2008

1. The speed of light with the rise in the temperature of the medium—
   (A) Increases
   (B) Decreases
   (C) Remains unaltered
   (D) Drops sharply

2. Which from the following rivers does not originate in Indian territory ?
   (A) Mahanadi
   (B) Brahmaputra
   (C) Ravi
   (D) Chenab

3. The gas predominantly responsible for global warming is—
   (A) Carbon dioxide
   (B) Carbon monoxide
   (C) Nitrous oxide
   (D) Nitrogen peroxide

4. 26th January is India's—
   (A) Independence Day
   (B) Republic Day
   (C) Revolution Day
   (D) Parliament Day

5. Which of the following uses non-conventional Source of Energy ?
   (A) Kerosene lamp
   (B) Wax candle
   (C) Solar lantern
   (D) Torch

6. Electric current is measured by—
   (A) Voltmeter
   (B) Anemometer
   (C) Commutator
   (D) Ammeter

7. The dynamo is a device for converting—
   (A) Heat energy into electrical energy
   (B) Mechanical energy into electrical energy
   (C) Magnetic energy into electrical energy
   (D) None of these

8. Galvanised iron sheets have a coating of—
   (A) Tin
   (B) Lead
   (C) Zinc
   (D) Chromium

9. The hardest substance available on earth is—
   (A) Platinum
   (B) Diamond
   (C) Quartz
   (D) Gold

10. Washing soda is the common name for—
    (A) Calcium carbonate
    (B) Calcium bicarbonate
    (C) Sodium carbonate
    (D) Sodium bicarbonate

11. 2008 Olympic games will be held in—
    (A) China
    (B) Greece
    (C) Italy
    (D) France

12. Who among the following has been appointed as the new Captain of Indian Test Cricket Team ?
    (A) Sachin Tendulkar
    (B) Rahul Dravid
    (C) Anil Kumble
    (D) Mahender Singh Dhoni

13. Who among the following has been selected as new coach for the Indian Cricket Team ?
    (A) Vivian Richards
    (B) Gary Kirsten
    (C) Kapil Dev
    (D) Allan Border

14. The mascot for the 34th National Games, to be held in Jharkhand in 2008, is—
    (A) Sheru
    (B) Roopa
    (C) Chauva
    (D) None of these

15. With which game is the Agha Khan Cup associated ?
    (A) Football
    (B) Badminton
    (C) Basketball
    (D) Hockey

16. The term L.B.W. is associated with which of the following games ?
    (A) Cricket
    (B) Hockey
    (C) Football
    (D) Polo

17. Wankhede stadium is situated in—
    (A) Chandigarh
    (B) Bangalore
    (C) Mumbai
    (D) Chennai

18. The Olympic games are normally held at an interval of—
    (A) 2 years
    (B) 3 years
    (C) 4 years
    (D) 5 years

19. Jaspal Rana is the name associated with which of the following games ?
    (A) Boxing
    (B) Shooting
    (C) Archery
    (D) Weight lifting

20. Netaji Subhash National Institute of Sports is located at—
    (A) Kolkata
    (B) New Delhi
    (C) Jhansi
    (D) Patiala

21. A person wants to contest election for the membership of Gram Panchayat, what should be his age ?
    (A) 18 years or above
    (B) 19 years or above
    (C) 21 years or above
    (D) Minimum 25 years

22. Who summons the joint sitting of the Rajya Sabha and Lok Sabha ?
    (A) President
    (B) Speaker of the Lok Sabha
    (C) Chairman of the Rajya Sabha
    (D) Prime Minister

23. Which of the following is not a source of revenue to the village panchayat ?
    (A) Property Tax
    (B) House Tax
    (C) Land Tax
    (D) Vehicle Tax

24. All electioneering campaigns during the time of elections are stopped—
    (A) 48 hours before the appointed time of election results
    (B) 48 hours before the actual poll
    (C) 24 hours before the actual poll
    (D) 36 hours before the actual poll

25. Who appoints of Chief Election Commissioner of India ?
    (A) President
    (B) Prime Minister
    (C) Parliament
    (D) Chief Justice of India

26. The General Budget is presented in the Parliament normally in the month of—
    (A) January
    (B) February
    (C) March
    (D) Last month of the year

27. Who is the signatory on the Indian currency notes in denomination of two rupees and above ?
    (A) Secretary, Reserve Bank of India
    (B) Finance Secretary, Ministry of Finance
    (C) Governor, Reserve Bank of India
    (D) Finance Minister, Ministry of Finance

28. The monetary unit of Bangladesh is—
    (A) Rupee
    (B) Takka
    (C) Rupiah
    (D) Dollar

29. Sellers market denotes a situation where—
    (A) Commodities are available at competitive rates
    (B) Demand exceeds supply
    (C) Supply exceeds demand
    (D) Supply and demand are equal

30. Development means economic growth plus—
    (A) Inflation
    (B) Deflation
    (C) Price stability
    (D) Social change

31. The Abbreviation NAEP stands for—
    (A) National Atomic Energy Planning
    (B) National Adult Education Programme
    (C) National Authority on Engineering Projects
    (D) Nuclear and Atomic Energy Projects

32. The Abbreviation PSLV stands for—
    (A) Polar Survey Landing Vehicle
    (B) Polarised Source Laser Viewing
    (C) Precise Source Locating Vision
    (D) Polar Satellite Launch Vehicle

33. The term 'epicentre' is associated with—
    (A) Earthquakes
    (B) Tornadoes
    (C) Cyclones
    (D) Earth's interior

34. Which of the following order is given to the planets of solar system on the basis of their sizes ?
    (A) Jupiter, Saturn, Earth, Mercury
    (B) Saturn, Jupiter, Mercury, Earth
    (C) Mercury, Earth, Jupiter, Saturn
    (D) Earth, Mercury, Saturn, Jupiter

35. The solar eclipse occurs when—
    (A) The sun comes in between the moon and the earth
    (B) The earth comes in between the sun and the moon

(C) The moon comes in between the sun and the earth

(D) None of these

36. The removal of top soil by water or wind is called—
(A) Soil wash   (B) Soil erosion
(C) Soil creep   (D) Silting of soil

37. Which of the following is suitable for growing cotton ?
(A) Sandy soil   (B) Clayey soil
(C) Black soil   (D) Alluvial soil

38. Bandipur Sanctuary is located in the State of—
(A) Tamil Nadu   (B) Uttar Pradesh
(C) Karnataka   (D) Madhya Pradesh

39. Largest State in terms of area, in India is—
(A) Assam
(B) Rajasthan
(C) Madhya Pradesh
(D) Jammu and Kashmir

40. Koraput is related to which of the following Industry ?
(A) Aeroplane
(B) Ship building
(C) Iron and steel
(D) Electric locomotives

41. Which of the following group of States is the largest producer of tea ?
(A) West Bengal, Tamil Nadu, Himachal Pradesh
(B) Karnataka, Uttar Pradesh, Rajasthan
(C) Assam, Bihar, Jharkhand
(D) West Bengal, Assam, Karnataka

42. Which of these has the largest river basin ?
(A) Brahmaputra   (B) Ganga
(C) Godavari   (D) Sutlej

43. The Indus Valley Civilization was famous for—
(A) Well-planned cities
(B) Efficient civil organisation
(C) Development of Art and Architecture
(D) All of these

44. The Red Fort of Delhi was built by—
(A) Akbar   (B) Shahjehan
(C) Jahangir   (D) Sher Shah

45. The ancient name of the city of Patna is—
(A) Pataliputra   (B) Kanauj
(C) Kausambi   (D) Kapilavastu

46. The ancient kingdom of "Avanti" had its capital at—
(A) Vaishali   (B) Kausambi
(C) Ujjain   (D) Ayodhya

47. When did Vasco-da-Gama come to India ?
(A) 1492   (B) 1498
(C) 1398   (D) 1542

48. The General who gave the firing order at Jallianwala Bag was—
(A) Tegart   (B) Cornwallis
(C) Simpson   (D) O. Dwyer

49. Gandhiji started Satyagraha in 1919 to protest against the—
(A) Rowlatt Act
(B) Salt Law
(C) Act of 1909
(D) Jallianwala Bagh Massacre

50. The Britishers came to India as traders and formed Company named—
(A) Indo-British Company
(B) The Great Britain Company
(C) Eastern India Company
(D) East India Company

51. Mahatma Gandhi was born in—
(A) Wardha   (B) Porbander
(C) Sabarmati   (D) Ahmedabad

52. Who gave the slogan "You give me blood, I promise you freedom" ?
(A) Bhagat Singh
(B) Chandra Shekhar Azad
(C) Subhash Chandra Bose
(D) Bal Gangadhar Tilak

53. In which State is Jawahar tunnel located ?
(A) Himachal Pradesh
(B) Uttarakhand
(C) Goa
(D) Jammu and Kashmir

54. Where did the dance form "Mohiniattam" develop ?
(A) Manipur   (B) Kerala
(C) Karnataka   (D) Tamil Nadu

55. On selling three articles at the cost of four articles, there will be profit of—
    (A) 25%
    (B) $33\frac{1}{3}$%
    (C) $37\frac{1}{2}$%
    (D) 40%

56. By selling an article for Rs. 40, there is loss of 40%. By selling it for Rs. 80 there is—
    (A) Gain of 20%
    (B) Loss of 10%
    (C) Loss of 20%
    (D) Gain of 10%

57. A number consists of two digits whose sum is 8. If 18 is subtracted from the number, the digits interchange their places. The number is—
    (A) 44
    (B) 35
    (C) 62
    (D) 53

58. A horse is tied to a peg hammered at one of the corner of a rectangular grass field of 40 m by 24 m by a rope 14 m long. Over how much area of the field can the horse graze ?
    (A) 154 m^2
    (B) 308 m^2
    (C) 240 m^2
    (D) 480 m^2

59. The sides of a triangle are in the ratio 3 : 5 : 7 and its perimeter is 30 cm. The length of the greatest side of the triangle in cm is—
    (A) 6
    (B) 10
    (C) 14
    (D) 16

60. The radius of a right circular cone is 3 cm and its height is 4 cm. The curved surface of the cone will be—
    (A) 12π sq. cm
    (B) 15π sq. cm
    (C) 18π sq. cm
    (D) 21π sq. cm

61. The steam engine was invented by—
    (A) James Watt
    (B) James Prescott Joule
    (C) New Commen
    (D) Isaac Newton

62. Who invented the telephone ?
    (A) Thomas Alva Edison
    (B) Galileo
    (C) Alexander Graham Bell
    (D) G. Marconi

63. Albert Einsten was a famous—
    (A) Physician
    (B) Chemist
    (C) Physicist
    (D) Biologist

64. The fractions $\frac{7}{11}$, $\frac{16}{20}$, $\frac{21}{22}$ when arranged in descending order is—
    (A) $\frac{7}{11}$, $\frac{16}{20}$, $\frac{21}{22}$
    (B) $\frac{21}{22}$, $\frac{7}{11}$, $\frac{16}{20}$
    (C) $\frac{21}{22}$, $\frac{16}{20}$, $\frac{7}{11}$
    (D) $\frac{7}{11}$, $\frac{21}{22}$, $\frac{16}{20}$

65. If 10% of a number is subtracted from it, the result is 1800. The number is—
    (A) 1900
    (B) 2000
    (C) 2100
    (D) 2140

66. The number just preceding 9909 which is a perfect square is—
    (A) 9908
    (B) 9900
    (C) 9899
    (D) 9801

67. In banking ATM stands for—
    (A) Automated Tallying Machine
    (B) Automatic Teller Machine
    (C) Automated Totalling Machine
    (D) Automated Transaction of Money

68. Which amongst the following Abbreviations stands for Organisation related to Indian Defence forces ?
    (A) DOD
    (B) RDSO
    (C) DRDO
    (D) DRES

69. Which amongst the following Abbreviations stands for organisation related to Indian space programme ?
    (A) NASA
    (B) ISO
    (C) ISRO
    (D) INSAT

70. The injection of Anti-toxin is given to prevent—
    (A) Tetanus
    (B) Tuberculosis
    (C) Typhoid
    (D) Filariasis

71. Dental caries are due to—
    (A) Viral infection
    (B) Contaminated water
    (C) Bacterial infection
    (D) Hereditary causes

72. Palak leaves are rich source of—
    (A) Vitamin A
    (B) Iron
    (C) Carotene
    (D) Vitamin E

73. Which of these is not a mosquito borne disease ?
    (A) Dengue fever
    (B) Malaria
    (C) Filariasis
    (D) Goitre

74. Oranges are rich source of—
    (A) Carbohydrates   (B) Fats
    (C) Proteins   (D) Vitamins

75. Which acid is produced when milk gets sour ?
    (A) Tartaric acid   (B) Butyric acid
    (C) Lactic acid   (D) Acetic acid

76. AIDS stands for—
    (A) Acquired Immune Disease Syndrome
    (B) Acquired Immunity Deficient Syndrome
    (C) Acquired Immune Deficiency Syndrome
    (D) Acquired Infection Deficiency Syndrome

77. Stem cuttings are commonly used for regrowing—
    (A) Cotton   (B) Banana
    (C) Jute   (D) Sugarcane

78. Persons with which blood group are called universal donors—
    (A) AB   (B) A
    (C) O   (D) B

79. Silk is produced by—
    (A) Egg of silkworm
    (B) Pupa of silkworm
    (C) Larva of silkworm
    (D) Insect itself

80. Which amongst the following is the train introduced by Indian Railways bringing travel by AC class within the reach of a common man ?
    (A) August Kranti   (B) Jan Shatabdi
    (C) Garib Rath   (D) Sampark Kranti

81. Approximately how many stations are there on the Indian Railway Network ?
    (A) 6000   (B) 7000
    (C) 8000   (D) 9000

82. The Headquarters of North Western Railway is at—
    (A) Abu Road   (B) Jodhpur
    (C) Ajmer   (D) Jaipur

83. New electrical rail engines are manufactured at—
    (A) Varanasi   (B) Chitaranjan
    (C) Patiala   (D) Chennai

84. With respect to Indian Railways, which of the following facts is correct ?
    (A) This is the cheapest method of transportation

    (B) Main source of earning is the transportation of goods
    (C) In India, this is the largest employer
    (D) All these

85. Which is the supreme gallantry award in India?
    (A) Ashok Chakra
    (B) Paramveer Chakra
    (C) Mahavir Chakra
    (D) Param Vishishta Chakra

86. Oskar award is related to which of the following ?
    (A) Literature   (B) Film
    (C) Science   (D) Music

87. Arjun Puraskar is awarded for—
    (A) Bravery in battlefield
    (B) The best performance in archery
    (C) Nice performance in sports
    (D) Excellent service in emergency

88. First Indian Nobel Laureate was—
    (A) Mother Teresa
    (B) Rabindranath Tagore
    (C) Sarojini Naidu
    (D) C. V. Raman

89. Bismillah Khan was related to which of the following ?
    (A) Tabla   (B) Sarod
    (C) Flute   (D) Shahnai

90. Who is the External Affairs Minister in Union Ministry ?
    (A) Shivaraj Patil
    (B) Pranab Mukherjee
    (C) Priyaranjan Das Munshi
    (D) A. K. Antony

91. Who is the Agriculture Minister in Union Cabinet ?
    (A) Raghuvansh Prasad Singh
    (B) Manishankar Aiyar
    (C) Sharad Pawar
    (D) Kamalnath

92. Who is the Minister for Culture and Tourism in Union Cabinet ?
    (A) Ambika Soni
    (B) Kapil Sibbal
    (C) Renuka Chaudhari
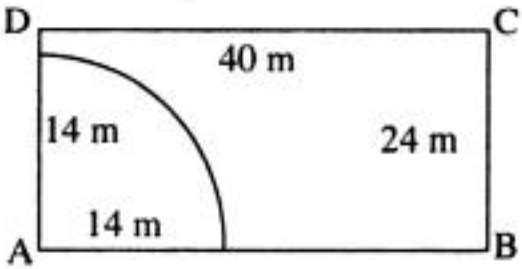   (D) Sushil Kumar Shinde

93. Who is the Chairman of Selection Committee of BCCI ?
    (A) Sunil Gavaskar (B) Dilip Vengasarkar
    (C) Kapil Dev (D) Chetan Chauhan

94. Recently, election of Legislature Assembly was conducted in which of the following two states ?
    (A) Gujarat and Andhra Pradesh
    (B) Madhya Pradesh and Himachal Pradesh
    (C) Himachal Pradesh and Gujarat
    (D) Andhra Pradesh and Himachal Pradesh

95. As degree is related to thermometer, identically .... is related to watch.
    (A) Wall (B) Tower
    (C) Hour (D) Cock

96. Headquarter of U. N. O. is located at—
    (A) Geneva (B) New York
    (C) Rome (D) Washington D. C.

97. Which of the following is essential for a mobile phone to function ?
    (A) Appropriate handset
    (B) Sim card
    (C) Service providing network
    (D) All these

98. Calculate the value of $\sqrt{\dfrac{36 \cdot 1}{102 \cdot 4}} -$
    (A) $\dfrac{6 \cdot 1}{34}$ (B) $\dfrac{19}{31}$
    (C) $\dfrac{19}{32}$ (D) $\dfrac{19}{33}$

99. Which of the following keys of personal computer is not available in the traditional typewriter ?
    (A) Tab (B) Spacebar
    (C) Enter (D) Back space ($\leftarrow$)

100. Which of the following terms is/are related to internet ?
    (A) www (B) http
    (C) e-mail (D) All these

Answers with Explanations

1. (C)
2. (B) The Brahmaputra, also called Tsangpo-Brahmaputra, is a trans-boundary river and one of the major river of Asia. From its origin in south-western Tibet as the Yarlung River. It is originate in the Jima Yangzong glacier near Mount Kailash in the Northern Himalayas.
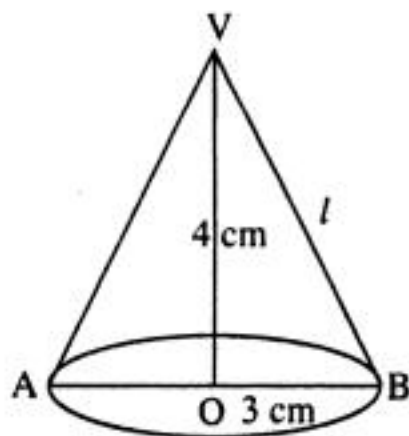
3. (A) Global warming is caused by the emission of greenhouse gases. 72% of the totally emitted greenhouse gases is carbon dioxide (CO_2), 18% Methane and 9% Nitrous oxide (NOX). Carbon dioxide emissions therefore are the most important cause of global warming. CO_2 is inevitably created by burning fuels like e.g. oil, Natural gas, diesel, organic-diesel, Petrol, organic Petrol, ethanol.

4. (B) The Republic Day of India is a National holiday of India to mark the adoption of the Constitution of India and the transition of India from a British Dominion to a republic on January 26, 1950. It is one of the three National holidays in India.

5. (C)

6. (D) An ammeter is a measuring instrument used to measure the flow of electric current in a circuit.

7. (B) 8. (C) 9. (B) 10. (C) 11. (A)
12. (C) 13. (B) 14. (C) 15. (D) 16. (A)
17. (C) 18. (C) 19. (B) 20. (D) 21. (C)
22. (A) 23. (A) 24. (B) 25. (A) 26. (B)
27. (C) 28. (B) 29. (B) 30. (D)

31. (B) A massive programme of Adult Education called the National Adult Education Programme (NAEP) for removal of illiteracy in the 15–35 age group was formulated by the Government of India and launched on 2nd October, 1978. The target for this programme was to educate 100 million adults within a time frame of five years.

32. (D) 33. (A) 34. (A) 35. (C) 36. (B)
37. (C) 38. (C) 39. (B) 40. (A) 41. (D)
42. (B) 43. (A) 44. (B) 45. (A) 46. (C)
47. (B) 48. (D) 49. (A) 50. (D) 51. (B)
52. (C) 53. (D) 54. (B)

55. (B) ∵ Selling Price of 3 articles
    = C. P. of 4 articles
    ∴ Reqd. percentage of profit
    $$= \frac{4-3}{3} \times 100\%$$
    $$= \frac{100}{3}\% = 33\frac{1}{3}\%.$$

56. (A) Let C. P. of the article = Rs. x
    Then as per question,
    ∵ $x \times \dfrac{(100-40)}{100} =$ Rs. 40
    ⇒ $x = \dfrac{40 \times 5}{3} =$ Rs. $\dfrac{200}{3}$

$\therefore$ % Gain $= \dfrac{\left(80 - \dfrac{200}{3}\right)}{\left(\dfrac{200}{3}\right)} \times 100\%$

$= \dfrac{(240 - 200)}{200} \times 100\% = 20\%$.

57. **(D)** Let two digital number $= (10x + y)$

$\because \qquad x + y = 8 \qquad\qquad …(1)$

and $(10x + y) - 18 = (10y + x)$

$\Rightarrow \qquad 9x - 9y = 18$

$\therefore \qquad x - y = 2 \qquad\qquad …(2)$

Solving Equation (1) and (2),

$x = 5$ and $y = 3$

Hence, Required number

$= 10 \times 5 + 3 = 53$.

58. **(A)** Area of the field (grazed by horse)

$= \dfrac{1}{4} \times \pi R^2$

$= \dfrac{1}{4} \times \dfrac{22}{7} \times 14 \times 14 = 154 \text{ m}^2$.

59. **(C)** Let the three sides of a triangle be $3x$, $5x$ and $7x$ cm. respectively.

$\because$ Perimeter of the triangle

$= 3x + 5x + 7x = 30$ cm

$\Rightarrow \qquad 15x = 30$

$\therefore \qquad x = 2$

Hence, the length of the greatest side of the triangle $= 7x = 7 \times 2 = 14$ cm

60. **(B)** Let the slant height of the right circular cone $= l$ cms

Then, $l = \sqrt{r^2 + h^2} = \sqrt{3^2 + 4^2} = 5$ cm

$\therefore$ Curved surface of the cone $= \pi.r.l$

$= \pi \times 3 \times 5$

$= 15\pi$ sq. cm.

61. **(A)**   62. **(C)**   63. **(C)**

64. **(C)** $\because \qquad \dfrac{7}{11} = \dfrac{140}{220}, \dfrac{16}{20} = \dfrac{176}{220}$

and $\qquad \dfrac{21}{22} = \dfrac{210}{220}$

$\therefore$ Descending order of fractions

$= \dfrac{21}{22} > \dfrac{16}{20} > \dfrac{7}{11}$

65. **(B)** Let the required number $= x$

Then, $\because x - \dfrac{10}{100}x = 1800$

$\Rightarrow \qquad \dfrac{(100 - 10)x}{100} = 1800$

$\therefore \qquad x = \dfrac{1800 \times 100}{90} = 2000$

66. **(D)** $\because$

$$
\begin{array}{r|l}
 & 99 \\
\hline
9 & 9909 \\
 & 81 \\
\hline
189 & 1809 \\
 & 1701 \\
\hline
 & 108 \\
\end{array}
$$

Hence, Required perfect square number

$= 9909 - 108$

$= 9801 = (99)^2$.

67. **(B)**   68. **(C)**   69. **(C)**   70. **(A)**   71. **(C)**

72. **(B)**   73. **(D)**   74. **(D)**   75. **(C)**   76. **(C)**

77. **(D)**   78. **(C)**   79. **(B)**   80. **(C)**   81. **(B)**

82. **(D)**   83. **(B)**   84. **(D)**   85. **(B)**   86. **(B)**

87. **(C)**   88. **(B)**   89. **(D)**   90. **(B)**   91. **(C)**

92. **(A)**   93. **(B)**   94. **(C)**   95. **(C)**   96. **(B)**

97. **(D)**

98. **(C)** Given exp. $= \sqrt{\dfrac{36 \cdot 1}{102 \cdot 4}} = \sqrt{\dfrac{361}{1024}}$

$= \sqrt{\dfrac{(19)^2}{(32)^2}}$

$= \dfrac{19}{32}$.

99. **(C)**   100. **(D)**