. They occupy 60% of the cultivated area but contribute only 45% of the total agricultural production. These are the farmers without the **financial wherewithal** to withstand the vagaries of nature. A single crop failure due to drought, flood or similar reasons can destroy them. Crop insurance programmes have not been able to recover farmers' investments in most cases due to lack of accurate farm-level data that can be used to settle claims. Satellite and remote sensing technologies are for the future. Farm economics are beholden to the economics of demand and supply. With every recurring phenomenon of high production that is in excess of demand, there is the consequent (and drastic) fall in prices. Planted acreages have little to no connection with projected demand. When a farmer plants a crop, he does not know what the likely market price of

his produce will be. The government's minimum support price gives him some direction, but it operates only with some crops. Neither is the government any better at forecasting. In the 2016 kharif season, for example, the government pushed farmers to reduce cotton and plant more pulses. Those who continued growing cotton made good money but the majority who went in for pulses faced excess supply and are dealing with a steep fall in prices.

There is no commodity-based farmers' organization in the country to address these issues. In other countries, such organizations advise farmers on global projections of demand and supply for specific crops and help in moderating acreages in line with projected demand. Neither are there platforms for farmers to highlight issues to key stakeholders such as policymakers, economists and scientists. Existing farmer organizations are aligned with political or other special interest groups and are neither objective nor scientific in their approach. Hence, the need for the development of a non-partisan platform. Another high-input cost today is that of farm labour, itself a much misunderstood and maligned issue. Everyone thinks there is ample farm labour available. But the problem is the availability of labour at the right time and at the right cost. The cost of labour has risen due to social welfare programmes and minimum wage levels. At peak times, like sowing, transplanting, harvesting, etc., it is very difficult to get sufficient farm labour. In the case of cotton, for example, the cost of harvesting has risen to about 10% of the selling price—which is very high. Sensitive crops like fruits, vegetables, etc., which have to be harvested at precise times to maximize the quality of the produce, face the same problems.

One solution to address this is greater reliance on technology, be it through farm **mechanization**, the use of weedicides or genetic engineering, that can lower input and time costs. Farmers operating in states with labour shortage use chemical pesticides to control weeds, which is cost- and time-efficient. There is also rapid mechanization of paddy transplantation. Farmers should be encouraged to use such labour-saving options instead of being burdened with the social objective of protecting rural employment and being denied access to new technology. The Agricultural Produce Market Committee Act prohibits farmers from selling their produce in any mandi other than their designated one. This makes farmers vulnerable to middlemen and vested interests. They are exposed to global prices but are not provided with access to cost-efficient technologies and information systems. This places them at a disadvantage with farmers from other countries. Karnataka has united all mandis in the state on an electronic platform and this has reportedly improved farmers' selling prices by 38%. This should be replicated nationally.

The agricultural extension system has collapsed in many parts of the country. The farmer is forced to depend on the advice of agri-input dealers and commercial organizations instead. Some organizations are attempting to use information and communication technology-based methods to give technical advice to farmers. This may prove to be beneficial. The other issue is that banks need to get more generous with credit in rural areas where the stranglehold of private moneylenders continues to wreak havoc. Lack of rural infrastructure, reliable power, cold-storage, roads and transport systems, etc., continue to cripple farm operations and increase costs.

We need to overhaul our thinking and approach towards addressing farmers' challenges which are complicated and structural in nature. Waiving farm loans is a lazy option for governments and a costly option for the banking system. Successive governments have chosen this option because they do not have the political will to find better solutions.

Q21. Which of the following statement is wrong according to the given passage:

(a) Crop insurance programmes have not been able to recover
(b) farmers' investment due to bad income
(c) The MSP operates with selected crops only
(d) Farmer organisations are specific in their approach.
(e) The social welfare programmes has risen the cost of labours.

Ans: d

Q22. What are the demerits of Agriculture Produce Market Committee?
i) Make available cost-efficient technologies to farmers.
ii) Making them(farmers) exposed to global prices.
iii) Facilitate irrigation system
(a) Only i
(b) Only ii
(c) Only iii
(d) Both ii & iii
(e) Both iii & i

Ans: b

Q23. Define “areca nut in a nutcracker”:
(a) Free to live
(b) Carrying a huge weight
(c) Always under pressure
(d) Extremely lucky
(e) None of these

Ans: c

Q24. What are the main issues of Indian farmer?
(a) A farmer doesn’t know the actual Market Price of his crop.
(b) Lack of accurate farm-level data.
(c) Both a & b
(d) High cost of farm-labour.
(e) All of these.

Ans: e

Q25. Write the suitable antonym of “acreage”:
(a) property
(b) ground
(c) lands
(d) soil
(e) None of these

Ans: e