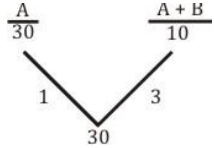
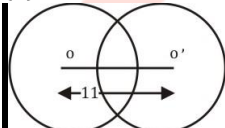
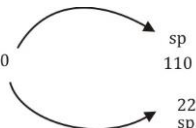


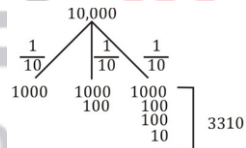


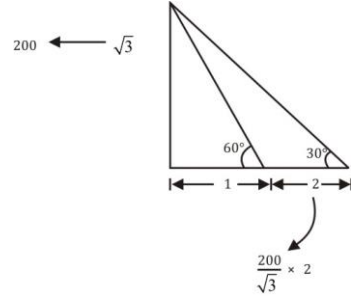
NUMERICAL ABILITY

- (b); $\sqrt{16} = 4$
- (d); $= 2.8 + 0.28 + 0.028 + 0.0028 = 3.1108$
- (d); $\cos\theta + \frac{1}{\cos\theta} = 2$
 $\cos\theta = 1$
 $\tan^2\theta + \sin^4\theta + \cos^2\theta = 0 + 0 + 1 = 1$
- (c)

Efficiency of B = $3 - 1 = 2$
Time required = $\frac{15}{2}$
 $= 7\frac{1}{2}$ min.
- (a); Let the number is x
 $\frac{2}{3} \times \frac{3}{4} \times \frac{1}{5} \times x = 7829.45$
 $x = 7829.45 \times 10$
10% of x = $\frac{1}{10} (7829.45 \times 10) = 7829.45$
- (b)

 $r_1 + r_2 > OO'$
 $21 > 11$
Only two common tangent can be drawn.
- (a); Let their ages, two years ago was $5x$ and $7x$
 $\frac{5x+4}{7x+4} = \frac{7}{9}$
 $4x=8$
 $x=2$
Shyam = $7 \times 2 + 2 = 16$ year
- (b)

A	:	B	:	C
Invest 3500	:	4500	:	5500
7	:	9	:	11

A's share = $\frac{7}{27} \times 405 = 105$
- (a)

Profit % = $\frac{120}{100} \times 100 = 120\%$
- (b); $2^5 \times 9^2 = 32 \times 81 = 2592$
Difference = $2592 - 2592 = 0$

- (c); $8000 + 8000 \times \frac{12}{100} \times T = 9100 + 9100 \times \frac{10}{100} \times T$
 $50T = 110$
 $T = 22$ years.
- (b); Let cp = 5
Sp = $\frac{9}{5} \times 5 = 9$
Profit % = $\frac{9-5}{5} \times 100 = 80\%$
- (b); $= \frac{16807}{343} \times \sqrt{\frac{56}{8}} \times \sqrt{\frac{9}{63}}$
 $= 49 \times \sqrt{7} \times \sqrt{\frac{1}{7}} = 49$
- (a); $= \frac{15 \times 36 + 12 \times 16}{48} = 15.25$
- (c); For real roots $b^2 \geq 4ac$
In option (c),
 $49 \geq 40$
- (b)

- (d); Diameter of circle = diagonal of square = $8\sqrt{2}$
Radius = $\frac{8\sqrt{2}}{2} = 4\sqrt{2}$
- (b); $= \frac{45}{100} \times 100000 = 45000$
- (c)

40	:	100
2	:	5
- (d); Due to inadequate data, can't be determined.
- (d); $T_1 = a = 8$
 $T_{60} = a + 59d = 185$
 $8 + 59d = 185$
 $d=3$
 $T_{31} = 8 + 30 \times 3 = 98$
- (d); $L + 2m = \left(72 \times \frac{5}{18}\right) \times 40$
 $L = 800 - 2 = 798$ m
- (a)


$$\text{Speed} = \frac{200 \times 2}{\sqrt{3} \times \left(\frac{1}{\sqrt{3}}\right)} = 400 \frac{m}{sec}$$

24. (b); $\sqrt{x} = 12.3 - 11$
 $= 1.3$
 $x = 1.69$
 $10x = 16.9$

25. (c); Product of number = LCM \times HCF
 $1152 = 24 \times \text{LCM}$
 $\text{LCM} = \frac{1152}{24} = 48$

26. (b); $= \frac{2+3+5+7+11+13+17}{7}$
 $= \frac{58}{7} = 8.28$

27. (b); $= \frac{4900}{28} \times \frac{444}{12}$

$$= 175 \times 37 = 6475$$

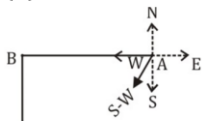
28. (d); New quantity of item D
 $= 40 \times \frac{150}{100} = 60$ quintal
 New price/kg of item D
 $= 90\%$ of 12.5
 $= 11.25$ Rs/kg
 Total price
 $= (60 \times 100 \times 11.25) = 67500$

29. (d); $\frac{17.5+10+7.5}{3} = 11.67$

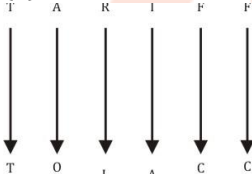
30. (a); $15 \times 25 : 10 \times 35$
 $15 : 14$

REASONING APITUDE

31. (d)



32. (d)

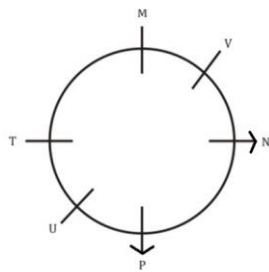


33. (a); $9 \times 3 - 3 = 24$
 $3 \times 3 - 3 = 6$

34. (d); +1, -1 series

35. (a); SQPTR

36. (c)



37. (d); third to the left or right

38. (c); P is sitting to the right of U.

39. (c);

40. (c); State with their capital

41. (d); Except (d), all others are browser.

42. (d); $7^2 + 1 = 50$

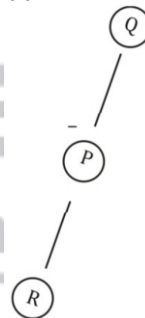
$$12^2 + 1 = 145$$

$$13^2 + 1 = 170$$

$$16^2 - 1 = 255$$

43. (a); 3-D expansion of circle is sphere similarly cuboid is for rectangle.

44. (c)



45. (a); BOOK, 'O' is the third letter.

46. (c); The girl is sister of Rupesh.

47. (a); The third word is "Single"

48. (a); Words with their antonyms.

49. (b); Except 125, all other numbers are perfect Squares.

50. (d); Except D, all other are external devices.

51. (b); C A N A D A

$$5 \ 1 \ 8 \ 1 \ 9 \ 1$$

52. (b); $24 \div 6 \times 4 + 9 - 8$

$$= 4 \times 4 + 9 - 8 = 17$$

53. (c)

54. (b)

55. (c); $(2 + 3) - (5 + 0) = 0$

$$(8 + 3) - (7 + 1) = 3$$

$$(6 + 9) - (5 + 3) = 7$$

56. (b); Except B, two semicircle outside.

57. (c);

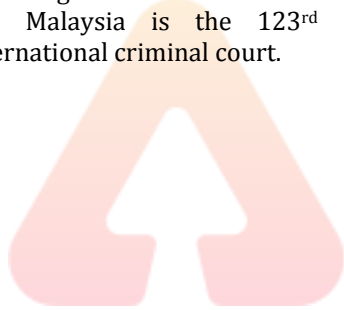
58. (c); There are 34 triangles.

59. (d); $7^{\text{th}} - 4^{\text{th}} = 3^{\text{rd}}$ term from the right

60. (a); $2^3 + 2^2, 3^3 + 3^2, 4^3 + 4^2, \dots, 6^3 + 6^2$

61. (c); Meira Kumar is an Indian politician and five-time Member of Parliament who was the United Progressive Alliance nominee for President of India in the 2017 election. She was elected unopposed as the first woman Speaker of Lok Sabha and served from 2009 to 2014.
62. (d); The "Marcha Real" is the national anthem of Spain. It is one of only four national anthems in the world that has no official lyrics
63. (c); World Population day is an annual event, observed on July 11 every year, which seeks to raise awareness of global population issues.
64. (c); Malala Yousafzai was announced as the co-recipient of the 2014 Nobel Peace Prize for her struggle against the suppression of children and young people and for the right of all children to education. Having received the prize at the age of 17, Yousafzai is the youngest Nobel laureate.
65. (a); A denial-of-service (DoS) is any type of attack where the attackers (hackers) attempt to prevent legitimate users from accessing the service. In a DoS attack, the attacker usually sends excessive messages asking the network or server to authenticate requests that have invalid return addresses.
66. (a); The "Rashtriya Gokul Mission" has been launched by the Government for conservation and development of indigenous breeds in a focused and scientific manner
67. (a); North-Central Railway Zone headquarters is located in Allahabad. It includes three divisions: Allahabad, Agra and Jhansi.
68. (a); The Shadow Cabinet is a feature of the Westminster system of government i.e. British Government. It consists of a senior group of opposition spokespeople who, under the leadership of the Leader of the Opposition, form an alternative cabinet to that of the government, and whose members shadow or mirror the positions of each individual member of the Cabinet.
69. (d); Transhumance is a type of pastoralism or nomadism, a seasonal movement of [livestock](#) between fixed summer and winter pastures.
70. (a); The Special Investigation Teams or SIT is a specialized team of officers in Indian law enforcement consisting of personnel trained to investigate serious crimes.
71. (d); Long Walk to Freedom is an autobiography written by South African President Nelson Mandela, and first published in 1994.
72. (d); The practice of a separate Railway Budget was started by the British in 1924 under the recommendation of a 10-member Acworth Committee headed by British economist William Mitchell Acworth in 1920-21.
73. (a); The Constitution of the People's Republic of Bangladesh gives the legislature the name Jatiya Sansad locally and House of the Nation in English.
74. (b); WHO headquarters is located in Geneva, Switzerland
75. (a); "Where there is no law, there will not be liberty" is written by John Locke.
76. (d); All the above options affect the Biodiversity.
77. (d); A minute amount of Zinc, lead, nickel, and Cadmium is found in Chocolate.
78. (b); Secondary memory devices include magnetic disks like hard drives and floppy disks ; optical disks such as CDs and CDROMs ; and magnetic tapes, which were the first forms of secondary memory.
79. (b); The Gandhi Sagar Dam is one of the four major dams built on India's Chambal River. The dam is located in the Mandsaur, Neemuch districts of the state of Madhya Pradesh.
80. (a); The currency in Botswana is the Pula (P) which is made up of 100 Thebe.
81. (d); All India Services include- Indian Administrative Service (IAS), Indian Police Service (IPS) and Indian Forest Service (IFS, to be distinguished from Indian Foreign Service). These Services are named so because they are common to both central as well as the state Governments.
82. (a); The Bretton Woods Institutions are the World Bank, and the International Monetary Fund (IMF). They were set up at a meeting of 43 countries in Bretton Woods, New Hampshire, USA in July 1944. Their aims were to help rebuild the shattered postwar economy and to promote international economic cooperation
83. (c); Exobiology is the branch of science that deals with the possibility and likely nature of life on other planets or in space.
84. (a); East-west corridor connects Silchar to Porbandar (3,300 km).
85. (c); A P J Abdul Kalam's book Wings of Fire is an Autobiography of A P J Abdul Kalam (1999), former President of India. It was written by Dr. Kalam and Arun Tiwari.
86. (d); The Convention on Wetlands called the Ramsar Convention is the intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources.
87. (d); INS Vikrant is also known as Indigenous Aircraft Carrier 1 (IAC-1), is an aircraft carrier under construction by Cochin Shipyard in Kochi. It is the first aircraft carrier to be built in India.
88. (d); The normal term of UN secretary General is 5 years.
89. (b); Buddha died at Kushinagar. It is a pilgrimage town in the Kushinagar district of the Indian state of Uttar Pradesh.
90. (d); A lokpal is an anti-corruption authority or body of ombudsman who represents the public interest in the Republic of India. The institution of ombudsman originated in Scandinavian countries.
91. (d); The term 'Hindu rate of growth' was coined by Professor Raj Krishna, an Indian economist, in 1978 to characterize the slow growth and to explain it against the backdrop of socialistic economic policies.
92. (c); Armed Forces Special Powers Acts (AFSPA), are Acts of the Parliament of India that grant special powers to the Indian Armed Forces in which each act terms "disturbed areas".

93. (a); Singapore - India Maritime Bilateral Exercise (SIMBEX) is an annual bilateral naval exercise conducted by the Indian Navy and the Republic of Singapore Navy
94. (b); Ignition temperature is the minimum temperature to which a combustible substance must be heated, before it catches fire.
95. (b); The stupa of Bharhut is between Allahabad and Jabalpur situated in the erstwhile Nagod state of Madhya Pradesh. It was probably built around 150 B.C. Buddhist narratives, among them the dream of Maya; celestials celebrating Buddha's enlightenment, the worship of Buddha's throne and the Bodhi tree; elephants paying homage to the Buddha throne were depicted in the Bharhut stupa.
96. (d); The summit of the Shanghai Cooperation Organization (SCO) leaders 2019 will be held in the Kyrgyzstan.
97. (a); It is also the first Greenfield airport to be constructed in the Northeastern Region of India, the 100th operational airport in India, and the only airport in the state of Sikkim.
98. (c); The Shanti Swarup Bhatnagar Prize for Science and Technology is a science award in India.
99. (a); Bhopal was named as the 'Cleanest Capital' of India according to Swachhta surveskshan report 2019.
- 100.(a); Malaysia is the 123rd country to join the International criminal court.



adda247
content partner