HSSC MOCK TEST – 135 (SOLUTION)

3. **(B)** Required sum = $\frac{n}{2}(2a + (n-1)d)$

$$= \frac{10}{2}\left(2 \times \frac{1}{2} + (9) - \frac{1}{6}\right)$$

$$= 5\left(1 - \frac{3}{2}\right)$$

$$= 5 \times \left(\frac{-1}{2}\right) = \frac{-5}{2}$$

8. **(C)** ATQ,
$P(n) = 3n - 1$
Put, n = 1
$P(1) = 2^{3(1)} - 1 = 7$, it is divisible by 7.
Put n = 2
$P(2) = 2^{3(2)} - 1 = 63$, it is divisible by 7.
Put n = 3
$P(3) = 2^{3(3)} - 1 = 511$, it is divisible by 7.
Hence, k = 7

10. **(*)** All options are correct. In india total 82 earthquake recording stations.

13. **(D)** ATQ,
$x + y + z = 17$..........(i)
and, $y = x + z + 1$ ....(ii)
Now, $100z + 10y + x = 100x + 10y + z - 396$
$\Rightarrow x - z = 396$ ....(iii)
On solving equation (i) and (ii)
$2x + 2z = 17 - 1$
$\Rightarrow x + z = 8$ ....(iv)
On solving equation (iii) and (iv)
$x = 6$ and $z = 2$
$\therefore$ y = 9
$\therefore$ Required number = $100 \times 6 + 10 \times 9 + 2$
= 692

16. **(C)** ba**b**bb/**a**b**b**bb/ab**b**b

17. **(D)** As a is only arbitrary constant. Hence, order is 1.

20. **(A)**
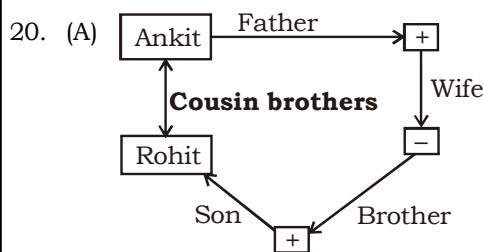
29. **(B)** 3 men can seat 3! ways in 3 seats
3 women can seat 3! ways in 3 seats
$\therefore$ The total number of ways = 2! × 3! × 3!
= 72

34. **(C)** As, Hairs is related to skin, Similarly, **Grass** is related to **hand**.

35. **(B)** ATQ,

$$A = \frac{1}{\sqrt{5} - \sqrt{6}} = -\sqrt{6} - \sqrt{5}$$

$$\frac{1}{A} = \frac{-1}{\sqrt{6}+\sqrt{5}} \times \frac{\sqrt{6}-\sqrt{5}}{\sqrt{6}-\sqrt{5}} = \sqrt{5}-\sqrt{6}$$

$$\left(A + \frac{1}{A}\right)^2 = (-\sqrt{6}-\sqrt{5} + \sqrt{5} - \sqrt{6})^2$$

$$A^2 + \frac{1}{A^2} = 24 - 2 = 22$$

40. **(C)** As,

Similarly,
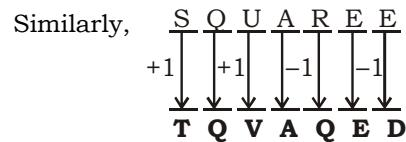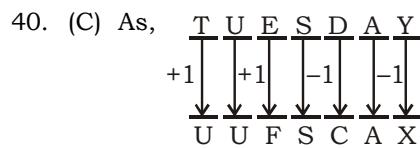
41. **(C)** We know that,
cosAcosB = 1 (if A + B = 18)
$\therefore$ cos1°cos2°cos3°.....cos179° = cos90° = 0

45. **(C)** Except **wind**, all others are resources of water.

46. **(C)** Required angle = $30 \times 10 - \frac{11}{2} \times 10$

= 300° – 55° = 245°
= 360° – 450° = 115°

52. **(A)** As, 12
$13 = 12 \times 1 + 1 \times 1$
$30 = 13 \times 2 + 2 \times 2$
$99 = 30 \times 3 + 3 \times 3$
$412 = 99 \times 4 + 4 \times 4$
Similarly, 18
$19 = 18 \times 1 + 1 \times 1$
$42 = 19 \times 2 + 2 \times 2$
135 $= 42 \times 3 + 3 \times 3$
$556 = 135 \times 4 + 4 \times 4$

56. (C) Even prime number = 2

∴ Required probability = $\dfrac{1}{6}$

68. (D) Indian valture (गिद्ध)

72. (C) As, currency of italy is Lira. Similarly, currency of **Bangladesh** is Taka.

73. (D) ATQ,

$3^{abc} \cdot 9^{ab} \cdot 27^{abc} = 1$

$\Rightarrow 3^{6(abc)} = 1$

$= 3^0 = 1$

77. (A) Indian penal code came into force from 6 october 1860.

79. (D) Number of ways of getting all the correct answer = 1 × 3 = 1

Number of ways all the incorrectanswers = $4^3 - 1 = 63$

91. (B) Replace ' indicating' with 'indicate', as ' could be used to' is followed by 'Base form of verb (V_1).

92. (D) No error

MEANINGS IN ALPHABETICAL ORDER

Word	Meaning in English	Meaning in Hindi
Bewildered	perplexed and confused; very puzzled	बेसुध
Muse	a person or personified force who is the source of inspiration for a creative artist.	काव्य प्रतिभा
Ponder	to think or consider especially quietly, soberly, and deeply	विचार करना
Dissonance	lack of harmony among musical notes.	मतभेद

HSSC MOCK TEST – 135 (ANSWER KEY)

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