

Quant Sunday Mega Quiz For RRB NTPC

S1. Ans.(b)

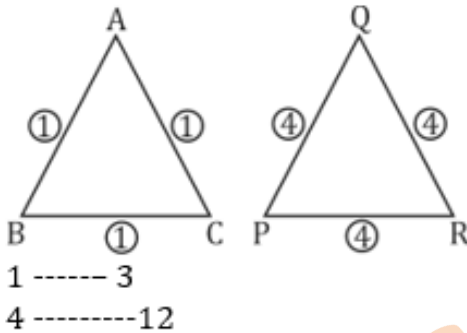
Sol.

$$\frac{12 \times 8 \times 10}{100} = \frac{18 \times D \times 7}{70}$$

$$D = \frac{16}{3} \text{ days} = 5 \frac{1}{3} \text{ days}$$

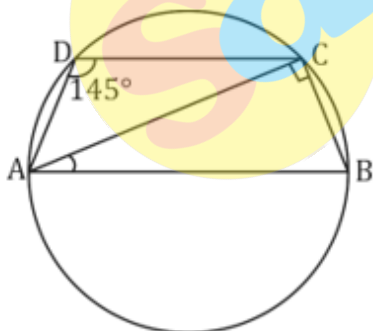
S2. Ans.(a)

Sol.



S3. Ans.(d)

Sol.



$$\angle ABC = 180^\circ - 145^\circ = 35^\circ$$

$$\angle BAC = 180^\circ - (90 + 35^\circ)$$

$$\angle BAC = 180^\circ - 125^\circ$$

$$\angle BAC = 55^\circ$$

TEST SERIES

Bilingual

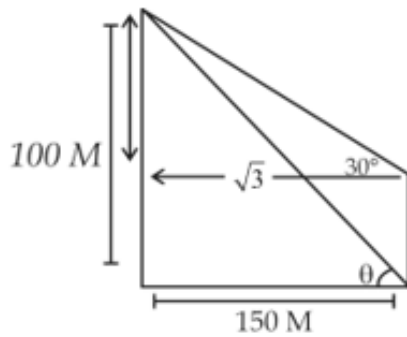


SSC CGL T-I
Most Expected
Questions

15 Full Length Mocks

S4. Ans.(a)

Sol.



$$\tan \theta = \frac{2}{3}$$

$$2 \text{ ----- } 100$$

$$3 \text{ ----- } 150$$

$$\sqrt{3} \text{ --- } 150$$

$$1 - \frac{150}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = 50\sqrt{3}$$

$$\text{Required height of pole} = 100 - 50\sqrt{3}$$

$$= 50(2 - \sqrt{3})\text{m}$$

S5. Ans.(d)

Sol.

$$\text{Mean proportion} = \sqrt{\frac{49 \times 169}{100}} = \frac{7 \times 13}{10}$$

$$= 9.1$$

$$\text{Third proportion } \frac{3}{7} = \frac{7}{x}$$

$$x = \frac{49}{3}$$

$$\therefore 9.1 : \frac{49}{3} = 27.3 : 49 = 39 : 70$$

S6. Ans.(c)

Sol.

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

$$x^2 + \frac{1}{x^2} = 7$$

$$x^3 + \frac{1}{x^3} = 27 - 9 = 18$$

$$\left(x^2 + \frac{1}{x^2}\right) \left(x^3 + \frac{1}{x^3}\right) = x^5 + \frac{1}{x} + x + \frac{1}{x^5}$$

$$(7)(18) = x^5 + \frac{1}{x^5} + \left(x + \frac{1}{x}\right)$$

$$126 = x^5 + \frac{1}{x^5} + 3$$

$$x^5 + \frac{1}{x^5} = 123$$

S7. Ans.(c)

Sol.

$$\operatorname{Cosec}(90^\circ - 3x) = \operatorname{cosec}(4x - 35^\circ)$$

$$90^\circ - 3x = 4x - 35^\circ$$

$$125^\circ = 7x$$

$$x = 17.8$$

S8. Ans.(a)

Sol.

$$\frac{32 \times 8 \times 6}{64} = x$$

$$x = 24$$

total surface area of cube = $6a^2$

total surface area of all 24 cuboid is

$$6 \times 4 \times 4 \times 24 = 2304$$

S9. Ans.(b)

Sol.

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

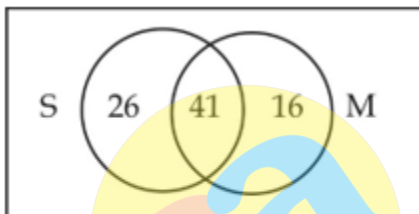
$$((a + b)^2 - ab = a^2 + b^2 + ab)$$

$$4104 = 6((a + b)^2 - ab)$$

$$(a + b)^2 - ab = 684$$

S10. Ans.(c)

Sol.



$$\text{Passed} = 100 - (41 + 26 + 16)$$

$$\text{Passed} = 17\%$$

S11. Ans.(b)

Sol.

$$A \quad (12) \quad \begin{array}{l} \diagdown \\ \diagup \end{array} \quad 36 \quad \begin{array}{l} \diagup \\ \diagdown \end{array} \quad 3$$

$$B \quad (36) \quad \begin{array}{l} \diagdown \\ \diagup \end{array} \quad 36 \quad \begin{array}{l} \diagup \\ \diagdown \end{array} \quad 1$$

Let A is closed after x min

So,

$$xA + 20B = 36$$

$$\Rightarrow 3x + 20 = 36$$

$$x = \frac{16}{3} = 5\frac{1}{3} \text{ min}$$

TEST SERIES

English



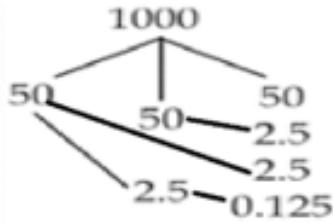
SSC CGL
TIER-II

English Language

20 Full Length Mocks

S12. Ans.(a)

Sol.



$$\begin{aligned} \text{Difference} &= 2.5 + 2.5 + 0.125 \\ &= 7.625 \end{aligned}$$

S13. Ans.(c)

Sol.

$$3x - 9 = 3(7x + 3)$$

$$x = -1$$

S14. Ans.(d)

Sol.

$$R + S = 35$$

$$R \times S = 306$$

$$\text{So, } R = 18, S = 17$$

S15. Ans.(b)

Sol.

$$\text{Speed of train} = 54 \times \frac{5}{18} = 15 \text{ m/s}$$

$$\text{Length of train} = 15 \times 15 = 225 \text{ m}$$

S16. Ans.(c)

Sol.

$$1 - \left\{ \frac{1 - \cos^2 A}{1 - \sin^2 A} \right\} + 1$$

$$\Rightarrow 2 - [\tan^2 A]$$

$$\Rightarrow 2 - \left\{ \left(\frac{3}{4} \right)^2 \right\} = \frac{23}{16}$$

S17. Ans.(d)

Sol.

Perfect square factors = 1, 4, 25 and 100

S18. Ans.(b)

Sol.

$$\text{Efficiency of A + B} = \frac{40}{5} = 8$$

$$\text{Efficiency of A} = \frac{40}{20} = 2$$

So, efficiency of B = 6

$$\text{No. of days taken by B} = \frac{40}{6} = 6\frac{2}{3} \text{ days}$$

S19. Ans.(c)

Sol.

$$\begin{aligned} \text{Volume of water} &= \frac{2}{3}\pi \times (2)^2 \times 18 \\ &= 48\pi \text{ cm}^3 \end{aligned}$$

S20. Ans.(b)

Sol. angle made by a quadrant = 90°

So, required angle = 45°

S21. Ans.(a)

Sol.

$$\text{Relative speed} = 90 - 18 = 72 \text{ kmph}$$

Or, 20 m/s

$$\text{Required time} = \frac{240}{20} = 12 \text{ sec}$$

S22. Ans.(d)

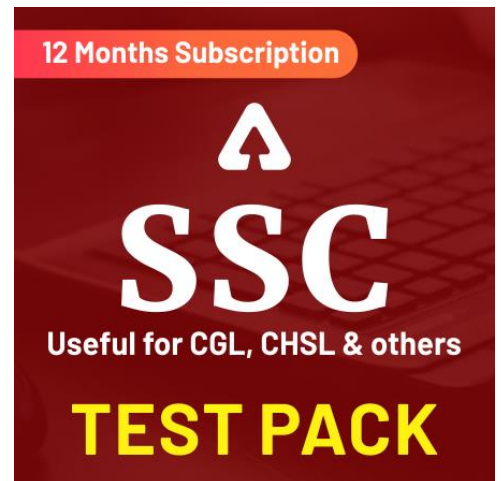
Sol.

$$\text{Required angle} = \frac{360^\circ}{8} = 45^\circ$$

S23. Ans.(d)

Sol.

$$\begin{aligned} \text{Cost price} &= 2970 \times \frac{100}{110} \\ &= \text{Rs } 2700 \end{aligned}$$



12 Months Subscription

SSC

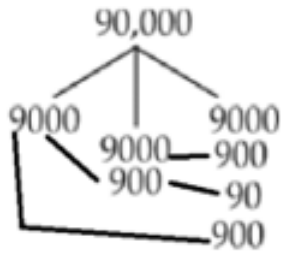
Useful for CGL, CHSL & others

TEST PACK

S24. Ans.(a)

Sol.

$$10\% = \frac{1}{10}$$



$$\begin{aligned} \text{Gain} &= \text{CI} - \text{SI} \\ &= 900 + 900 + 900 + 90 \\ &= \text{Rs } 2790 \end{aligned}$$

S25. Ans.(b)

Sol.

$$\frac{1}{4}A = \frac{1}{2}B$$

$$A : B = 2 : 1$$

So,

$$3 \text{ units} \rightarrow \text{Rs } 1500$$

$$2 \text{ units} \rightarrow \frac{2}{3} \times 1500 = \text{Rs } 1000$$

ONLINE TEST SERIES

SSC CHSL
Tier 1

25 Full Length Mocks
With Current Affairs

Bilingual