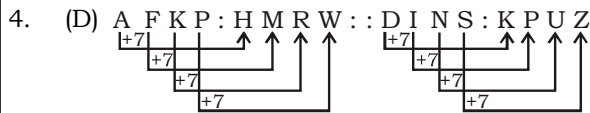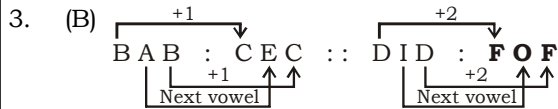# SSC CPO SI MOCK TEST – 08 (SOLUTION)

1. (C) Generally, shoe is made by leather. Similarly, highway is made by gravel.
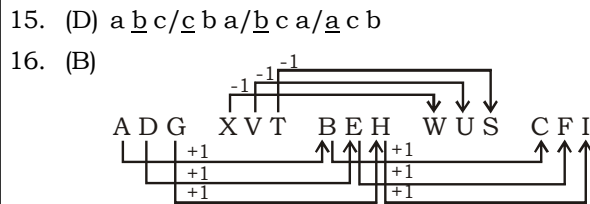2. (C) Clock shows time. Similarly, thermometer shows temperature.
3. (B)
$$B\ A\ B\ :\ C\ E\ C\ ::\ D\ I\ D\ :\ F\ O\ F$$
(+1), (+1 Next vowel), (+2), (+2 Next vowel)

4. (D) A F K P : H M R W :: D I N S : K P U Z
(+7 each)

5. (D) 4 : 20 :: 6 : 42
(4×5) (6×7)

6. (B) 4 : 64 :: 2 : 8
(4^3) (2^3)

7. (C)
8. (A)
9. (D) Single vowel is used in option (A), (B) and (C). Whereas three vowels are used in option (D).

10. (C)
2   5   10   50   500 $\frac{25000}{\boxed{5000}}$
×2.5 ×2 ×5 ×10 ×50
(2.5×2) (2×5) (5×10)
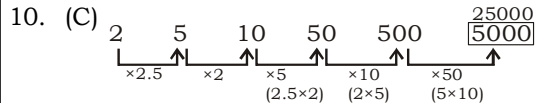
11. (C) Except 15, all are prime numbers.
12. (D) (A) Y B C X (B) L O P K
(opp) (opp) (opp) (opp)
(C) T G H S (D) K Q R I
(opp) (opp) (not opp) (opp)

13. (C)
$$\frac{Zenith}{4}\ \frac{Zephyr}{1}\ \frac{Zig\ Zag}{5}\ \frac{Zodiac}{2}\ \frac{Zoonomy}{3}$$

14. (D)
$$\frac{Chamber}{2}\ \frac{Cheap}{3}\ \frac{Cheerful}{4}\ \frac{Chemistry}{1}$$

15. (D) a b c / c b a / b c a / a c b

16. (B)
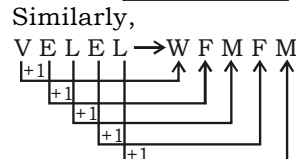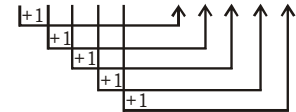A D G   X V T   B E H   W U S   C F I
(+1, +1, +1) (-1, -1, -1)

17. (B)
I { X, Y, Z   II { Y, P, Q   III { Q, Z

I+ II+III { X, Y, P, Q, Z

So, Z is the weakest among all.

18. (B) Let $x + y = 54$ --------- (i)
$\underline{x - y = 12}$ --------- (ii)
$\therefore 2x = 66$
$\therefore x = 33$
from equation (i)
$33 + y = 54$
$\therefore y = 54 - 33$
$= 21$
Here $x = 33$ and $y = 21$. So, 33 is higher number

19. (C) Raja ⟶ Raghu
Guru ⟶ Krishna

20. (D) BRAN**D**
21. (C) REVI**S**ION
22. (C) L E V E L ⟶ M F W F M
(+1 each)
Similarly,
V E L E L ⟶ W F M F M
(+1 each)

23. (B) T A B L E C L O T H
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓
X E M R A N R I X T
So,
H O T E L
↓ ↓ ↓ ↓ ↓
T I X A R

24. (C) Here, E = A, A = R, R = X , M = S, T = W, P = O, W = E and O = T
So,
W A R M O T E
↓ ↓ ↓ ↓ ↓ ↓ ↓
E R X S T W A

25. (C)   2   9   28   65   126
1^3+1 2^3+1 3^3+1 4^3+1 5^3+1

26. (C) 2   6 $\frac{8}{2+6}$ $\frac{16}{2+6+8}$ $\frac{30}{6+8+16}$ $\frac{54}{8+16+30}$ $\frac{100}{16+30+54}$

27. (A) (8 – 4) ÷ (4 - 2) = 2 and
(9 – 0) ÷ (7 - 4) = 3
Similarly,
(9-1) ÷ (5 - 3) = 4
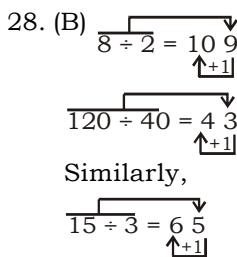
28. (B)
$8 ÷ 2 = 10\ 9$ (+1)
$120 ÷ 40 = 4\ 3$ (+1)
Similarly,
$15 ÷ 3 = 6\ 5$ (+1)

29. (A) $2 + 3 \Rightarrow (2 \times 3) - (2 + 3) \Rightarrow 6 - 5 = 1$
$5 + 7 \Rightarrow (5 \times 7) - (5 + 7) \Rightarrow 35 - 12 = 23$
$3 + 9 \Rightarrow (3 \times 9) - (3 + 9) \Rightarrow 27 - 12 = 15$
$4 + 8 \Rightarrow (4 \times 8) - (4 + 8) \Rightarrow 32 - 12 = 20$

30. (A) $9 \times 5 \times 6 = 270$
$3 \times 7 \times 20 = 420$
Similarly,
$$4 \times x \times 8 = 224$$
$$32x = 224$$
$$x = 224 \div 32$$
$$\therefore x = 7$$

31. (D) $3 \times 3 - 3 + 3 = 6$
$9 - 3 + 3 = 6$
$12 - 3 = 6$
$9 = 6$ (False)

32. (D)

33. (C)

$BC = \sqrt{(AC)^2 + (AB)^2}$

$= \sqrt{(4)^2 + (3)^2}$

$= \sqrt{16 + 9}$

$= \sqrt{25} = 5$ km

34. (A)

Here BC = DE = 50 M and BE = CD = 30 M
Required distance AE = AB – BE
$= 40$ M $- 30$ M
$= 10$ M

35. (D)

36. (A)
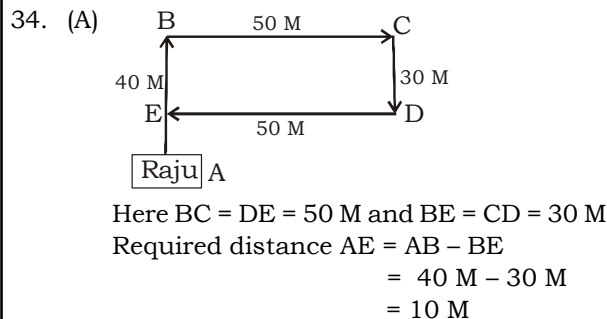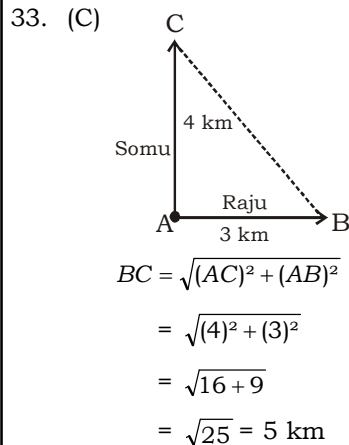
Conclusion I- ✔
II- ×
III- ×
IV- ×

37. (B)

38. (C)

39. (A) 8 + 22 = 30 Students

40. (D)

41. (A) According to the universal rule, identify any two situation in which we have only one digit common. In the given dice only one digit is common i.e. (3). Now write the numbers as clockwise from the common number.

(I)   (II)
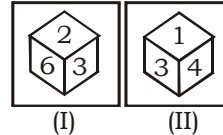
Here, we have $3 \to 6 \to 2$ in figure (I).

Now, look at the figure (II).

Where We have $3 \to 1 \to 4$.

Now, write both of them one above the after as.

From given dice I & II

3 - 6 - 2
5 ③ 1 - 4

Here $6 \xleftrightarrow{\text{opp}} 1$

$2 \xleftrightarrow{\text{opp}} 4$

So, 5 will be the opposite of 3.

42. (D) In the given dices 2 and 4 are common surfaces. So remaining surfaces will be opposite to each other.

43. (B)   44. (C)   45. (A)
46. (A)   47. (C)   48. (B)
49. (D)   50. (C)

101. (D) Ist term $= 2 = 1^2 + 1$
2nd term $= 5 = 2^2 + 1$
3rd term $= 10 = 3^2 + 1$
$\therefore$ 25th term $= 25^2 + 1$
$= 625 + 1$
$= 626$

102. (A)

Smallest positive integer which is to be deducted from 10870210 to make it a perfect square = 1 Ans.

103. (B) $\sqrt{\dfrac{1.296\times0.081\times5.776}{1.5625\times0.0361\times72.9\times64}}$

= $\sqrt{\dfrac{1296\times81\times5776}{15625\times0361\times729\times64}}$

= $\sqrt{\dfrac{2^4\times3^4\times3^4\times2^4\times19^2}{5^6\times19^2\times3^6\times2^6}}$

= $\sqrt{\dfrac{2^{8-6}\times3^{8-6}\times19^{2-2}}{5^6}}$

= $\sqrt{\dfrac{2^2\times3^2\times1}{5^6}}$

= $\dfrac{2\times3}{5^3}$ = $\dfrac{6}{125}$ = 0.048

104. (D) Part of the tank filled by both pipes P

and Q in 1 minute = $\dfrac{1}{12}+\dfrac{1}{16}=\dfrac{4+3}{48}=\dfrac{7}{48}$

Part of the tank filled by them in x

minutes = $\dfrac{7}{48}x$

Remaining part = $1-\dfrac{7x}{48}=\dfrac{48-7x}{48}$

∵ in 1 minute $\dfrac{1}{12}$ part is filled by P

∴ in 5 minutes $\dfrac{5}{12}$ part is filled by P

∴ ATQ, $\dfrac{48-7x}{48}=\dfrac{5}{12}$

⇒ $\dfrac{48-7x}{48}=\dfrac{5}{12}$

⇒ $48-7x=20$

⇒ $x=4$ Ans.

105. (C) Work done by his son alone in 1 day

= $\dfrac{1}{6}-\dfrac{1}{9}=\dfrac{3-2}{18}=\dfrac{1}{18}$

Hence his son completes the work in 18 days.

106. (A) Price after 15% discount to the member

= $50000\times\dfrac{95}{100}\times\dfrac{85}{100}$ = ₹ 40375

Amount taken from the member
= ₹ 40000
Benefit of the member = 40375 – 40000
= ₹ 375

107. (D) Single equivalent discount

= $100-100\times\dfrac{80}{100}\times\dfrac{90}{100}\times\dfrac{95}{100}$

= 100 – 68.4

= 31.6%

108. (D) SP at 20% discount = $825\times\dfrac{80}{100}$ = ₹ 660

CP = $\dfrac{SP\times100}{100+\%\text{ gain}}$

= $\dfrac{660\times100}{110}$ = ₹ 600

109. (D) Let the number of boys = $3x$
& the number of girls = $2x$, then,
ATQ,

$\dfrac{3x}{2x+6}=\dfrac{6}{5}$

⇒ $15x=12x+36$

⇒ $x=\dfrac{63}{3}=12$

∴ $x=12$
Number of boys = 3 × 12 = 36

110. (D) Let the number of coins of denomination
₹ 1 = $5x$
50 paise = $6x$
25 paise = $8x$
ATQ,

$5x+\dfrac{6x}{2}+\dfrac{8x}{4}=240$

⇒ $5x+3x+2x=240$
⇒ $10x=240$
⇒ $x=24$
Number of 25 paise coins = 8 × 24
= 192

111. (B) Copper in Type A brass = $\dfrac{8}{11}$

Copper in Type B brass = $\dfrac{15}{22}$

Copper in Type C brass = $\dfrac{5}{7}$

Required Ratio = $\dfrac{\dfrac{5}{7}-\dfrac{15}{22}}{\dfrac{5}{7}-\dfrac{8}{11}}=\dfrac{\dfrac{110-105}{154}}{\dfrac{55-56}{77}}$

= $\dfrac{5}{154}\times\dfrac{77}{-1}=\dfrac{5}{2}$

= 5 : 2

112. (A) Total weight of 180 students
= 180 × 50 kg = 9000 kg
Let the number of boys = x, then,
number of girls = 180 – x
ATQ,
$x\times60+(180-x)\times45=9000$
⇒ $60x-45x+180\times45=9000$
⇒ $15x=9000-8100$

⇒ $x=\dfrac{900}{15}=60$

Number of boys = 60
Number of girls = 180 – 60 = 120 Ans.

113. (A) Total marks of section one = 60×40

$$= 2400$$

Total marks of all sections = 100×72

$$= 7200$$

Average marks of two section = $\dfrac{7200 - 2400}{100 - 40}$

$$= \dfrac{4800}{60} = 80$$

114. (C) Total weight of 35 students = $35 \times \dfrac{95}{2}$ kg

$$= 1662.5 \text{ kg}$$

Total weight of 35 Students + Teacher

$$= 36 \times 48 = 1728 \text{ kg}$$

Teacher's age = $1728 - 1662.5 = 65.5$ kg

$$= 65\dfrac{1}{2} \text{ kg}$$

115. (C) Net CP = ₹ $(2000 + 400)$ = ₹ 2400

% gain = $16\dfrac{2}{3} = \dfrac{50}{3}\%$

$$\text{SP} = \dfrac{\text{CP}(100 + \% \text{ gain})}{100}$$

$$= \dfrac{2400\left(100 + \dfrac{50}{3}\right)}{100}$$

$$= \dfrac{2400 \times 350}{100 \times 3} = 2800$$

116. (A) CP of 36 oranges at 4% loss = $\dfrac{1 \times 100}{96}$

$$= ₹ \dfrac{100}{96}$$

SP at 8% gain = $\dfrac{100}{96} \times \dfrac{108}{100} = ₹ \dfrac{9}{8}$

∵ ₹ $\dfrac{9}{8}$ is the SP of 36 oranges

∴ ₹ 1 is the SP of $\dfrac{36}{\dfrac{9}{8}} = 36 \times \dfrac{8}{9}$

$$= 32 \text{ oranges}$$

117. (B) Let the CP of the whole consignment = ₹ 1, then,

SP of $\dfrac{2}{3}$ of a consignment + SP of $\dfrac{1}{3}$ of the consignment

$$= \dfrac{105}{100} \times \dfrac{2}{3} + \dfrac{98}{100} \times \dfrac{1}{3} = \dfrac{210}{300} + \dfrac{98}{300}$$

$$= \dfrac{308}{300}$$

Profit = $\dfrac{308}{300} - 1 = \dfrac{8}{300}$

When the profit is ₹ $\dfrac{8}{300}$, Cost of consignment is ₹ 1

When the profit is ₹ 1, Cost of consignment is ₹ $\dfrac{300}{8}$

When the profit is ₹ 400, Cost of consignment is ₹ $\dfrac{300}{8} \times 400 = 300 \times 50$

$$= ₹ 15000$$

118. (C) 35% of x = 735

$$x = \dfrac{735 \times 100}{35}$$

Now 80% of x = $\dfrac{80}{100} \times \dfrac{735 \times 100}{35}$

$$= ₹ 1680$$

119. (A) Let the original price = ₹ 100

new price = 125% of 100

$$= ₹ 125$$

From ₹ 125, ₹ 25 will be deducted

From ₹ 1, ₹ $\dfrac{25}{125}$ will be deducted

From ₹ 100, ₹ $\dfrac{25}{125} \times 100 = 20\%$ Ans.

120. (A) Let the total distance = x km, then, ATQ,

$$\dfrac{\dfrac{x}{2}}{30} + \dfrac{\dfrac{x}{2}}{25} = 11$$

$$\Rightarrow \dfrac{x}{60} + \dfrac{x}{50} = 11$$

$$\Rightarrow \dfrac{5x + 6x}{300} = 11$$

$$\Rightarrow x = 300 \text{ km}$$

121. (C) Time taken by the man to cover 1 km

$$= \left(\dfrac{1}{10} + \dfrac{4}{60}\right) \text{ hrs.}$$

$$= \dfrac{1}{10} + \dfrac{1}{15} = \dfrac{5}{30} = \dfrac{1}{6} \text{ hrs.}$$

Total time taken by the man to cover 10 kms = $(9 + 1)$ kms

$$= \dfrac{1}{6} \times 9 + \dfrac{1}{10}$$

$$= \dfrac{3}{2} + \dfrac{1}{10} = \dfrac{15 + 1}{10} = \dfrac{16}{10} = \dfrac{8}{5} \text{ hrs.}$$

$$= 1 \text{ hr} + \dfrac{3}{5} \times 60 \text{ minutes}$$

$$= 60 + 36 = 96 \text{ minutes}$$

122. (D)

Scheme A	Scheme B	Scheme C
P_1	P_2	$P_3 \rightarrow$ principal
10%	12%	15% $\rightarrow$ rate
6 yrs	10 yrs	12 yrs $\rightarrow$ time

$A_1 = P_1 + \dfrac{P_1 \times 10 \times 6}{100} = \dfrac{160 P_1}{100}$

$A_2 = P_2 + \dfrac{P_2 \times 12 \times 10}{100} = \dfrac{220 P_2}{100}$

$A_3 = P_3 + \dfrac{P_3 \times 15 \times 12}{100} = \dfrac{280 P_3}{100}$

$\because$ $A_1 = A_2 = A_3$

$\Rightarrow$ $P_1 : P_2 : P_3 = 77 : 56 : 44$

123. (A) $P = ₹\ 16000$

$R = \dfrac{5}{2}$ % half yearly

$T = 1\dfrac{1}{2}$ yrs $= 3$ half years

$CI = 16000 \left[\left(1 + \dfrac{5}{200}\right)^3 - 1 \right]$

$= 16000 \left[\left(\dfrac{205}{200}\right)^3 - 1 \right]$

$= 16000 \times \left[\left(\dfrac{41}{40}\right)^3 - 1 \right]$

$= 1600 \times \dfrac{68921 - 64000}{64000} = \dfrac{4921}{4}$

$= ₹\ 1230.25 = 1230\dfrac{1}{4}$

124. (C) Length of the solid $= (10 + 10 + 10 + 10)$ cm

$= 40$ cm

breadth of the solid $= 10$ cm

height of the solid $= 10$ cm

Total Surface Area $= 2(lb + bh + lh)$

$= 2[40 \times 10 + 10 \times 10 + 40 \times 10]$

$= 2[400 + 100 + 400]$

$= 1800$ cm^2

125. (B) Inradius $= \dfrac{1}{3}$ of median

$\Rightarrow$ $4 = \dfrac{1}{3}$ of median

$\Rightarrow$ median $= 12$ cm

$\Rightarrow \dfrac{\sqrt{3}}{2} \times$ Side $= 12$

Side $= 8\sqrt{3}$ cm

Area of the equilateral $\Delta = \dfrac{\sqrt{3}}{4} \times (8\sqrt{3})^2$

$= \dfrac{\sqrt{3}}{4} \times 8 \times 8 \times 3$

$= 48\sqrt{3}$ cm^2

126. (D) $\because$ height of the cylinder = radius of the sphere = r (say)

Let 'R' be the radius of the cylinder

$\dfrac{\text{Volume of cylinder}}{\text{Volume of the sphere}} = \dfrac{\pi R^2 r}{\dfrac{4}{3}\pi r^3} = 1$

[$\because$ vol. of cylinder = vol. of the cone]

$\Rightarrow$ $R^2 = \dfrac{4}{3} r^2$

$R = \dfrac{2}{\sqrt{3}} r$

$\dfrac{\text{TSA of cylinder}}{\text{TSA of the sphere}} = \dfrac{2\pi R(h + r)}{4\pi r^2}$

$= \dfrac{2\pi R(r + R)}{4\pi r^2}$

$= \dfrac{2\pi \times \dfrac{2r}{\sqrt{3}}\left(r + \dfrac{2}{\sqrt{3}} r\right)}{4\pi r^2}$

$= \dfrac{\dfrac{4\pi r}{\sqrt{3}} \times \dfrac{(\sqrt{3} + 2)}{\sqrt{3}} r}{4\pi r^2}$

$= \dfrac{\sqrt{3} + 2}{3}$

Required Ratio $= (\sqrt{3} + 2) : 3$

127. (A) CSA of Cone $=$ CSA of Sphere

$\pi r l = 4\pi r^2$

$l = 4r$

Now, height of the cone $= \sqrt{l^2 - r^2}$

$= \sqrt{(4r)^2 - r^2}$

$= \sqrt{15}r$ Ans.

128. (D) Let the sides of two equilateral triangles be x & $2x$ respectively.

Required Ratio $= \dfrac{\dfrac{\sqrt{3}}{4}(x)^2}{\dfrac{\sqrt{3}}{4}(2x)^2} = \dfrac{x^2}{4x^2} = \dfrac{1}{4}$

$= 1 : 4$

129. (C) Area of the path $= \pi[r_o^2 - r_i^2]$

$= \dfrac{22}{7}[(18 + 7)^2 - 18^2]$

$= \dfrac{22}{7}[25^2 - 18^2]$

$= \dfrac{22}{7} \times 43 \times 7$

$= 946$ m^2

130. (D) Equation of the straight line parallel to the y-axis is $x = -2$

131. (D) $2a + 3b = 4$

$\Rightarrow (2a + 3b)^3 = 4^3$

$\Rightarrow (2a)^3 + (3b)^3 + 3 \times 2a \times 3b(2a + 3b) = 64$

$\Rightarrow 8a^3 + 27b^3 + 18ab(4) = 64$

$\Rightarrow 8a^3 + 27b^3 + 72ab = 64$

132. (C) $\dfrac{x + \sqrt{x^2 - 1}}{x - \sqrt{x^2 - 1}} + \dfrac{x - \sqrt{x^2 - 1}}{x + \sqrt{x^2 - 1}} = 34$

$\Rightarrow \dfrac{(x + \sqrt{x^2 - 1})^2}{(x - \sqrt{x^2 - 1})(x + \sqrt{x^2 - 1})}$

$+ \dfrac{(x - \sqrt{x^2 - 1})^2}{(x + \sqrt{x^2 - 1})(x - \sqrt{x^2 - 1})} = 34$

$\Rightarrow \dfrac{(x + \sqrt{x^2 - 1})^2}{x^2 - (x^2 - 1)} + \dfrac{(x - \sqrt{x^2 - 1})^2}{x^2 - (x^2 - 1)} = 34$

$\Rightarrow (x + \sqrt{x^2 - 1})^2 + (x - \sqrt{x^2 - 1})^2 = 34$

$\Rightarrow 2[x^2 + x^2 - 1] = 34$

$\Rightarrow 2x^2 - 1 = 17$

$\Rightarrow x^2 = 9$

$\therefore \quad x = \pm 3 \qquad (\because x < 0)$

$\Rightarrow x = -3$

133. (C) $(x + y + z) = 6$

Let $a = x - 1, b = y - z, c = z - 3$

Now, $a + b + c = x - 1 + y - 2 + z - 3$

$= x + y + z - 6$

$= 6 - 6 = 0$

$\therefore \quad a^3 + b^3 + c^3 = 3abc$

$\Rightarrow (x - 1)^3 + (y - 2)^3 + (z - 3)^3$

$= 3(x - 1)(y - 2)(z - 3)$

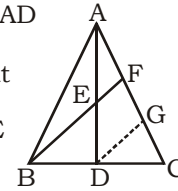134. (A) Let the angles of the triangle be $x°$, $4x°$ and $5x°$.

Now,

$5x° = 4x° + x°$

(sum of two angles = 3rd angle)

$\therefore$ The given triangle is right angled triangle.

135. (B) ABC is a Δ and AD is the median whose mid point is E.
Draw DG || BE through D.

Now, In Δ ADG.

E is the mid point of AD and EF || DG.

$\Rightarrow$ F is the mid point of AG.

$\Rightarrow$ AF = FG .... (A)

[A line through the mid point of a side of a Δ parallel to another side bisects the 3rd side]

Again, In Δ BCF,
DG || BF and D is the mid point of BC.

$\Rightarrow$ G is the mid point of CF.

$\Rightarrow$ CG = FG .... (B) [same reason]

From (A) & (B)

AF = FG = GC = $\dfrac{1}{3}$ AC = $\dfrac{1}{3} \times 15 = 5$cm

$\therefore$ CF = 5 + 5 = 10 cm

136. (D) $\because$ OA = AB

$\Rightarrow \Delta$OAB is equilateral.

$\Rightarrow \angle$AOB = 60°

Again, $\angle$AOB $= 2 \angle$APB

$\Rightarrow \qquad 60° = 2 \angle$APB

$\Rightarrow \qquad \angle$APB $= 30°$

Also, $\angle$APB $+ \angle$AQB = 180° (cyclic quad.)

$\Rightarrow 30 + \angle$AQB = 180°

$\therefore \quad \angle$AQB = 150°

137. (C) $\because$ BP and CQ are two medians.

$\Rightarrow$ PQ || BC
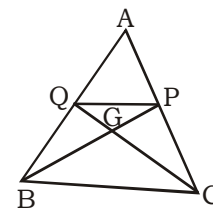
$\Rightarrow \dfrac{\text{ar}(\Delta PGQ)}{\text{ar}(\Delta BGC)} = \dfrac{1}{4}$

$\Rightarrow \dfrac{\text{ar}(\Delta BGC)}{\text{ar}(\Delta PGQ)} = \dfrac{4}{1}$

$\Rightarrow \dfrac{3\text{ar}(\Delta BGC)}{3\text{ar}(\Delta PGQ)} = \dfrac{12}{3}$

$\Rightarrow \dfrac{\text{ar}(\Delta ABC)}{\text{ar}(\Delta PGQ)} = \dfrac{12}{1}$

$\Rightarrow$ ar(Δ PGQ) : ar(Δ ABC) = 1 : 12

138. (C) 3rd angle
= $180° - (30°45'15'' + 28°14'45'')$
= $180° - (58°59'60'')$
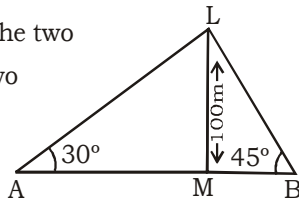= $180° - (58°60')$
= $180° - 59°$

= $121° = 121 \times \dfrac{\pi}{180}$

= $\dfrac{2\pi^c}{3}$ rad approx. Ans.

139. (C) $5\cos\theta + 12\sin\theta = 13$

$\Rightarrow \dfrac{5}{13}\cos\theta + \dfrac{12}{13}\sin\theta = 1$

Let $\dfrac{5}{13} = \cos\theta$ & $\dfrac{12}{13} = \sin\theta$

$\Rightarrow \cos^2\theta + \sin^2\theta = 1$

$\therefore \ \tan\theta = \dfrac{\sin\theta}{\cos\theta} = \dfrac{\frac{12}{13}}{\frac{5}{13}} = \dfrac{12}{5}$

140. (C) Let A & B are the two ships on the two sides of a light house LM.

In $\triangle LMA$,

$\tan 30° = \dfrac{LM}{AM}$

$\dfrac{1}{\sqrt{3}} = \dfrac{100}{AM} \Rightarrow AM = 100\sqrt{3}$ m

In $\triangle LMB$,

$\tan 45° = \dfrac{LM}{MB}$

$1 = \dfrac{100}{MB} \Rightarrow MB = 100$ m

$\therefore$ The distance between the two ships
= AB = AM + MB
= $100\sqrt{3} + 100$
= $100(\sqrt{3} + 1)$ m
= $100 \times (1.73 + 1)$ m
= 100×2.73 m
= 273 m

141. (D) Let total expenditure be ₹ x, then
30% of x = 19,500

$x = \dfrac{19500 \times 100}{30} = ₹\,65,000$

Cost of Royalty = 20% of 65,000
= ₹ 13,000

142. (B) Central angle of the sector for the

cost of paper = $\dfrac{15}{100} \times 360° = 54°$

143. (D) Let the total expenditure = ₹ y
15% of y = 5000

$y = ₹ \dfrac{5000 \times 100}{15}$

Total cost excluding advertisement

charges & royalty = 64% of $\dfrac{5000 \times 100}{15}$

= $\dfrac{64}{100} \times \dfrac{5000 \times 100}{15} = ₹\,21333\dfrac{1}{3}$

144. (C) Let the total expenditure = ₹ x.
5% of x = 12000

$x = \dfrac{12000 \times 100}{5} = ₹\,2,40,000$

Marked price = 125% of 2,40,000

= $\dfrac{125}{100} \times 2,40,000 = ₹\,3,00,000$

Marked price of each copy = $\dfrac{3,00,000}{3,000}$

= ₹ 100

145. (C) Percentage less of advertisement charge with respect to Royalty

= $\dfrac{20 - 16}{20} \times 100 = \dfrac{4}{20} \times 100 = 20\%$

146. (C) The number of patients surveyed
= 2 + 12 + 15 + 25 + 18 + 12 + 3 + 1 = 88

147. (B) Average age of first detection of the disease

= $\dfrac{6\times2 + 10\times12 + 14\times15 + 18\times25 + 22\times18 + 26\times12 + 30\times3 + 34\times1}{88}$

= $\dfrac{12 + 120 + 210 + 450 + 396 + 312 + 90 + 34}{88}$

= 18.45 years Ans

148. (A) Maximum number of patients susceptible to the disease is at the age of 18 years

149. (C) Number of patients below 20 yrs of age
= 2 + 12 + 15 + 25 = 54

150. (B) The percentage of patients above 20 yrs

= $\dfrac{18 + 12 + 3 + 1}{88} \times 100$

= $\dfrac{34}{88} \times 100 = 38.64\%$

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Affect	To influence	असर पड़ना
Amicable	Characterized by friendship and goodwill	मैत्रीपूर्ण
Appalling	Offending/Terrifying	भयावह/डरानेवाला
Archaeologist	One who studies past human life and activities	पुरातत्त्वविद्
Association	Formal organisation of people	संघ
Benevolence	An act of kindness	उदारता/परोपकारिता
Carving	Removing parts by cutting into a surface	तराशना/नक्काशी
Cautious	Careful	सतर्क
Connoisseur	Expert in fine art	पारखी
Consoling	Comforting	शांति देना
Council	A body serving in an administrative capacity	समिति
Cruelty	A cruel act, inhuman treatment	क्रूरता
Curtail	Restrict, Curb	घटाना
Dictatorship	System ruled by one person	तानाशाही
Earnest	Serious and sincere	गंभीरतापूर्ण
Effects	Result/consequences	परिणाम/नतीजा
Entail	Imply/ to have a part of	अपरिहार्य होना
Fictitious	False/Assumed	अवास्तविक
Flatter	Praise in a way that is not sincere	झूठी तारीफ करना/चापलूसी करना
Genial	Kind/friendly	हँसमुख/मिलनसार
Grim	Unpleasant	गंभीर
Inmates	Person serving sentence in a jail	सहकैदी
Irreverence	Disrespect	अपमान
Jury	Group of judges	निर्णायक समिति/न्यायाधीशों का समूह
Laudable	Praiseworthy	प्रशंसनीय
Morbidity	Unhealthy state of mind	अस्वस्थ मानसिकता
Mores	Custom accepted by particular group	रीति-रिवाज
Numismatist	One who collects coins	मुद्राशास्त्री
Oligarchy	System governed by few people	अल्पजनाधिपत्य
Panacea	Remedy to curve all disease	रामबाण
Perseverance	Persistent determination	गंभीरता
Philatelist	Who collects postal stamps	टिकट संग्रही
Puddle	Pool	छोटा तालाब
Repel	Push back	पीछे हटाना
Reticence	The quality or state of being reserved	संकोच
Rites	An established ceremony prescribed by a religion	रीति
Rituals	Any customary observation	संस्कार/कर्म-काण्ड
Shabby	In poor condition because of old age	फटा पुराना
Smug	Self-satisfied	आत्म संतुष्ट
Stagnate	Not flowing/not active	ठहरा हुआ
Stoicism	indifference to pleasure and pain	आत्मसंयम
Theocracy	Government ruled by religious leaders	धर्मतंत्र
Totalitarianism	Government in which ruler is an absolute dictator	अधिनायकवादी
Tradition	Custom	प्रथा

SSC CPO SI MOCK TEST – 08 (ANSWER KEY)

1. (C)	26. (C)	51. (C)	76. (B)	101. (D)	126. (D)	151. (C)	176. (B)
2. (C)	27. (A)	52. (B)	77. (C)	102. (A)	127. (A)	152. (A)	177. (A)
3. (B)	28. (B)	53. (B)	78. (B)	103. (B)	128. (D)	153. (B)	178. (*)
4. (D)	29. (A)	54. (A)	79. (B)	104. (D)	129. (C)	154. (C)	179. (D)
5. (D)	30. (A)	55. (B)	80. (B)	105. (C)	130. (D)	155. (C)	180. (C)
6. (B)	31. (D)	56. (D)	81. (C)	106. (A)	131. (D)	156. (C)	181. (A)
7. (C)	32. (D)	57. (C)	82. (B)	107. (D)	132. (C)	157. (C)	182. (B)
8. (A)	33. (C)	58. (C)	83. (B)	108. (D)	133. (C)	158. (D)	183. (A)
9. (D)	34. (A)	59. (C)	84. (C)	109. (D)	134. (A)	159. (A)	184. (D)
10. (C)	35. (D)	60. (D)	85. (B)	110. (D)	135. (B)	160. (D)	185. (C)
11. (C)	36. (A)	61. (A)	86. (B)	111. (B)	136. (D)	161. (B)	186. (B)
12. (D)	37. (B)	62. (C)	87. (D)	112. (A)	137. (C)	162. (B)	187. (D)
13. (C)	38. (C)	63. (A)	88. (D)	113. (A)	138. (C)	163. (B)	188. (B)
14. (D)	39. (A)	64. (C)	89. (C)	114. (C)	139. (C)	164. (B)	189. (B)
15. (D)	40. (D)	65. (C)	90. (C)	115. (C)	140. (C)	165. (B)	190. (A)
16. (B)	41. (A)	66. (A)	91. (B)	116. (A)	141. (D)	166. (D)	191. (A)
17. (B)	42. (D)	67. (B)	92. (C)	117. (B)	142. (B)	167. (B)	192. (D)
18. (B)	43. (B)	68. (C)	93. (A)	118. (C)	143. (D)	168. (C)	193. (A)
19. (C)	44. (C)	69. (B)	94. (B)	119. (A)	144. (C)	169. (A)	194. (C)
20. (D)	45. (A)	70. (C)	95. (C)	120. (A)	145. (C)	170. (B)	195. (A)
21. (C)	46. (A)	71. (B)	96. (C)	121. (C)	146. (C)	171. (D)	196. (A)
22. (C)	47. (C)	72. (D)	97. (C)	122. (D)	147. (B)	172. (A)	197. (B)
23. (B)	48. (B)	73. (D)	98. (C)	123. (A)	148. (A)	173. (C)	198. (B)
24. (C)	49. (D)	74. (D)	99. (C)	124. (C)	149. (C)	174. (C)	199. (C)
25. (C)	50. (C)	75. (B)	100. (B)	125. (B)	150. (B)	175. (B)	200. (D)

151. (C); Change 'he had fallen' into 'he fell'. If 'since' is preceded by Present Perfect Tense, it is followed by Simple Past Tense.

152. (A); 'Having broken down' must be replaced by 'since the car had broken down'.

153. (B); Change 'has' into 'have'. If a subject and the verb are joined by a relative pronoun, the verb used will agree with the antecedent of the relative pronoun.

154. (C); Change 'furnitures' into 'furniture'. Furniture is an uncountable noun. So it must be in singular form.

155. (C); Change 'real good' into 'really good'. Adjective is qualified by an 'adverb' and 'really' is an adverb whereas 'real' is an adjective.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003

Note:- Whatsapp with Mock Test No. and Question No. at 7053606571 for any of the doubts. Join the group and you may also share your suggestions and experience of Sunday Mock Test.

Note:- If you face any problem regarding result or marks scored, please contact 9313111777