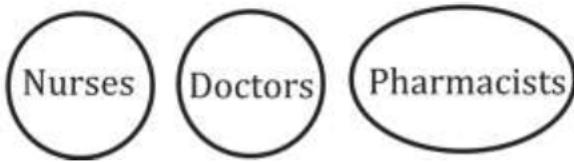


**SSC CHSL Previous Year Paper [2nd July 3rd Shift] (SOLUTIONS)****S1. Ans.(b)****Sol.****S2. Ans.(a)****Sol.**

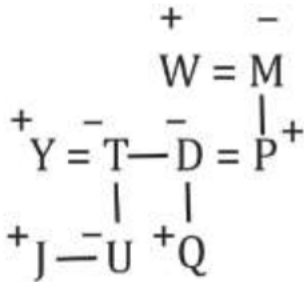
CONSULTANCY  
-4      | opp.      -4  
Q O J K Y O U Y J W P

MASTERMINDS  
-4      | opp.      -4  
A P O W I I O Z J E I

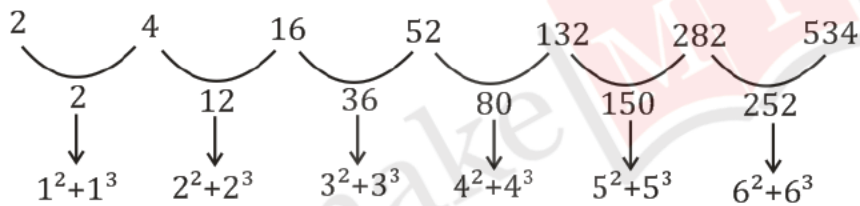
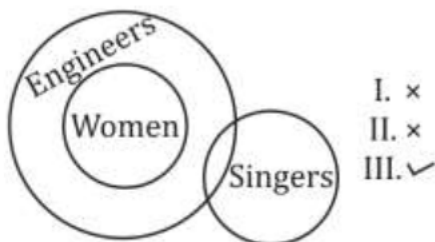
**S3. Ans.(d)****Sol.**  $72 = 3x + x$  $x = 18$ **S4. Ans.(d)****Sol.****S5. Ans.(a)****Sol.**

F O R T U N E P Y  
6 5 2 1 3 4 7 8 9  
NEPTUNE → 4 7 8 1 3 4 7

**S6. Ans.(d)****Sol.** -5, -3, -2, -1

**S7. Ans.(b)****Sol.** 27 triangles**S8. Ans.(a)****Sol.** Sum of the digits in even and rest are odd.**S9. Ans.(c)****Sol.****S10. Ans.(c)****Sol.**

Q is the grandson of W.

**S11. Ans.(c)****Sol.****S12. Ans.(b)****Sol.** Singapore is an Asian country and rest are European countries.**S13. Ans.(b)****Sol.**a b d b / a c d b / a b d b / a c d b / a b d b / a c d b / a b d b**S14. Ans.(c)****Sol.**

**S15. Ans.(d)****Sol.**  $16 - 6 + 12 \times 3 \div 4 = 18$  $16 - 4 + 12 \times 3 \div 6 = 18$  $16 - 4 + 6 = 18$  $22 - 4 = 18$  $18 = 18$ **S16. Ans.(a)****Sol.**

P      Q      R

$\begin{array}{ccc} 5 & 3 & 7 \\ \text{---} & & \text{---} \\ & 2 & \end{array}$ 
 $2 \times 140 = 280$   
 $15 = 2100$   
 $1 = 140$

**S17. Ans.(d)****Sol.****S18. Ans.(a)****Sol.** Ice-cream is served in cone

Soup is served in bowl.

**S19. Ans.(c)****Sol.** 3, 1, 5, 2, 4 (years in increasing order)**S20. Ans.(c)****Sol.****S21. Ans.(a)****Sol.** pair of opposite letters.**S22. Ans.(a)****Sol.** 6 is opposite to 1 (by figure 2 and 3).**S23. Ans.(c)****Sol.**

$\begin{array}{ccccccccc} 89 & , & 90 & , & 82 & , & 109 & , & 45 & , & 170 \\ \text{---} & & \text{---} & & \text{---} & & \text{---} & & \text{---} & & \\ & +1 & & -8 & & +27 & & -64 & & +125 & \end{array}$

**S24. Ans.(a)****Sol.** opposite meaning

**S25. Ans.(a)**

**Sol.**  $15 \times 7 - 3 = 102$   $11 \times 7 - 3 = 74$

$15 \times 21 - 2 = 313$   $11 \times 21 - 2 = 229$

**S26. Ans.(d)**

**Sol.** Sambhar lake of Rajasthan is India's largest inland salt water lake and Chilka lake is the India's largest brackish water saline lake.

**S27. Ans.(b)**

**Sol.** Former Flipkart Executive Sandeep Patil appointed as India Managing Director of Truecaller. Sandeep Patil will be leading business strategies to expand the company and increase its revenue.

**S28. Ans.(c)**

**Sol.** Rajasthan government increased the amount of financial assistance given to schools girls under Aapki Beti. Under the Aapki Beti scheme, girls living under the Below Poverty Line (BPL) and whose mother or father or both have died get annual financial assistance in the state.

**S29. Ans.(a)**

**Sol.** In the ISSF World Cup rifle pistol stage in Munich, Germany, Rahi Sarnobat has booked an Olympic quota place for India winning gold in women's 25m pistol event.

**S30. Ans.(a)**

**Sol.** Pondicherry has been given partial state-hood.

**S31. Ans.(a)**

**Sol.** The hertz (symbol: Hz) is the derived unit of frequency in the International System of Units (SI) and is defined as cycles per one second. It is named after Heinrich Rudolf Hertz, the first person to provide conclusive proof of the existence of electromagnetic waves.

**S32. Ans.(a)**

**Sol.** In Lok Sabha 2019 Elections, Congress won 8 seats out of the 13 Lok Sabha seats of Punjab.

**S33. Ans.(c)**

**Sol.** The Financial Literacy Week is an initiative of RBI to promote awareness on key topics every year through a focused campaign. Financial Literacy Week 2019 will be observed from June 3-7 on the theme of "Farmers" and how they benefit by being a part of the formal banking system

**S34. Ans.(a)**

**Sol.** Mundra Thermal Power Station is located at Mundra in Kutch district in the Indian state of Gujarat. The power plant is one of the coal-based power plants of Adani Power.

**S35. Ans.(d)**

**Sol.** Indian Space Research Organisation has launched a special programme for School Children called "Young Scientist Programme" "YUva Vigyani KAryakram", in tune with the Government's vision "Jai Vigyan, Jai Anusandhan"

**S36. Ans.(c)**

**Sol.** Facing stiff competition from Chinese and South Korean players, Japanese conglomerate Sony Corporation has announced to quit the Indian smartphone market.

**S37. Ans.(c)**

**Sol.** The AFC 2019 tournament was 17th edition of AFC Cup was held from 5 January to 1 February 2019. It was hosted by . (United Arab Emirates (UAE

**S38. Ans.(a)**

**Sol.** New York-based investment and financial services major Goldman Sachs have pumped in \$250 million to construct one of its largest global workspaces in Bengaluru.

**S39. Ans.(b)**

**Sol.** Satyashodhak Samaj (Truth-seekers' Society) was a social reform society founded by Jyotirao Phule in Pune, Maharashtra, on 24 September 1873.

**S40. Ans.(b)**

**Sol.** SpiceJet's Chairman and Managing Director Ajay Singh was elected to the board of the International Air Transport Association (IATA) in June 2019.

**S41. Ans.(c)**

**Sol.** Fold mountains are mountains that form mainly by the effects of folding on layers within the upper part of the Earth's crust. The Himalayas, Andes, and Alps are all active fold mountains. The Himalayas stretch through the borders of China, Bhutan, Nepal, India, and Pakistan.

**S42. Ans.(d)**

**Sol.** The National Institute of Nutrition is an Indian Public health, Nutrition and Translational research center located in Hyderabad, India.

**S43. Ans.(a)**

**Sol.** The quote " The shots that hit me are the last nails to the coffin of British rule in India" was said by Lala Lajpat Rai. The patriot died at Lahore in 1928 after he was attacked by police during a protest rally against the Simon Commission.

**S44. Ans.(a)**

**Sol.** EEPROM stands for electrically erasable programmable read-only memory and is a type of non-volatile memory used in computers, integrated in microcontrollers for smart cards and remote keyless systems.

**S45. Ans.(a)**

**Sol.** A pivot table is a program tool, that is a built-in feature of MS Excel, allowing you to organize and summarize selected columns and rows of data in a spreadsheet to obtain a desired report, helping in visualization of data.

**S46. Ans.(a)**

**Sol.** Pinjar is a short novel written by Amrita Pritam originally in Punjabi. Pinjar' means 'skeleton'. A skeleton with neither a face, nor mind, nor a will, nor identity.

**S47. Ans.(b)**

**Sol.** The winners of the upcoming ICC men's World Cup will earn a cash award of USD 4 million along with the trophy on July 16. It is the highest prize money on offer in the history of the tournament. The previous edition saw the winner earning USD 3.75mn.

**S48. Ans.(c)**

**Sol.** The "World Blood Donor Day" was celebrated around the world on 14<sup>th</sup> JUNE 2019 with the theme 'Safe blood for all'.

**S49. Ans.(a)**

**Sol.** The Soorya Festival features various art forms and events, including film festivals, theater festivals, dance, music, painting and photography exhibitions. Established in 1977, it takes place annually in Thiruvananthapuram city in the Indian state of Kerala, in the months of September to January.

**S50. Ans.(c)**

**Sol.** Neptune is farthest from the Sun among the given planets.

**S51. Ans.(a)**

**Sol.**

Income	Expenditure	Saving
100	90	10
+25.5%	+25%	+30%
125.5	112.5	13

**S52. Ans.(a)**

**Sol.**  $\frac{or(\triangle ABC)}{or(\triangle PQR)} = \frac{9}{16}$

$$\frac{AB}{PQ} = \frac{3}{4}$$

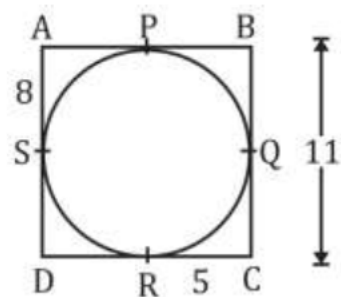
$$\therefore 3\text{unit} = 12$$

$$1\text{unit} = 4$$

$$\therefore PQ = 4 - 4 \times 4 = 16 \text{ cm.}$$

**S53. Ans.(d)**

**Sol.**



$$CR = QC = 5 \text{ cm}$$

$$\therefore BQ = 11 - 5 = 6 \text{ cm} = PB$$

$$AS = AP = 8 \text{ cm}$$

$$\therefore AB = AP + PB = 8 + 6 = 14 \text{ cm}$$

**S54. Ans.(b)**

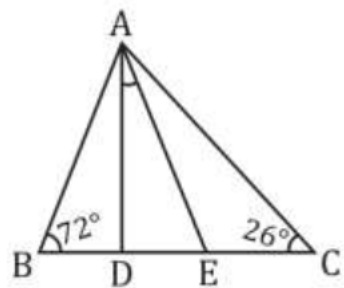
**Sol.**  $3 \cos^2 A + 6 \sin^2 A = 3$

$$3 \cos^2 A + 6 - 6 \cos^2 A = 3$$

$$3 = 3 \cos^2 A$$

$$\cos^2 A = 1$$

$$A = 0^\circ$$

**S55. Ans.(a)****Sol.**

$$\angle DAE = \frac{1}{2} (\angle B - \angle C)$$

$$= \frac{1}{2} (72 - 26)$$

$$= \frac{1}{2} \times 46$$

$$= 23^\circ$$

**S56. Ans.(c)**

**Sol.**  $\frac{(\cos 9^\circ + \sin 81^\circ)(\sec 9^\circ + \operatorname{cosec} 81^\circ)}{\sin 56^\circ \sec 34^\circ + \cos 25^\circ \operatorname{cosec} 65^\circ}$

$$= \frac{2 \sin 81^\circ \times 2 \operatorname{cosec} 81^\circ}{\sin 56^\circ \operatorname{cosec} 56^\circ + \cos 25^\circ \sec 25^\circ}$$

$$= \frac{4}{1+1} = 2$$

**S57. Ans.(a)**

**Sol.** Avg. of B, C and E =  $\frac{90+135+120}{3}$

$$= \frac{345}{3} = 115$$

$$\therefore \text{Required \%} = \frac{125-115}{125} \times 100$$

$$= \frac{10}{125} \times 100$$

$$= 8\%$$

**S58. Ans.(d)**

**Sol.**  $\left( \frac{\sin \theta}{1+\cos \theta} + \frac{1+\cos \theta}{\sin \theta} \right) \left( \frac{1}{\tan \theta + \cot \theta} \right)$

$$= \frac{\sin^2 \theta + 1 + \cos^2 \theta + 2 \cos \theta}{\sin \theta (1+\cos \theta)} \times \sin \theta \cos \theta$$

$$= \frac{2(1+\cos \theta)}{(1+\cos \theta)} \times \cos \theta$$

$$= 2 \cos \theta$$

**S59. Ans.(d)**

**Sol.**  $3 - 2 \sin^2 \theta - 3 \cos \theta = 0$

$$3 - 2 + 2 \cos^2 \theta - 3 \cos \theta = 0$$

$$2 \cos^2 \theta - 3 \cos \theta + 1 = 0$$

$$2 \cos^2 \theta - 2 \cos \theta - \cos \theta + 1 = 0$$

$$2 \cos \theta (\cos \theta - 1) - 1 (\cos \theta - 1) = 0$$

$$(2 \cos \theta - 1) (\cos \theta - 1) = 0$$

$$\therefore 2 \cos \theta = 1$$

$$\cos \theta = \frac{1}{2}$$

$$\theta = 60^\circ \{ \because 0^\circ < \theta < 90^\circ \}$$

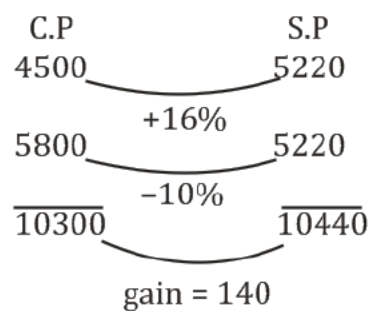
$$\therefore 2 \operatorname{cosec} \theta + \tan \theta$$

$$= 2 \operatorname{cosec} 60^\circ + \tan 60^\circ$$

$$= \frac{4}{\sqrt{3}} + \sqrt{3} = \frac{4+3}{\sqrt{3}} = \frac{7}{\sqrt{3}} = \frac{7\sqrt{3}}{3}$$

**S60. Ans.(a)**

**Sol.**

**S61. Ans.(c)**

**Sol.** Ratio =  $\frac{100+125}{135} = \frac{225}{135} = \frac{5}{3}$

**S62. Ans.(b)**

**Sol.**

$$\begin{array}{rcl} A + B - 16 & \nearrow 6 & \\ A + C - 32 & \xrightarrow{3} & 96 \\ B + C - 24 & \searrow 4 & \end{array}$$

$\therefore$  Efficiency by solving the above equations.

$$A = 5/2, B = 7/2, C = 1/2$$

$$\text{When they work combinely for 12 days then work done} = \frac{13}{2} \times 12 = 78$$

$$\therefore \text{Remaining work} = 96 - 78 = 18$$

$$\therefore \text{Remaining work done by C} = \frac{18}{1/2} = 36 \text{ days.}$$

**S63. Ans.(d)**

**Sol.**  $a^2 + b^2 + 2ab = 25$

$$a^3 + b^3 = (a + b) (a^2 + b^2 - ab)$$

$$110 = 5 (25 - 2ab - ab)$$

$$22 = 25 - 3ab$$

$$\boxed{ab = 1}$$

$$\therefore (a + b)^2 - 3ab = 25 - 3 = 22$$



**S64. Ans.(a)**

$$\begin{aligned}\text{Sol. } & \frac{90+140}{100+70+110+125+95} \times 100 \\ &= \frac{230}{500} \times 100 \\ &= 46\%\end{aligned}$$

**S65. Ans.(a)**

$$\text{Sol. } A + B = 96$$

$$\begin{array}{ccc} \begin{array}{c} A \\ 140 \\ \textcircled{7} \\ \swarrow \times 8 \\ 56 \end{array} & : & \begin{array}{c} B \\ 100 \\ \textcircled{5} \\ \swarrow \times 8 \\ 40 \end{array} \longrightarrow \begin{array}{c} 12 - 96 \\ 1 - 8 \end{array} \end{array}$$

Average ratio

$$\begin{array}{cc} A & B \\ 2x & 3x \end{array}$$

$$\text{A.T.Q} \Rightarrow 96 \times 58 = 56 \times 2x + 40 \times 3x$$

$$96 \times 58 = 232x$$

$$x = 24$$

$$\therefore \text{Average of B} = 24 \times 3 = 72 \text{ kg}$$

**S66. Ans.(d)**

$$\text{Sol. } a + b + c = 5$$

$$a^2 + b^2 + c^2 = 33$$

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

$$ab + bc + ca = -4$$

$$a^3 + b^3 + c^3 - 3abc = (a + b + c)(a^2 + b^2 + c^2 - ab - bc - ca)$$

$$= 5 \times (33 + 4)$$

$$= 5 \times 37$$

$$= 185$$

**S67. Ans.(b)**

$$\text{Sol. } 40\sqrt{5}x^3 - 3\sqrt{3}y^3 = (2\sqrt{5}x - \sqrt{3}y) \times (Ax^2 + Bxy + Cy^2)$$

$$(2\sqrt{5}x)^3 - (\sqrt{3}y)^3 = (2\sqrt{5}x - \sqrt{3}y)(20x^2 + 2\sqrt{15}xy + 3y^2)$$

$$A = 20, B = 2\sqrt{15}, C = 3$$

$$\therefore \sqrt{B^2 + C^2 - A} = \sqrt{60 + 9 - 20}$$

$$= \sqrt{49} = 7$$

**S68. Ans.(c)**

$$\text{Sol. } P = 4096, T = \frac{5}{2} \text{ years, } R = 15\%$$

For 10 monthly-

$$T = \frac{5}{2} \times 12 = 30 = 10 + 10 + 10 = 3 \text{ years}$$

$$R = \frac{15}{12} \times 10 = 12.5\% = \frac{1}{8}\%$$

$$\begin{array}{ccccccc} & 1/8 & & & & & \\ 4096 & \xrightarrow{\quad} & 512 & \xrightarrow{1/8} & & & \\ & & 512 & \xrightarrow{1/8} & 64 & \xrightarrow{1/8} & \\ & & & & 128 & \xrightarrow{1/8} & 8 \end{array}$$

$$\text{CI} = 512 \times 3 + 64 + 128 + 8 = 1736$$

**S69. Ans.(c)**

$$\text{Sol. } \frac{x+y}{(84+52) \times \frac{5}{18}} = 12$$

$$\frac{x + \frac{2}{3}x}{(84+52) \times \frac{5}{18}} = 12$$

$$x = 272 \text{ m}$$

**S70. Ans.(b)**

$$\text{Sol. } c = \frac{135-110}{110} \times 100$$

$$= \frac{25}{110} \times 100 \approx 23\%$$

**S71. Ans.(b)**

$$\text{Sol. } x^2 + 1 = 3x$$

$$\boxed{x + \frac{1}{x} = 3}$$

$$\frac{x^4 + \frac{1}{x^2}}{x^2 + 5x + 1} = \frac{x(x^3 + \frac{1}{x})}{8x} = \frac{x^3 + \frac{1}{x^3}}{8}$$

$$= \frac{27-9}{8} = \frac{18}{8} = \frac{9}{4} = 2\frac{1}{4}$$

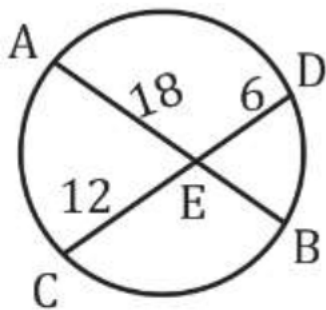
**S72. Ans.(b)****Sol.**

S	F			
5	$2 \times 14$	70	28	) $\begin{matrix} 7-14 \\ 1-2 \end{matrix}$
9	$5 \times 7$	63	35	

$$\therefore \text{Total number of candidates} = 70 \times 2 + 28 \times 2$$

$$= 140 + 56$$

$$= 196$$

**S73. Ans.(d)****Sol.**

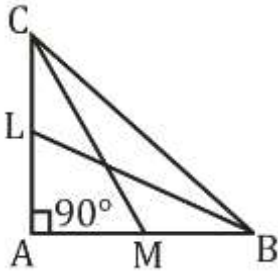
$$AE \times EB = EC \times ED$$

$$18 \times EB = 12 \times 6$$

$$EB = 4 \text{ cm}$$

**S74. Ans.(b)**

**Sol.**



$$CM^2 = AC^2 + AM^2$$

$$CM^2 = AC^2 + \frac{AB^2}{4} \quad \dots(i)$$

$$BL^2 = AL^2 + AB^2$$

$$BL^2 = \frac{AC^2}{4} + AB^2 \quad \dots(ii)$$

Add eq<sup>n</sup> (i) + eq<sup>n</sup> (ii)

$$CM^2 + BL^2 = AC^2 + \frac{AC^2}{4} + \frac{AB^2}{4} + AB^2$$

$$4(CM^2 + BL^2) = 5(AC^2 + AB^2)$$

$$4(CM^2 + BL^2) = 5BC^2$$

**S75. Ans.(c)**

**Sol.**  $2\pi rh = 440$

$$\pi rh = 220$$

$$\therefore \text{volume} = \pi rh \times r = 220 \times 7$$

$$= 1540 \text{ cm}^3$$

**S76. Ans.(b)**

**Sol.** Morose: sullen and ill-tempered.

So, its antonym is cheerful.

**S77. Ans.(d)**

**Sol.** Corroborate: confirm or give support to (a statement, theory, or finding).

Contradict: a combination of statements, ideas, or features which are opposed to one another.

**S78. Ans.(d)**

**Sol.** Sit through: stay until the end of (a tedious or lengthy meeting or performance).

Here the tedious task is to bear long lecture.

**S79. Ans.(b)**

**Sol.** Inapprehensible: That cannot be apprehended; not apprehensible to or graspable by either body or mind.

Immutable: unchanging over time or unable to be changed.

**S80. Ans.(b)**

**Sol.** Replace "and also" with "but also". Not only\_\_\_\_\_ but also is the right pair to be used.

**S81. Ans.(a)**

**S82. Ans.(c)**

**S83. Ans.(d)**

**S84. Ans.(b)**

Embed: fix (an object) firmly and deeply in a surrounding mass.

Bury: put or hide underground.

**S85. Ans.(c)**

**Sol.** As clear as mud: not at all easy to understand.

**S86. Ans.(a)**

**Sol.** Certain verbs like avoid, can't help, and consider etc. take gerund form of verb. Use travelling in place of travel.

**S87. Ans.(b)**

**Sol.** Blossom: a flower or a mass of flowers, especially on a tree or bush.

**S88. Ans.(c)**

**Sol.** Singular noun takes singular verb. Use "attracts some of" instead of "attract some of".

**S89. Ans.(d)**

**Sol.** Combustible: able to catch fire and burn easily.

Inflammable: easily set on fire.

Fragile: (of an object) easily broken or damaged.

**S90. Ans.(c)**

**Sol.** Billowing: (of smoke, cloud, or steam) moving or flowing outwards with an undulating motion.

Toss: throw (something) somewhere lightly or casually.

**S91. Ans.(b)**

**Sol.** Personnel: people employed in an organization or engaged in an organized undertaking such as military service.

**S92. Ans.(a)**

**S93. Ans.(b)**

**S94. Ans.(a)**

His wealth is surpassed only by Jeff Bezos is the correct usage here.

**S95. Ans.(d)**

**S96. Ans.(a)**

**S97. Ans.(d)**

**S98. Ans.(c)**

**Sol.** Spill the beans means to reveal a secret.

**S99. Ans.(a)**

**Sol.** Shack: a roughly built hut or cabin.

Fort: a fortified building or strategic position.

**S100. Ans.(c)**

**Sol.** Emission: the production and discharge of something, especially gas or radiation.

Emphasis: special importance, value, or prominence given to something.

Emporium: a large retail store selling a wide variety of goods.

Emolument: a salary, fee, or profit from employment or office.

