

Quant Mega Quiz for SSC Tier - 1 (Solutions)

S1. Ans.(d)

Sol.

Interest Rate = 10%

Let P → 100

Rate ⇒ 10

Actual Principal = 100 - 10 = 90

Rate = $\frac{10}{90} \times 100 = 11\frac{1}{9}\%$

S2. Ans.(c)

Sol.

$$\frac{n_1 - 1}{t_1} = \frac{n_2 - 1}{t_2}$$

$$\frac{1}{7} = \frac{3}{t_2}$$

$t_2 = 21$ years

S3. Ans.(b)

Sol.

Let Principal be x

$$\frac{3}{4}x = \frac{x \times 25 \times r}{2 \times 100}$$

$r = 6\%$

S4. Ans.(a)

Sol.

Time = 6 years 8 months

$$= 6\frac{8}{12} = 6\frac{20}{3} \text{ years}$$

$$720 = \frac{P \times 20 \times 12}{3 \times 100}$$

$$P = 36 \times 25$$

= 900 Rs.

S5. Ans.(b)

Sol.

Total % discount for $9\frac{3}{4}$ years

$$= \frac{9}{4} \times \frac{8}{3} \%$$

= 6%

$$78 = P \times 6/100$$

P = Rs. 1300



S6. Ans.(c)

Sol.

$$t = 1 \text{ months} = 1/12 \text{ years}$$

$$S.I. = 1 \text{ paisa}$$

$$= 1/100 \text{ Rs}$$

$$\frac{1}{100} = \frac{1 \times 1 \times R}{12 \times 100}$$

$$R = 12\%$$

S7. Ans.(a)

Sol.

ATQ,

$$\frac{400 \times 3 \times r}{100} + \frac{500 \times 4 \times r}{100} = 160$$

$$r(12 + 20) = 160$$

$$32r = 160$$

$$r = 5\%$$

S8. Ans.(b)

Sol.

ATQ,

$$840 = \frac{P \times 40}{100}$$

$$P = \text{Rs. } 2100$$

$$840 = \frac{2100 \times R \times 5}{100}$$

$$R = 8\%$$

S9. Ans.(d)

Sol.

$$S.I = 2P - P = P$$

$$P = \frac{P \times 8 \times r}{100}$$

$$r = \frac{100}{8} = \frac{25}{2}$$

$$= 12\frac{1}{2}\%$$

S10. Ans.(c)

Sol.

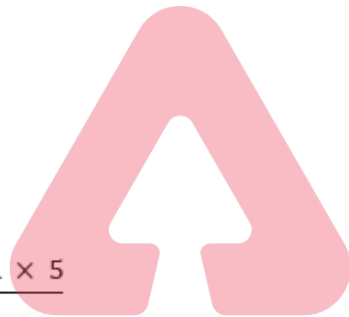
$$P : SI = 10 : 3$$

$$\text{Let, } P = 10x$$

$$S.I. = 3x$$

$$3x = \frac{10x \times 6 \times t}{100}$$

$$t = 5 \text{ years}$$



SSC

adda247

S11. Ans.(d)

Sol.

Bonus of all manager = 40% of 48 lakh = 19.2 lakh

Bonus of all executive = 20% of (16×6) = 19.2 lakh

Bonus of all trainee = 20% of (2 × 2) = 0.8 lakh

$$\text{Avg. Bonus} = \frac{39.2 \text{ lakh}}{9} = \text{Rs } 4,35556$$

S12. Ans.(a)

Sol.

Year	Total Export
2011	6000
2012	5000
2013	8000
2014	8000
2015	7000

Total export in 2013 & 2014 are equal

S13. Ans.(d)

Sol. Total profit = $5 + (-5) + 20 + 5 + (-5)$
= +20 Cr

S14. Ans.(d)

Sol.

$$\text{Total export} = 500 + 850 + 950 + 1000 + 875 \\ = 4175$$

$$\text{Electronic's export\%} = \frac{875}{4175} \times 100 \\ = 20.96\%$$

S15. Ans.(a)

Sol.

$$\frac{\text{Total Boys}}{\text{Total Girls}} = \frac{145}{175} = 29 : 35$$

S16. Ans.(b)

Sol.

Mark's Gap	No. of Students
0-10	30
10-20	22
20-30	13
30-40	16
40above	26

No. of Students b/w 20 to 40 marks = 29



S17. Ans.(c)

Sol.

$$\begin{aligned}\text{GDP at beginning at 2015} &= \$1 \times \frac{106}{100} \\ &= \$1.06 \text{ millions}\end{aligned}$$

S18. Ans.(d)

Sol.

Avg. score

$$= \frac{(80+40+30+80+30)}{5} = 52 \text{ marks}$$

As 5 marks to be deducted due to poor attendance

$$\begin{aligned}\therefore \text{Final avg. score} &= 52-5 \\ &= 47 \text{ marks}\end{aligned}$$

S19. Ans.(d)

Sol.

Person	Weight height ratio
Ali	32.89
Alok	35.32
Amit	40.56
Amol	31.39

So, Amol has the least ratio



S20. Ans.(d)

Sol.

Least profit year is 2014

$$\begin{aligned}\text{Revenue} &= \text{Expenditure} \times \frac{(100+P)}{100} \\ &= 675 \times \frac{105}{100} = \text{Rs } 708.75 \text{ cr}\end{aligned}$$

S21. Ans.(b)

Sol.

$$\begin{aligned}80\% - \frac{200}{3}\% &\Rightarrow 2 \text{ litres} \\ \frac{40}{3}\% &\rightarrow 2 \\ 1\% &\Rightarrow \frac{6}{40} \\ 100\% &\Rightarrow \frac{6}{40} \times 100 \\ &\Rightarrow 15 \text{ litres}\end{aligned}$$

ENGLISH

SSC CGL

TIER-I / PRE E-KIT

Ace - Advanced | Arithmetic | English
Reasoning | General Awareness

Validity : 6 Months

S22. Ans.(b)

Sol.

CP of 1000 gm → 1000 Rs.

SP of 900 gm → 1000 Rs.

SP of 1000 gm → $\frac{10000}{9}$

$$\begin{aligned}\text{Profit \%} &= \frac{\frac{10000}{9} - 1000}{1000} \times 100 \\ &= \frac{1000}{90} = \frac{100}{9} \%\end{aligned}$$

S23. Ans.(d)

Sol.

Failed students

$$= 50 + 30 - 12$$

$$= 68$$

So Passed student

$$= 100 - 68$$

$$= 32$$

S24. Ans.(d)

Sol.

Price → 100 : 125

4 : 5

Consumption → 5 : 4

$$\begin{aligned}\% \text{ Reduction} &= \frac{1}{5} \times 100 \\ &= 20\%\end{aligned}$$

S25. Ans.(d)

Sol.

Price → 100 : 80

5 : 4

Consumption → 4 : 5

1r → 3.5 kg

4r → 14 kg

$$\begin{aligned}\text{Original Price} &= \frac{385}{14} \\ &= 27.5 \text{ kg}\end{aligned}$$

S26. Ans.(a)

Sol.

Let the total votes → x

Total casted votes

$$= \frac{92}{100}x$$

$$\text{Winner's votes} = \frac{48}{100}x$$

$$\text{Loser's votes} = \frac{92x}{100} - \frac{48x}{100}$$

$$= \frac{44x}{100}$$

$$\frac{48x}{100} - \frac{44x}{100} = 1100$$

$$\frac{4x}{100} = 1100$$

$$x = 27500$$



S27. Ans.(d)

Sol.

$$\begin{aligned} &\text{Value after 2 years} \\ &= 100000 \times \frac{90}{100} \times \frac{90}{100} \\ &= 81000 \text{ Rs.} \end{aligned}$$

S28. Ans.(d)

Sol.

$$\begin{aligned} &-12 - 4 + 0.48 \\ &= -15.52\% \end{aligned}$$

S29. Ans.(c)

Sol.

$$\begin{aligned} A &: B \\ 120 &: 100 \\ 6 &: 5 \\ \% \text{ less} &= \frac{1}{6} \times 100 \\ &= 16\frac{2}{3}\% \end{aligned}$$

S30. Ans.(a)

Sol.

$$\begin{aligned} \text{Price} &\rightarrow 100 : 130 \\ 10 &: 13 \\ \text{Consumption} &\rightarrow 13 : 10 \\ \% \text{ reduction} &= \frac{3}{13} \times 100 \\ &= \frac{300}{13}\% \end{aligned}$$

