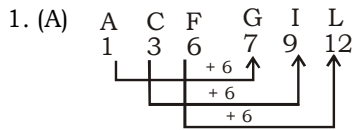
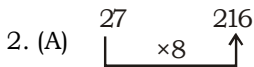
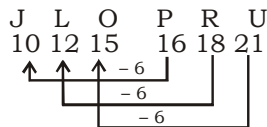


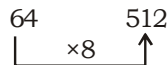
SSC CPO SI MOCK TEST – 01 (SOLUTION)



Similarly,



Similarly,



3. (C) Crocodile, Snake and Lizard all belong to Crawling Family where as Penguin does not belong to this family.

4. (A) Both Absent and Present are opposite to each other. Similarly, both against and for are opposite to each other.

5. (D) As we know single means one couple means two.

6. (A) $841 : 361$
 $\downarrow \quad \quad \downarrow$
 $29^2 : 19^2$

Similarly,

$1225 : 625$
 $\downarrow \quad \quad \downarrow$
 $35^2 : 25^2$

$[\because 29 - 19 = 35 - 25]$

8. (B) As Judge gives the Judgment. Similarly, Doctor gives Diagnosis.

9. (C) As Air has maximum value of Nitrogen element. Similarly, Land has maximum value of Oxygen element.

10. (D) As 11 and 19 have two prime numbers (13, 17) between them

Similarly,

53 and 67 have two prime number (59, 61) between them

11. (A) Extranet, Wide Area Network and Internet are the type of network which covers whole world. But Local Area Network is a type of network which covers a small town or a big office.

12. (D) All value has two even and two odd numbers except 1282 (it has three even numbers).

13. (D) Sum of all digits of the numbers is 19 except 4566 (it's sum is 21).

14. (C) Except AEIO, others have consonant.

15. (C) Except Fluorine, others are metal

16. (B) Difference between all values are

(i) $29 - 16 = 13,$

(ii) $143 - 157 = -14$

(iii) $276 - 263 = 13$

(iv) $195 - 182 = 13$

Except (ii) others have same value of difference

17. (D) 249 is a non-prime number, while 211, 223, 241 are prime numbers.

18. (D) For AXDU

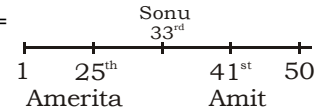
$A \xrightarrow{\text{opposite}} z \longrightarrow x$
 $1 \quad \quad \quad 26 - 2 \quad \quad 24$

$D \xrightarrow{\text{opposite}} W \longrightarrow U$
 $4 \quad \quad \quad 23 - 2 \quad \quad 21$

Similarly, CULM and DUIP have same relation except HRPJ.

19. (A) Eminase \rightarrow Eminence \rightarrow Eminencia \rightarrow Eminent

20. (C) Position of Sonu =



$= 50 - 33 + 1 = 18^{\text{th}}$ position from behind.

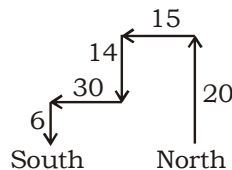
21. (A) $-2 \quad 2 \quad 14 \quad 34 \quad 62$
 $\downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow$
 $0^2 - 2 \quad 2^2 - 2 \quad 4^2 - 2 \quad 6^2 - 2 \quad 8^2 - 2$

22. (D) $0 \quad 15 \quad 48 \quad 99 \quad 168$
 $\downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow$
 $1^2 - 1 \quad 4^2 - 1 \quad 7^2 - 1 \quad 10^2 - 1 \quad 13^2 - 1$

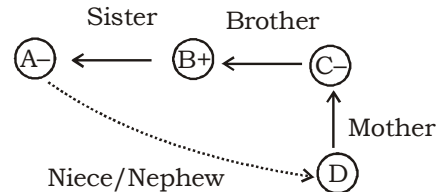
23. (B) $5 \quad 23 \quad 90 \quad 268 \quad 534$
 $\downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow$
 $\times 5 - 2 \quad \times 4 - 2 \quad \times 3 - 2 \quad \times 2 - 2$

24. (A) $0 \quad 4 \quad 18 \quad 48 \quad 100$
 $\downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow \quad \quad \downarrow$
 $1^3 - 1^2 \quad 2^3 - 2^2 \quad 3^3 - 3^2 \quad 4^3 - 4^2 \quad 5^3 - 5^2$
 $180 \quad 294$
 $\downarrow \quad \quad \downarrow$
 $6^3 - 6^2 \quad 7^3 - 7^2$

25. (D)



26. (D)



Campus
K D Campus Pvt. Ltd

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

27. (B) $9 \times 8 - 24 = \frac{48}{2} = 24$

$6 \times 9 - 6 = \frac{48}{2} = 24$

$6 \times 12 - 24 = \frac{48}{2} = 24$

$16 \times 29 - 416 = \frac{48}{2} = 24$

28. (C) $\left\lfloor \frac{27 + 25}{2} \right\rfloor \times 5 = 130$

$\left\lfloor \frac{24 + 22}{2} \right\rfloor \times 5 = 115$

$\left\lfloor \frac{20 + 14}{2} \right\rfloor \times 5 = 85$

29. (A) $13 \times 9 - 24 = 93$

$45 \times 14 - 24 = 606$

$15 \times 15 - 24 = 201$

30. (D) 'RENT' Word is made by using the letters of 'ENTERPRENEUR'

31. Only son of Amar's mother's father → Amar's maternal uncle.

So, the girl's maternal uncle is Amar's maternal uncle. Thus the girl's mother is Amar's Aunt.

32. (A) 1 January 2006 → Saturday

1 Jan 2007 → Sunday

1 Jan 2008 → Monday

1 Jan 2009 → Wednesday

(due to leap year).

1 January 2010 → Thursday

33. (A) As $4 \times 2 - 1 \times 3 = 8 - 3 = 5$

Similarly,

$5 \times 3 - 4 \times 2 = 15 - 8 = 7$

34. (C) P E N C A R D

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

16 5 14 3 1 15 4

and

A B R O A D

↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

1 2 18 15 1 4

Similarly,

T W E L V E

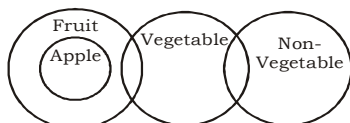
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

20 23 5 12 22 5

35. (B)

36. (A)

37. (D)

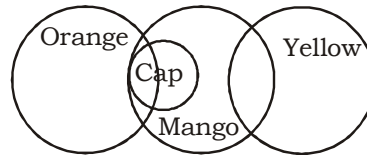


1. False

2. False

Neither (i) nor (ii) follows.

38. (B)

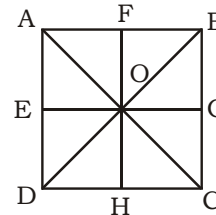


1. False

2. True

Only (ii) conclusion follows.

39. (A)



AOF, AOE, BOF, BOG, AOB, EOD, HOD, AOD, COH, GOC, DOC, GOB, ADC, ABC, ADB, BDC.

40. (C)

41. (A)

42. (B)

43. (D)

44. (C) As

| | | | | | |
|------|------|------|------|------|------|
| M | U | K | E | S | H |
| +1 ↓ | +2 ↓ | +1 ↓ | +2 ↓ | +1 ↓ | +2 ↓ |
| N | W | L | G | T | J |

Similarly,

| | | | | | |
|------|------|------|------|------|------|
| M | A | L | I | N | I |
| +1 ↓ | +2 ↓ | +1 ↓ | +2 ↓ | +1 ↓ | +2 ↓ |
| N | C | M | K | D | K |

45. (B)

46. (A) $3 \times 9 - 45 \div 5$

$= 3 \times 9 - 9$

$= 27 - 9 = 18$

47. (A)

48. (A) abcddabccdbbcbdaabcd

49. (B)

50. (D)

101. (D) Given series is an Arithmetic Progression series

So, 3, 6, 9 243 having same common difference (d) to find the number of terms (n)

We know,

$$l = a + (n - 1) d$$

o o

last term first term

$243 = 3 + (n - 1)3$

$240 = (n - 1)3$

$n - 1 = 80$

$n = 81$

Then $S_n = \frac{n}{2} (a + l)$

Sum of series = $\frac{81}{2} (3 + 243) = \frac{87}{2} \times 123$

$81 \times 123 = 9963$

102. (A) $\frac{\sin \rho - \cos \rho}{\sin \rho, \cos \rho}$ put $\theta = 60$

$$\frac{\frac{\sqrt{3}}{2} - \frac{1}{2}}{\frac{\sqrt{3}}{2}, \frac{1}{2}} = \frac{\sqrt{3}-1}{\sqrt{3}, 1}$$

$$= \frac{\sqrt{3}-1}{\sqrt{3}, 1} \times \frac{\sqrt{3}-1}{\sqrt{3}-1} = \frac{3, 1-2\sqrt{3}}{\sqrt{3}^2 - 1^2}$$

$$= \frac{4-2\sqrt{3}}{2} = 2 - \sqrt{3}$$

103. (A) We know that

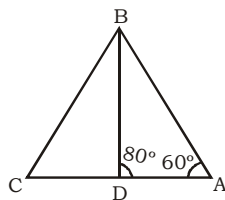
$$1 + \cos \theta = 2 \cos^2 \frac{\rho}{2}$$

$$1 - \cos \theta = 2 \sin^2 \frac{\rho}{2}$$

Put these value in equation

$$\sqrt{\frac{1 + \cos \rho}{1 - \cos \rho}} = \sqrt{\frac{2 \cos^2 \frac{\rho}{2}}{2 \sin^2 \frac{\rho}{2}}} = \tan \frac{\rho}{2}$$

104. (C)



Property $\frac{AD}{DC} = \frac{AB}{BC}$ is a property of angle bisector

So,
 $\angle DBA = \angle CBD$
 $\angle DBA = 180^\circ - 60^\circ - 80^\circ$
 $= 40^\circ$

then,
 $\angle BCA = 180^\circ - \angle CBA - \angle CAB$
 $= 180^\circ - 80^\circ - 60^\circ$
 $= 40^\circ$

105. (C) Unit's place of series will be 'Zero' because $5 \times \text{even} = \text{Number that contains last digit as zero}$
 In given series
 $55 \times 84 = 0$ last digit.

106. (A) In 1st condition profit = 5%
 Let C. P (in percentage) = 100%
 S.P (in percentage) = 105%
 In 2nd condition
 C.P (according to 1st and 2nd condition) = 90%
 S.P (according to 2nd condition)

$$= \frac{90 \times 130}{100}$$

$$= 117\%$$

S.P in 2nd condition - S.P in 1st condition = 3300

$$117\% - 105\% = 3300$$

$$12\% = 3300$$

$$1\% = 275$$

$$100\% = 27500$$

So, CP will be ₹27500

107. (D) Let speed and length of train x & y respectively in 1st condition.

$$\frac{y}{x - 6} \times \frac{5}{18} = 9$$

$$y = 9 \times (x - 6) \times \frac{5}{18} \dots (i)$$

According to 2nd condition.

$$\frac{y}{x - 9} \times \frac{5}{18} = 10$$

$$y = (x - 9) \times \frac{5}{18} \times 10 \dots (ii)$$

Equation both equation (i) & (ii)

$$(x - 9) \times \frac{5}{18} \times 10 = (x - 6) \times 9 \times \frac{5}{18}$$

$$x = 36 \text{ km/h}$$

108. (A) Let Average age of team = x
 total age of team = $11x$.
 Reduction effect on the age average on team eliminating 2 players and introduced new 2 members
 $9 \times 2 = 18$ month.
 total age of terminating player = $18 + 25$
 $= 43$ year
 then total age of new player = 43 year - 18 months
 $= 41$ year, 6 month.
 Hence, average age of new player

= $\frac{41 \text{ year } 6 \text{ months}}{2}$
= 20 years, 9 months

109. (D) $\frac{1}{1, x^{n-m}} + \frac{1}{1, x^{m-n}}$
= $\frac{1}{1, x^{n-m}} + \frac{1}{1, x^{-|n-m|}}$
= $\frac{1}{1, x^{n-m}} + \frac{1}{1, x^{n-m}}$
= $\frac{1}{1, x^{n-m}} + \frac{x^{n-m}}{x^{n-m}, 1} = 1$

110. (B) 4th proportional mean
a : b = c : d
 $\frac{a}{b} = \frac{c}{d}$
ATQ,
Let the 4th proportion $\rightarrow x$
 $\frac{10}{12} = \frac{15}{x}$
 $x = 18$

111. (B) For real or imaginary roots we check condition = $\sqrt{b^2 - 4ac}$
 $a = 1, b = -7, c = 21$
Put in condition $\sqrt{49 - 84} = \sqrt{-35}$
This value is an imaginary
Thus, this equation has imaginary roots.

112. (A) ATQ,
 $x + \frac{1}{x} = \sqrt{3}$
Taking cube on both side.
 $\left(x + \frac{1}{x}\right)^3 = (\sqrt{3})^3$
 $x^3 + \frac{1}{x^3} = 3 - 3$
 $\frac{x^6 + 1}{x^3} = 0 \Rightarrow x^6 + 1 = 0 \quad \dots(i)$
According to condition,
 $x^{96} - 1 = (x^{48} - 1)(x^{48} + 1)$
 $= (x^{24} - 1)(x^{24} + 1)(x^{48} + 1)$
 $= (x^{12} - 1)(x^{12} + 1)(x^{24} + 1)(x^{48} + 1)$
 $= (x^6 - 1)(x^6 + 1)(x^{12} + 1)(x^{24} + 1)(x^{48} + 1)$
 $= 0$

According to Ist equation $x^6 + 1 = 0$

113. (A) As we know the previous question.
 $x + \frac{1}{x} = \sqrt{3}$
Taking cube
 $x^6 + 1 = 0$
ATQ,
 $x^{72} + x^{66} + x^{34} + x^{28} + x^{12} + x^6 + 1$
 $x^{66}(x^6 + 1) + x^{28}(x^6 + 1) + x^6(x^6 + 1) + 1$
 $x^{66} \times 0 + x^{28} \times 0 + x^6 \times 0 + 1 = 1$

114. (A) Let the radius of sphere r .
ATQ,
 $\frac{4}{3} \pi \times r^3 = 38808$
 $\frac{4}{3} \times \frac{22}{7} \times r^3 = 38808$
 $r^3 = \frac{38808}{4 \times 22} \times 7 \times 3$
 $r = 21 \text{ m}$
Surface area of sphere = $4\pi r^2$
 $4 \times \frac{22}{7} \times 21 \times 21 = 5544 \text{ m}^2$

115. (D) Consider the radius of circle = $r \text{ m}$
ATQ,
Circumference of a circle = $2\pi r = 308 \text{ m}$
 $2 \times \frac{22}{7} \times r = 308$
 $r = 49 \text{ m}$.
Then area of circle = πr^2
 $\frac{22}{7} \times 49 \times 49 = 7546 \text{ m}^2$

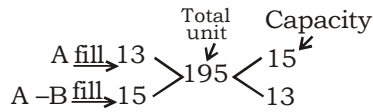
116. (B) Comparison for two group
 $\frac{M_1 D_1}{W_1} = \frac{M_2 D_2}{W_2}$
ATQ,
 $5M \times 15 = 15W \times 15$
 $1M = 3W$
According to 2nd condition
 $(8M + 6W) \times D = 5M \times 15 \quad \dots(i)$
As we know
 $1M = 3W$
 $2M = 6W$
Put in equation (i)
 $(8M + 2M) \times D = 5M \times 15$
 $10M \times D = 15 \times 5M$
 $D = 7 \frac{1}{2}$
So, $8M + 6W$ can do same piece of work

Campus K D Campus Pvt. Ltd

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

in $7\frac{1}{2}$ days.

117. (A)

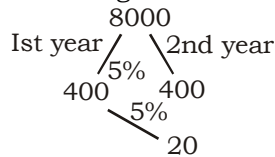


So, B's capacity = A - (A - B)
15 - 13 = 2

So B can empty the tank = $\frac{\text{Total unit}}{\text{Capacity}}$

$$= \frac{195}{2} = 97\frac{1}{2} \text{ hours.}$$

118. (A) According to the 1st condition i.e. annually



For $1\frac{1}{2}$ years it means 1st year interest is added completely and half of 2nd year interest is added means.

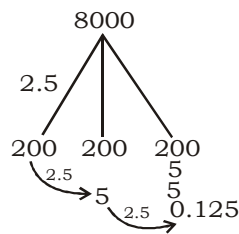
Total interest for $1\frac{1}{2}$ year.

$$= 400 + \frac{420}{2} = 400 + 210 = 610$$

According to 2nd condition i.e. half yearly.

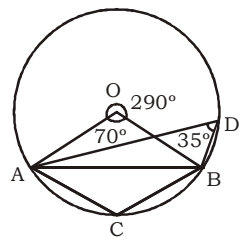
So the rate became half i.e. $\frac{5}{2} = 2.5\%$

Then



So, total interest = 215.125
Difference = 215.125 - 210 = ₹5.125

119. (A)



$\angle ADB = 35^\circ$

So, $\angle AOB = 2\angle ADB = 2 \times 35^\circ = 70^\circ$

So, reflexive angle of chord AB.

Thus,

$$\angle ACB = \frac{\text{reflexive angle of chord AB}}{2}$$

$$= \frac{290}{2} = 145$$

120. (A) ATQ,

$$A \times \frac{40}{100} = B \times \frac{30}{100}$$

$$\frac{A}{B} = \frac{3}{4}$$

Let B = 4 & A = 3

$$4 = \frac{3}{100} \times x\%$$

$$x\% = \frac{400}{3} \%$$

121. (B) ATQ,

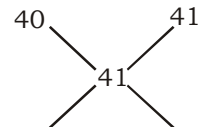
S.P of mixed rice = 49.2

So, C.P of mixed rice

$$= \frac{x \times 120}{100} = 49.2$$

$x = 41$

According to condition of Allegation.



$$52 - 41 = 11 \quad 41 - 40 = 1$$

So the ratio will be 11 : 1

122. (A) ATQ,

| | | |
|-----------------|-----------------|-----------------|
| A | B | C |
| 3×3000 | 3×3000 | 6×6000 |
| 9 | 16 | 36 |

Total unit 61

Total profit for 61 units 6100

$$\text{Profit for 9 unit} = \frac{6100 \times 9}{61} = ₹900$$

Hence, A's share = ₹900

123. (A) ATQ,

Total number of student = 1000 i.e. 100%

For cricket 45%

100% → 1000

$$45\% \rightarrow \frac{1000 \times 45}{100} = 450$$

Campus
K D Campus Pvt. Ltd

2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

124. (A) As we know total central angle is 360°
i.e. 100%
 $100\% \rightarrow 360^\circ$

$$\text{For different games } 10\% \rightarrow \frac{360^\circ \times 10}{100}$$

$$= 36^\circ$$

Hence, the central angle for different games = 36°

125. (B) Difference the percentage of cricket & Football

$$= 45 - 20 = 25\%$$

ATQ,

$$100\% \rightarrow 1000$$

$$25\% \rightarrow \frac{1000 \times 25}{100} = 250$$

Hence, The difference between the student in cricket and football is 250.

126. (C) Difference between the percentage of Hockey and football = $25\% - 20\% = 5\%$

As we know

$$100\% = 360$$

$$5\% = \frac{360 \times 5}{100} = 18^\circ$$

Hence the difference between the central angle of Hockey and football = 18°

127. (B) Central angle for Hockey and Different games is $25\% + 10\% = 35\%$

$$\Rightarrow 100 \rightarrow 360$$

$$35\% \rightarrow \frac{360 \times 35}{100}$$

$$= 126^\circ$$

128. (C) $\frac{\sqrt{11}, \sqrt{5}}{\sqrt{11} - \sqrt{5}} + \frac{\sqrt{11} - \sqrt{5}}{\sqrt{11}, \sqrt{5}}$

$$\frac{3316, 2.236}{3317 - 2.236} + \frac{3.317 - 2.236}{3.317, 2.336}$$

$$= \frac{5.553}{1.081} + \frac{1.081}{5.553}$$

$$= 5.137 + 0.195$$

$$= 5.332$$

129. (B) Let the side of cube is a use Pythagoras theorem to get the diagonal across the base.

$$a^2 + a^2 = h^2$$

and again use Pythagoras theorem to get cube's diagonal, then solve for $12\sqrt{3}$

$$h^2 + a^2 = (12\sqrt{3})^2$$

$$3a^2 = 12\sqrt{3} \times 12\sqrt{3} \quad [\because h^2 = a^2]$$

$$a = 12$$

$$\text{Hence, volume of cube} = a^3 = 12^3$$

$$= 1728 m^3$$

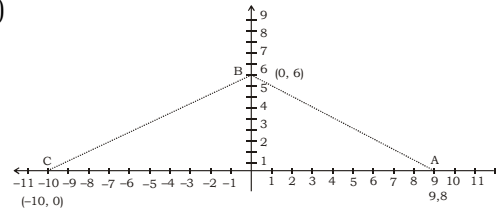
130. (B) Let the number of each note = x then,

$$1x + 5 \times x + 10 \times x = 640$$

$$16x = 640$$

So, total number of ₹1 Note + ₹5 Note and ₹10 Note = $40 + 40 + 40 = 120$

131. (B)



ABC has AC (19 unit) as its base and BO (6 unit) as its height according to diagram

$$\text{then, Area of } \triangle ABC = \frac{1}{2} \times AC \times BO$$

$$= \frac{1}{2} \times 19 \times 6 = 57 \text{ unit}^2.$$

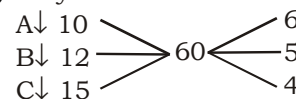
132. (D) Area of shaded cone = $\frac{180}{360} \times \pi r^2$

– area of AOD – area of BOE
– area of FOC.

$$\frac{1}{2} \times \frac{22}{7} \times 7 \times 7 - \frac{\sqrt{3}}{4} \times 7 \times 7 \times 3$$

$$= 13.42 \text{ cm}^2$$

133. (C) Days efficiency



So, total unit = 60 units

Work done by A + B in 4 days = $(6 + 5) \times 4$
= 44 units

Remaining units done by C = $60 - 44$
= 16 units

No. of day required by C = $\frac{16}{4} = 4$ days

Total days required by them = $4 + 4 = 8$ days

134. (A) $\sqrt{\frac{1}{\cot^2 \theta + 1}} = \sqrt{\frac{1}{\operatorname{cosec}^2 \theta}} = \sqrt{\sin^2 \theta}$

$$\sqrt{1 - \cos^2 \theta} = \sqrt{1 - \frac{1}{\sec^2 \theta}}$$

$$= \sqrt{\frac{\sec^2 \theta - 1}{\sec^2 \theta}}$$

135.(D) $\tan 75^\circ + \tan 15^\circ = \frac{\sqrt{3}+1}{\sqrt{3}-1} + \frac{\sqrt{3}-1}{\sqrt{3}+1}$

$$= \frac{(\sqrt{3}+1)^2 + (\sqrt{3}-1)^2}{(\sqrt{3})^2 - (1)^2}$$

$$= \frac{3+1+2\sqrt{3}+3+1-2\sqrt{3}}{3-1}$$

$$= \frac{8}{2} = 4$$

136.(A) $1 \times 2 \times 3 \times 4 \times \dots \times 19 \times 20$
 Number of Zeroes = 10, 20, 2×5, 4×15
 = 4

137.(D) Let 1st Number = x
 According to Question,
 Sum of last four number = $5x$
 Then
 Sum of five numbers $\Rightarrow x + 5x = 300$
 $\Rightarrow 6x = 300$
 $\Rightarrow x = 50$
 Hence, the first number is 50.

138. (A) 2, 3, 5, 7, are the prime number except 2, there are 720 odd numbers that are prime number.
 We know that odd + odd = even
 Thus the sum of 720 odd numbers must be even
 $2 + 720$ prime number = even
 and all even is divided by = 2

139. (A) Diameter of circle = Diagonal of square
 Thus $2r =$ Diagonal of square
 we know
 Diagonal of square = $\sqrt{2} \times$ side of square
 $2r = \sqrt{2} \times$ side of square
 $\sqrt{2} r =$ side of square

140. (A) We know power of odd number gives odd number.
 \Rightarrow odd number - 1 = even no.
 and all even number is divided by 2
 Hence.
 HCF of $3^{512} - 1$ and $3^{511} - 1 = 2$

141. (C) $\tan \theta + \cot \theta = 5$
 $\Rightarrow \tan \theta + \frac{1}{\tan \theta} = 5$

So,

$$\tan^2 \theta + \frac{1}{\tan^2 \theta} = (5)^2 - 2 = 23 \rightarrow (i)$$

$$\tan^2 \theta + \frac{1}{\tan^3 \theta} = (5)^3 - 3 \times 5 = 110 \rightarrow (ii)$$

Adding (i) and (ii)
 $\tan^3 \theta + \cot^3 \theta + \tan^2 \theta + \cot^2 \theta$
 $= 110 + 23 = 133.$

142. (C) Let the distance covered by boat = z
 the speed of boat in still water = x
 ATQ
 In (i) condition

$$\frac{z}{x+3} = 8$$

$$z = 8(x+3) \rightarrow (i)$$

In (ii) Condition

$$\frac{z}{x-3} = 16$$

$$z = 16(x-3) \rightarrow (ii)$$

Comparing (i) & (ii)

$$16(x-3) = 8(x+3)$$

$$16x - 48 = 8x + 24$$

$$x = 9 \text{ km/hr}$$

143. (A) In ΔABC

$$\tan 60^\circ = \frac{h}{9} \rightarrow (i)$$

In ΔABD

$$\tan 30^\circ = \frac{h}{16}$$

$$\Rightarrow \cot 60^\circ = \frac{h}{16} \rightarrow (ii)$$

Multiply both equation (i) & (ii)

$$\tan 60 \times \cot 60 = \frac{h}{9} \times \frac{h}{16}$$

$$\Rightarrow h = 12 \text{ m}$$

144. (C) Curved Surface Area of Cylinder

$$= 2 \pi r h = 2 \times \frac{22}{7} \times 50 \times 14$$

$$= 4400 \text{ cm}^2$$

145. (A) 600m covers in 3 minutes

$$1 \text{ m covers in } \frac{3}{600} \text{ minutes}$$

$$6000 \text{ m(6km) covers in } \frac{3}{600} \times 6000 \text{ minutes}$$

$$= 30 \text{ minutes} = \frac{1}{2} \text{ hours}$$

$$146. (A) = \frac{99 \times 6 + 66 \times 7 + 77 \times 9}{11 \times 2}$$

$$\frac{54 + 42 + 63}{2} = \frac{159}{2}$$

$$147. (D) (\operatorname{cosec} \theta - \sin \theta)(\sec \theta - \cos \theta) \sin 2\theta$$

$$= \left(\frac{1 - \sin^2 \theta}{\sin \theta} \right) \times \left(\frac{1 - \cos^2 \theta}{\cos \theta} \right) \times 2 \sin \theta \cos \theta$$

$$= \cos^2 \theta \times \sin^2 \theta \times 2$$

$$\text{At } \theta = 30 = \frac{1}{4} \times \frac{(\sqrt{3})^2}{4} \times 2 = \frac{3}{8}$$

148. (B) We Know that

$$OC = OA = \frac{24}{2} = 12$$

Similarly

$$OB = OD = \frac{10}{2} = 5$$

Using Pythagoras theorem in any triangle we can calculate the side of rhombus

$$5^2 + 12^2 = 13^2$$

Hence, side of rhombus is 13

So, Perimeter of rhombus is 52.

$$149. (B) \text{ Length of Cuboid after adding all cube} \\ = 7 \times 7 = 49$$

Breadth and height of Cuboid Remaining same so curved area of cuboid is

$$2(lh + bh) = 2 \times (49 \times 7 + 7 \times 7) \\ = 784 \text{ cm}^2$$

$$150. (D) \text{ Side of triangle} = \frac{24}{3} = 8$$

We know that

height of equilateral triangle

$$= \frac{(\text{Side})}{2} \sqrt{3} = \frac{8}{2} \sqrt{3}$$

$$= 4\sqrt{3}$$

Hence, the height of triangle = $4\sqrt{3}$



2007, OUTRAM LINES, 1ST FLOOR, OPPOSITE MUKHERJEE NAGAR POLICE STATION, DELHI-110009

SSC CPO SI MOCK TEST – 01 (ANSWER KEY)

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

Note:- Whatsapp with Mock Test No. and Question No. at 9560866063 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