HARYANA SSC MOCK TEST-7 (SOLUTIONS)

1. (A)

I	2	3	4	5	6	7	8	9	10	11
H	O	S	P	I	T	A	L	I	T	Y

Specified letters $\Rightarrow$ H, P, T, A

Meaningful word $\Rightarrow$ P A T H

2. (B) Cinema is an audio-visual mode of entertainment. All others are printed materials.

3. (D)

Z C B A
−1 |
Y F E D
−1 |
X I H G
−1 |
W L K J

4. (B) In first diagram,
$2^2 + 3^2 + 4^2 + 5^2 = 54$
In second diagram,
$13^2 + 3^2 + 8^2 + 11^2 = 363$
Similarly,
In third diagram,
$12^2 + 7^2 + 9^2 + 15^2 = 499$

5. (B)

6. (C) The hands of a clock are at right angles twice in every hour but in 12 hours they are at right angles only 22 times. It is so because there are two positions common in every 12 hours.

7. (C) $a\boxed{b}\,cb\boxed{c}\,/\,\boxed{a}\,bc\boxed{b}\,c/abcb\boxed{c}$

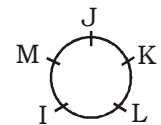8. (D) Son of A is C and B is brother of A therefore B is uncle of A.

9. (B) First Row
F + I $\Rightarrow$ O
↓ ↓
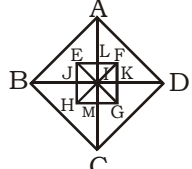6 + 9 $\Rightarrow$ 15
Second Row
A + J $\Rightarrow$ K
↓ ↓
1 + 10 $\Rightarrow$ 11
Third Row
E + M $\Rightarrow$ R
↓ ↓
5 + 13 $\Rightarrow$ 18

10. (B) A Mountain is higher than a hill. Similarly, Ocean is larger than a sea.

11. (A) A $\to$ Z
B $\to$ Y
C $\to$ X
Therefore, D E F
↓ ↓ ↓
W V U

12. (D)

J
M K
I L

Immediate right of K is J.

13. (D)

14. (A)

Possible triangles are :
$\triangle$ABI, $\triangle$AID, $\triangle$BAD
$\triangle$BCI, $\triangle$CID, $\triangle$BCD
$\triangle$ABC, $\triangle$ACD, $\triangle$IJE, $\triangle$IEL, $\triangle$LIF
$\triangle$FIK, $\triangle$KIG, $\triangle$IGM, $\triangle$IHM, $\triangle$IJH
$\triangle$EIF, $\triangle$EIH, $\triangle$HIG, $\triangle$FIG,
$\triangle$EFG, $\triangle$FHG, $\triangle$EGH, $\triangle$EHF

15. (B) Saturday + 3 = Tuesday
The day before the day before yesterday will be Tuesday.
So, today is Tuesday + 3 = Friday.

16. (C) Sum of first n natural numbers
$= \dfrac{n(n+1)}{2}$
Here, $n = 15$
$\therefore$ Required sum $= \dfrac{15 \times 16}{2} = 120$

17. (A) HCF × LCM = product of numbers
$\therefore xy = 3 \times 105 = 315$
$x + y = 36$
$\therefore \dfrac{x+y}{xy} = \dfrac{1}{y} + \dfrac{1}{x} = \dfrac{36}{315} = \dfrac{4}{35}$

18. (A) $\dfrac{1}{-2} = -0.5$;
$\dfrac{1}{(-2)^2} = \dfrac{1}{4} = 0.25$
$-\dfrac{1}{2} < \dfrac{1}{(-2)^2}$

19. (B) Let the amount of milk and water are $5x$ and x respectively.

By question, $\dfrac{5x}{x+5} = \dfrac{5}{2}$

$\Rightarrow 2x = x + 5 \therefore x = 5$

$\therefore$ amount of milk $= 5x = 5 \times 5$

$= 25$ L

20. (A) Interest $= 1200 - 800 = 400$

$\therefore$ S.I $= \dfrac{P \times R \times T}{100}$

$\Rightarrow 400 = \dfrac{800 \times R \times 10}{100}$

$\therefore R = 5\%$

21. (A) Required value

$= 5,40,000 \left(1 - \dfrac{50}{3 \times 100}\right)^3$

$= 5,40,000 \left(\dfrac{5}{6}\right)^3$

$= ₹\, 3,12,500$

22. (D) Expression

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{8\sqrt{7 + 4\sqrt{3}}}}}$

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{8\sqrt{4 + 3 + 2 \times 2\sqrt{3}}}}}$

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{8\sqrt{\left(2 + \sqrt{3}\right)^2}}}}$

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{8\left(2 + \sqrt{3}\right)}}}$

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{16 + 8\sqrt{3}}}}$

$= \sqrt{-\sqrt{3} + \sqrt{2 + \sqrt{12 + 4 + 2 \times 2 \times 2\sqrt{3}}}}$

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

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

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

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

23. (C) Total distance travelled

$= 50 \times 2.5 + 70 \times 1.5$

$= (125 + 105)$ km $= 230$ km

24. (D) Required increase

$= \left(30 + 30 + \dfrac{30 \times 30}{100}\right)\%$

$= 69\%$

25. (B) Part of the tank filled by both pipes in 1 minute.

$= \dfrac{1}{20} + \dfrac{1}{30} = \dfrac{3 + 2}{60} = \dfrac{1}{12}$

Hence, the tank will be filled in 12 minutes.

26. (B)

27. (B) S.P $= \dfrac{60}{85} \times 100 \times \dfrac{102}{100} = ₹\, 72$

28. (D) Let listed Price $= 100$

Total discounted price after successive discounts of 25% , 30% & 40%

$= 100 \times \dfrac{100 - 25}{100} \times \dfrac{100 - 30}{100} \times \dfrac{100 - 40}{100}$

$= 100 \times \dfrac{75}{100} \times \dfrac{70}{100} \times \dfrac{60}{100}$

$= \dfrac{3150}{100} = 31.50$

Single equivalent discount $100 - 31.50$
$= 68.50\%$

29. (B) Here, first divisor (56) is a multiple of second divisor (8).

$\therefore$ Required remainder = Remainder obtained on dividing 29 by 8 = 5

30. (B) Let speed of boat in still water $= x$ km/h. and speed of current $= y$ km/h.

By question,

$\dfrac{24km}{(x+y)km/h} = 10$ hrs.

$\therefore x + y = \dfrac{24}{10} = 2.4$ ...(1)

$\dfrac{24km}{(x-y)km/h} = 12$ hrs

$x - y = \dfrac{24}{12} = 2.5$ ... (2)

Adding from equation (1) and (2)

$x + y = 2.4$

$\underline{x - y = 2.0}$

$2x = 4.4$

$x = 2.2$

HARYANA SSC MOCK TEST - 7 (ANSWER KEY)

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