DELHI POLICE MOCK TEST – 02 (SOLUTION)

51. (C) As,
S O C I A L
1 2 3 4 5 6
O C I A L S
2 3 4 5 6 1
Similarly,
D R I V E N
1 2 3 4 5 6
R I V E N D
2 3 4 5 6 1

52. (A) $8 \times 8 = 64$
$16 \times 8 = 128$

53. (D) Moving 135° clock wise from west gives north-east and moving 135° clock wise from south gives north-west.

54. (B)

55. (C)

56. (C) Except (C), rest of the figures can be drawn with the help of lines.

57. (A) Except (A), in rest of the options second number divides the first number completely.

58. (A) Only 2012 is a leap year.

59. (D) Except (D), in rest three consecutive letters are used in some order.

60. (C) Paneer, Butter and Ghee are made from milk.

61. (D) 6 7 (8 8) 9 10

62. (A) We can't find 'R' in the given word.

63. (B) **a** aabb **b** a **a** ab **b** b

64. (A) Stone age Metallic Age Alloy age Atomic Age
1 2 3 4

65. (A) T R O K F Z S
−2 −3 −4 −5 −6 −7

66. (D) 114 225 336 447 558 669
+1 +1 +1 +1 +1
+11 +11 +11 +11 +11

67. (C) $8 + 2 \times 6 = 20$
$2 + 6 \times 8 = 50$
$6 + 8 \times 2 = 22$
$8 + 6 \times 22 = 140$

68. (B) As, M O N K O
5 7 6 3 7
Similarly, K L J M N
3 4 2 5 6

69. (D) $7 \times 6 \times 2 = 84$
$8 \times 9 \times 3 = 216$
$5 \times 30 \times 6 = 900$

70. (D) $3^2 = 9$, $4^2 = 16$
$2^2 = 4$, $6^2 = 36$
$3^2 = 9$, $5^2 = 25$

71. (B) $25 - 1 = 24$, $15 - 3 = 12$
Given: 24 = 30 m
$\Rightarrow$ 12 = 15 m

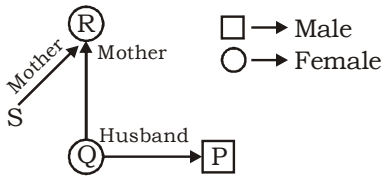
72. (A) $2 - 4 + 6 = 4$
$9 - 3 + 7 = 13$
$4 - 7 + 6 = 3$
$9 - 7 + 8 = 10$

73. (A)

74. (A) As, T R I P L E
−1
S Q H O K D

Similarly, D I S P O S E
−1
C H R O N R D

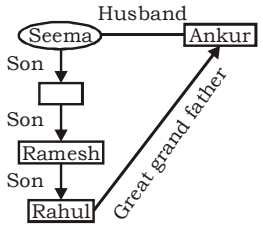
75. (D)



'R' is the mother-in-law of P.

76. (C)

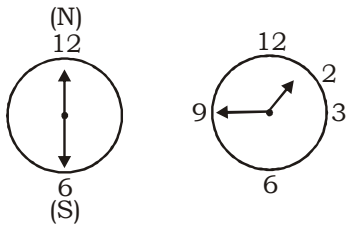
77. (*)



Ankur is great grand father of Rahul.

78. (C) D H I L N O P
↓
5th letter from left

79. (D)



Hour hand will represent north-east at 1:45.

80. (C) Aeroplane can fly and it is called a 'Bulldozer'.

81. (A)

82. (*) 

83. (A)

84. (D)

85. (A)

86. (A) According to question,

$$SP = \frac{9}{5} \times CP$$

$$\frac{SP}{CP} = \frac{9}{5} > +4 \text{ gain}$$

$$\text{gain \%} = \frac{4}{5} \times 100 = 80\%$$

87. (A) Speed of the man = $\frac{a}{b}$ km/hr

$$\text{Required time} = \frac{1200}{1000} \times \frac{b}{a} = \frac{6b}{5a}$$

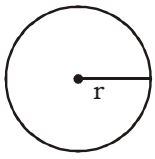
88. (A) Let the number = x
According to question

$$\Rightarrow x - \frac{2}{5}x = 75$$

$$\Rightarrow \frac{5x - 2x}{5} = 75$$

$$\Rightarrow \frac{3x}{5} = 75$$

$$x = 125$$

89. (C) 

$$\frac{4}{3}\pi r^3 = 4\pi r^2$$

r = 3 units

90. (D) Let nine consecutive numbers are x, $x + 2$, $x + 4$, $x + 6$, $x + 8$, $x + 10$, $x + 12$, $x + 14$, $x + 16$

$$\therefore \frac{x + x + 2 + x + 4 + x + 6 + x + 8 + x + 10 + x + 12 + x + 14 + x + 16}{9} = 53$$

$9x + 72 = 477$
$9x = 405$
$x = 45$
$\therefore$ least odd number is 45

91. (A) Principal = ₹ 1000
Amount = ₹ 1331
Rate = 10%
Let time = n year
By using formula,

$$\text{Amount} = \text{Principal}\left(1 + \frac{R}{100}\right)^n$$

$$1331 = 1000\left(1 + \frac{10}{100}\right)^n$$

$$\frac{1331}{1000} = \left(\frac{11}{10}\right)^n$$

$$\left(\frac{11}{10}\right)^3 = \left(\frac{11}{10}\right)^n$$

$n = 3$ years
Hence, required time = 3 years

92. (D) $2x + \frac{1}{3x} = 5$

$\Rightarrow 6x^2 + 1 = 15x$

$$\therefore \frac{5x}{6x^2 + 20x + 1}$$

$$= \frac{5x}{15x + 20x} = \frac{5x}{35x} = \frac{1}{7}$$

93. (D) The given triangle is a right angled triangle
$\Rightarrow$ side of the square

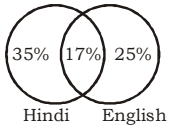
$$= \frac{P \times b}{P + b} = \frac{8 \times 6}{8 + 6} = \frac{24}{7}$$

$$\Rightarrow \text{Area of square} = \left(\frac{24}{7}\right)^2$$

$$= \frac{576}{49} \text{ cm}^2$$

94. (C) Students failed in Hindi = 52%
Students failed in English = 42%
Students failed in both subjects = 17%

Venn diagram of failed students



Total percentage of passed students in both subjects
= 100 – (35 + 17 + 25)
= 100 – 77
= 23%
Hence required percentage = 23%

95. (B) $x : y$
$2 : 3$

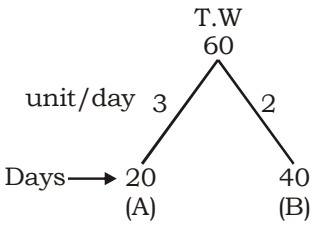
$\therefore \frac{x}{y} = \frac{2}{3}$

$\frac{3x+2y}{9x+5y}$

$\frac{y\left(3\frac{x}{y}+2\right)}{y\left(9\frac{x}{y}+5\right)} = \left(\frac{3\times\frac{2}{3}+2}{9\times\frac{2}{3}+2}\right)$

$\frac{2+2}{6+5} = \frac{4}{11}$

96. (D)



(A + B) can do the whole work together in

$= \frac{60}{3+2} = 12$ days

97. (B) Successive discount of 10% and 20%

$= 10 + 20 - \frac{10\times20}{100} = 28\%$

Successive discount of 28% and 30%

$= 28 + 30 - \frac{28\times30}{100} = 49.6\%$

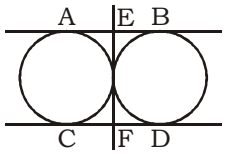
98. (A) (cos 0° + sin 45° + sin 30°) (sin 90° – cos 45° + cos 60°)

$\Rightarrow \left(1+\frac{1}{\sqrt{2}}+\frac{1}{2}\right)\left(1-\frac{1}{\sqrt{2}}+\frac{1}{2}\right)$

$\left(\frac{3}{2}+\frac{1}{\sqrt{2}}\right)\left(\frac{3}{2}-\frac{1}{\sqrt{2}}\right)$

$\frac{9}{4}-\frac{1}{2} \Rightarrow \frac{9-2}{4} = \frac{7}{4}$

99. (C) Maximum number of tangent are 3



100. (A) Let the length of train be l m.
According to the question

$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$

$\Rightarrow 100 = \frac{500+l}{\text{speed of train}}$

$\Rightarrow \text{speed} = \frac{500+l}{100}$ ...(i)

Again,

$60 = \frac{250+l}{\text{speed of train}}$

$\text{speed} = \frac{250+l}{60}$ ...(ii)

Equating (i) and (ii)

$\Rightarrow \frac{500+l}{100} = \frac{250+l}{60}$

$\Rightarrow 1500 + 3l = 1250 + 5l$

$\Rightarrow 2l = 250$

$\Rightarrow$ length of train = 125 m

DELHI POLICE MOCK TEST – 02 (ANSWER KEY)

1. (A)	26. (A)	51. (C)	76. (C)
2. (B)	27. (D)	52. (A)	77. (*)
3. (B)	28. (C)	53. (D)	78. (C)
4. (A)	29. (D)	54. (B)	79. (D)
5. (B, C)	30. (A)	55. (C)	80. (C)
6. (A)	31. (C)	56. (C)	81. (A)
7. (C)	32. (D)	57. (A)	82. (*)
8. (D)	33. (C)	58. (A)	83. (A)
9. (D)	34. (B)	59. (D)	84. (D)
10. (D)	35. (B)	60. (C)	85. (A)
11. (C)	36. (A)	61. (D)	86. (A)
12. (D)	37. (D)	62. (A)	87. (A)
13. (C)	38. (C)	63. (B)	88. (A)
14. (A)	39. (B)	64. (A)	89. (C)
15. (C)	40. (C)	65. (A)	90. (D)
16. (D)	41. (B)	66. (D)	91. (A)
17. (B)	42. (B)	67. (C)	92. (D)
18. (D)	43. (A)	68. (B)	93. (D)
19. (B)	44. (D)	69. (D)	94. (C)
20. (B)	45. (B)	70. (D)	95. (B)
21. (D)	46. (D)	71. (B)	96. (D)
22. (B)	47. (B)	72. (A)	97. (B)
23. (C)	48. (C)	73. (A)	98. (A)
24. (D)	49. (D)	74. (A)	99. (C)
25. (C)	50. (C)	75. (D)	100. (A)

Note :- Question number (5) has been repeated twice in the question paper and their answer are (B) and (C) Respectively

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

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