

S7. Ans.(a);

Sol. The main ingredient in sweetened soft drinks is water; they are about 90 percent carbonated water.

S8. Ans.(b);

Sol. $R = \frac{1}{10}$ / half year

$t = 4$ half years

Principal $(10 \times 10 \times 10 \times 10) \times = 10000$

Amount $(11 \times 11 \times 11 \times 11) \times 1 = 14641$

S9. Ans.(b);

Sol. Lollywood is the oldest film industry of Pakistani cinema, based in Lahore, Punjab, Pakistan.

S10. Ans.(b);

Sol. Coefficient of variation

$$= \frac{\text{Standard Deviation}}{\text{Mean}} \times 100\%$$

$$= \frac{4.5}{18} \times 100\% = 25\%$$

S11. Ans.(a);

Sol. $a^3 + b^3 + c^3 = 3abc$

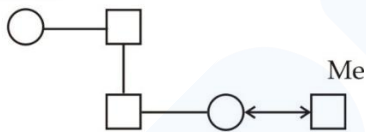
Now, $\frac{a^2}{bc} + \frac{b^2}{ac} - 3$

$$= \frac{a^3 + b^3 - 3abc}{abc} = \frac{-c^3}{abc} = -\frac{c^2}{ab}$$

S12. Ans.(a);

Sol.

Women



Father-in-law's sister

S13. Ans.(a);

Sol. India shares a 1643 km long border with Myanmar in four north-eastern states namely, Arunachal (520 km), Nagaland (215 km), Manipur (398 km) and Mizoram (510 km)

S14. Ans.(d);

Sol. A geographical indication (GI) is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.

S15. Ans.(c);

Sol. In March 2016 Election Commission of India declared assembly elections in 5 states scheduled for April–May 2016.

S16. Ans.(c);

Sol. $10 \times x = (20 \times 2) \times 5$

$x = 20$

17. Ans.(c);

$$\text{Sol. Ratio efficiency} = \frac{\frac{1}{60}}{\frac{1}{50}}$$

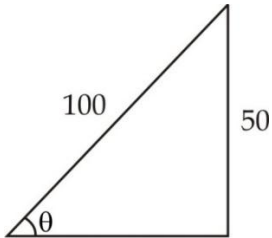
$$= \frac{5}{6}$$

S

S

18. Ans.(d);

Sol.



$$\sin\theta = \frac{50}{100} = \frac{1}{2}$$

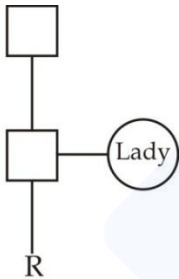
$$\Rightarrow \theta = 30 \text{ degrees}$$

S19. Ans.(a);

Sol. Retinol, also known as Vitamin A1, is a vitamin found in food and used as a dietary supplement.

S20. Ans.(b);

Sol.



Paternal Aunt

S21. Ans.(b);

Sol. Bollywood actor Manoj Kumar has been selected for the 47th Dadasaheb Phalke Award for 2015.

S22. Ans.(c);

Sol.

S23. Ans.(c);

Sol. Sleep apnea is a serious sleep disorder that occurs when a person's breathing is interrupted during sleep.

S24. Ans.(b);

Sol. The boiling point of water is 100 C or 212 F at 1 atmosphere of pressure (sea level).

S25. Ans.(a);

Sol. Synonyms series

S26. Ans.(b);

Sol. $S = 3 + 5 + 7 + 11 + 13 + 17 + 19 + 23$
 $= 98$

S27. Ans.(b) $a = \frac{2b}{3}$

$a : b = 2 : 3$

$b : c = 2 : 3$

$c : d = 2 : 3$

$\frac{b}{d} = \frac{2}{3} \times \frac{2}{3} = \frac{4}{9}$

S28. Ans.(d);

Sol. Windows 10 is a series of personal computer operating systems produced by Microsoft as part of its Windows NT family of operating systems.

S29. Ans.(b);

Sol. Distillation is the process of separating the components or substances from a liquid mixture by using selective boiling and condensation.

S30. Ans.(b);

Sol. Required difference = $|(12200) - (14300)|$
 $= 2100$

S31. Ans.(b);

Sol. Required difference = $|(11500) - (13100)|$
 $= 1600$

S32. Ans.(c);

Sol. VK = 11500

MSD = 13100

RD = 14700

SR = 11500

S33. Ans.(a);

Sol. Echocardiogram is more closely related to Doppler effect

S34. Ans.(d);

Sol.

S35. Ans.(c);

Sol. Initially,

Milk = 20 ℓ

Water = 5 ℓ

4 : 1

16 : 1

Difference is 12

$12 \times 5 = 60$

On adding 60 ℓ milk, we have $(20 + 60) : 5$

16 : 1

S36. Ans.(a);

Sol. World Wetlands Day is celebrated every year on 2 February.

S37. Ans.(b);

Sol. In stutter disease, speech is impaired.

S38. Ans.(c);

Sol. The 2015 Davis Cup was the 104th edition of the Davis Cup, a tournament between national teams in men's tennis. It was sponsored by BNP Paribas. Great Britain won their tenth title with Andy Murray defeating David Goffin of Belgium

S39. Ans.(b);

Sol. AP with

$$a = 1$$

$$\ell = 81$$

$$d = 2$$

$$81 = 1 + (n-1)2$$

$$n = 41$$

$$S = \frac{41}{2} [82]$$

$$41 \times 41$$

$$= 1681$$

S40. Ans.(b);

Sol. Start' menu in a standard personal computer is a set of options and commands

S41. Ans.(d);

Sol. $24 - 48 \div 12 + 4 \times 2$

$$24 - 4 + 8 = 28$$

S42. Ans.(c);

Sol. In volcano eruption, lava is released.

S43. Ans.(c);

Sol. The purpose of homogenization is to reduce the milk fat globules size to less than 1.0 μm which allows them to stay evenly distributed in milk. Homogenization is a high pressure process that forces milk at a high velocity through a small orifice to break up the globules.

S44. Ans.(b);

Sol. Akbar was the 3rd Mughal Emperor of India

S45. Ans.(a);

Sol. Velocity of a car does not depend on Speedometer.

S46. Ans.(b);

Sol. Colosseum, also called Flavian Amphitheatre, giant amphitheatre built in Rome under the Flavian emperors.

S47. Ans.(c);

Sol. $30 + 25 - \frac{30 \times 25}{100}$

$55 - 7.5 = 47.5$... (i)

$47.5 + 15 - \frac{47.5 \times 15}{100}$

$62.5 - \frac{95 \times 15}{200}$

$62.5 - \frac{57}{8}$

$62.5 - 7.125 = 55.375$

$\approx 55.38\%$

S48. Ans.(b);

Sol. In March 2016 National Green Tribunal imposed an initial compensation of Rs. 5 Crore on Art of Living Foundation for tampering with the Yamuna river's flood plains.

S49. Ans.(c);

Sol. The Manu Smriti was one of the first Sanskrit texts studied by the European philologists. It was first translated into English by Sir William Jones. His version was published in 1794

S50. Ans.(d);

Sol. +2/+2 series.

S51. Ans.(d);

Sol. The 2016 Asia Cup was a Twenty20 International (T20I) cricket tournament that was held in Bangladesh from 24 February to 6 March 2016. It was the 13th edition of the Asia Cup, the fifth to be held in Bangladesh. India beat Bangladesh by 8 wickets in the final to win their sixth Asia Cup title

S52. Ans.(d);

Sol. The Kakori Conspiracy (or Kakori train robbery or Kakori Case) was a train robbery that took place between Kakori and, near Lucknow, on 9 August 1925 during the Indian Independence Movement against the British Indian Government. The robbery was organised by Hindustan Republican Association (HRA).

S53. Ans.(c);

Sol. $S_{initial} = 380$

$ATQ, \frac{380+x}{21} = 20$

$\Rightarrow x = 40$

S54. Ans.(b);

Sol. Golconda Fort was built during Qutb Shahi dynasty.

S55. Ans.(a);

Sol. The Government of India Act 1935 derived material from four key sources .. This act ended the system of dyarchy introduced by GOI Act 1919 and provided for establishment of a Federation of India to be made up of provinces of British India and some or all of the Princely states.

S56. Ans.(c);

Sol. Bill Gates was number 1 in the Forbes 2016 ranking of World's billionaires

S57. Ans.(a);

$$\text{Sol. } \frac{60 \times 7}{2} = \frac{70 \times 5}{x}$$

$$\frac{120}{2} = \frac{70 \times 5}{x}$$

$$x = 100\text{m}$$

S58. Ans.(b);

Sol. An echocardiogram (echo) is a graphic outline of the heart's movement.

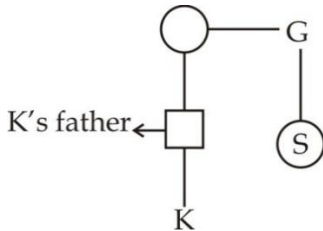
S59. Ans.(b);

$$\text{Sol. } a^2 + b^2 = 60$$

$$\text{Ans. } (a + b)^2 + (a - b)^2 = 2 \times 60 = 120$$

S60. Ans.(a);

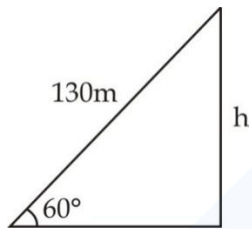
Sol.



S

61. Ans.(d);

Sol.



$$\frac{h}{130} = \sin 60 = \frac{\sqrt{3}}{2}$$

$$h = 65\sqrt{3}$$

$$h = 65 \times 1.73 \approx 112.58 \text{ m}$$

S62. Ans.(c);

Sol. Halley's Comet or Comet Halley, officially designated 1P/Halley, is a short-period comet visible from Earth every 75–76 years.

S63. Ans.(b);

$$\text{Sol. Required number} = HCF \{1580 - 8, (3800 - 1)\}$$

$$= HCF \{1572, 3799\} = 131$$

S64. Ans.(a);

Sol. Drinking more water is not the cause of kidney stone formation.

S65. Ans.(b);

$$\text{Sol. Ratio} = 5:2$$

S66. Ans.(c);

Sol. Parliament every year under Article 112 of the Constitution of India, Under the Constitution, Annual Financial Statement has to Auditor General of India under Article 150 of the Constitution, which enables is commonly known as Union Budget)

S67. Ans.(c);

Sol. Let the required distance = $36x$

$$\text{Bus} = \frac{36x \times 4}{9} = 16x$$

$$\text{Rail} = \frac{36x \times 5}{18} = 10x$$

$$\text{Rest} = 10x = 10$$

$$\Rightarrow x = 1$$

$$\Rightarrow \text{Distance} = 36 \text{ km}$$

S68. Ans.(c);

Sol. We have

$$a^3 + b^3 + c^3 - 3abc$$

$$= (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$$

$$= -(a + b + c)(ab + bc + ca - a^2 - b^2 - c^2)$$

$$\therefore \frac{a^3 + b^3 + c^3 - 3abc}{ab + bc + ca - a^2 - b^2 - c^2} = -(a + b + c)$$

$$= -(17)$$

$$= -17$$

S69. Ans.(b);

$$\text{Sol. } S_{\text{initial}} = 19 \times 24 = 456$$

$$S_{\text{final}} = 456 + x$$

ATQ,

$$\frac{456+x}{20} = 24 + \frac{4}{12}$$

$$= \frac{73}{3}$$

$$\frac{456+x}{20} = \frac{73}{3}$$

$$1368 + 3x = 1460$$

$$3x = 92$$

$$x = \frac{92}{3} = 30 + \frac{2}{3} = 30 + \frac{8}{12}$$

$$\Rightarrow 30 \text{ years } 8 \text{ months}$$

S70. Ans.(c);

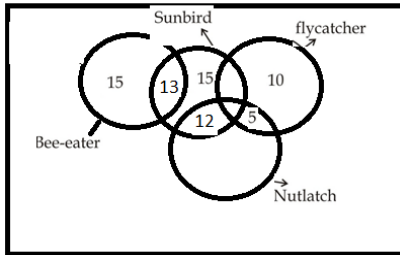
Sol. Referee is the decision making authority in stadium.

S71. Ans.(a);

Sol. Maria Sharapova has been provisionally banned from tennis after she revealed on Monday she tested positive at the Australian Open for a recently banned drug that she has been taking for 10 years for health reasons.

S72. Ans.(b);

Sol.



$$\begin{aligned} \text{Required difference} &= (15 + 12 + 13) - (15) \\ &= 25 \end{aligned}$$

S73. Ans.(c);

Sol. Two birds = $13 + 12 + 5 = 30$

Only one = $75 - 30 = 45$

S74. Ans.(a);

Sol. Required ratio = $\frac{75 - 53}{13 + 15} = \frac{11}{14}$

S75. Ans.(d);

Sol. $4 + 2 = 6$

$6 + 3 = 9$

$9 + 4 = 13$

S76. Ans.(c);

Sol. For the First time the Bhagavad-Gita has been translated in the West in 1785 Ch.Wilkinson and aroused great interest not only experts, but also the writers, the poets, the philosophers

S77. Ans.(a);

Sol. $x \times \frac{5}{100} \times 10 = (1000 - x) \times \frac{10}{100} \times 5$

$$\frac{x}{2} = \frac{(1000 - x)}{2}$$

$$1000 = 2x$$

$$x = 500$$

S78. Ans.(b);

Sol. 329 → 'you are bad'

419 → 'bad is good'

195 → 'nothing is bad'

Bad → 9

is → 1

Good → 4

S79. Ans.(b);

Sol. Any online 'demo' is a non-interactive presentation .

S80. Ans.(a);

Sol. 324 → are you alright

783 → you come home

9271 → we are at home

you → 3
home → 7
come → 8

S81. Ans.(c);

Sol. The game of football is also referred to as Soccer.

S82. Ans.(c);

Sol. (a) Mouse

(b) Monitor

(c) Waiter

(d) Printer

Other than (c) all are related to computer.

S83. Ans.(c);

Sol. Coins are not made of uranium.

S84. Ans.(b);

Sol. Maximum profit = $10(650 - 400)$
= 2500

S85. Ans.(d);

Sol. As per historical astronomy there are 12 zodiac divisions

S86. Ans.(b);

Sol. CP = 100

MP = 125

Now,

$$\frac{125 \times (100 - x)}{100} = 100$$

$$\therefore x = 20\%$$

S87. Ans.(a);

Sol. Varlance = $(S.D)^2 = 100$

S88. Ans.(a);

Sol.

89. Ans.(b);

Sol. $R = 3M \Rightarrow R : M = 3 : 1$

$M = 2S \Rightarrow M : S = 2 : 1$

$\Rightarrow R : M : S = 6 : 2 : 1$

Required time = $\frac{42}{2} = 21$ 21 minutes

S90. Ans.(c);

Sol. Complement = x

$$x = 60 + \frac{(90 - x)}{5}$$

$$5x = 390 - x$$

$$6x = 390$$

$$x = 65$$

$$90 - x = 25^\circ$$

S91. Ans.(b);

Sol. Violet Brown White Blue Black Purple Indigo

S92. Ans.(c);

Sol. **93. Ans.(d);**

Sol. 94. Ans.(c);

Sol.

S95. Ans.(a);

Sol. $a = 6$

$$\ell = 71$$

$$d = 5$$

$$71 = 6 + (n - 1) 5$$

$$\frac{65}{5} = n - 1$$

$$n = 14$$

$$s = \frac{14}{2}(6 + 71)$$

$$s = 7 \times 77 = 539$$

96. Ans.(d);

Sol. Clyde William Tombaugh was an American astronomer who discovered planet Pluto.

S97. Ans.(d);

Sol.

S98. Ans.(a);

Sol. LCM $\{3x, 5x, 10x\} = 630$

$$\therefore x = 21$$

$$\text{Now, numbers} = 21 \times 3 = 63$$

$$5 \times 21 = 105$$

$$10 \times 21 = 210$$

$$\text{HCF} = 21$$

S99. Ans.(c);

Sol. Ratio before three years $= \frac{5}{9}$

Ratio after $(3 + 5) = 8$ yrs

$$= \frac{3}{5} = \frac{6}{10}$$

$$\Rightarrow 1 \Rightarrow 8$$

Now Maya's present age $= 8 \times 5 + 3$

$$= 43$$

S100. Ans.(b);

Sol. From (i) and (ii)

$$\text{Is/god} \Rightarrow \text{ge/fa}$$

From (iii) $\text{god} \rightarrow \text{fa}$

$$\therefore \text{is} \rightarrow \text{ge}$$