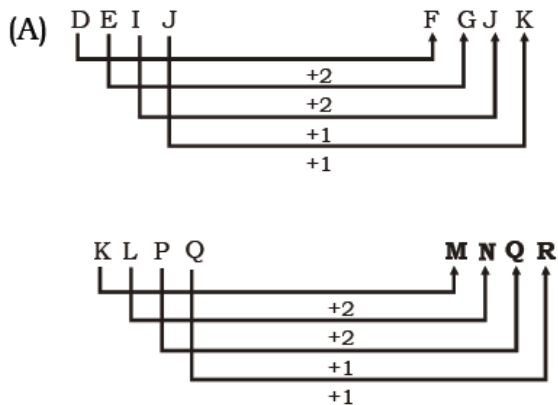
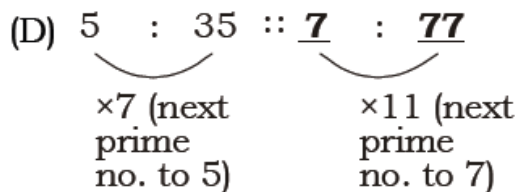


## HSSC MOCK TEST – 5 (SOLUTION)

1.



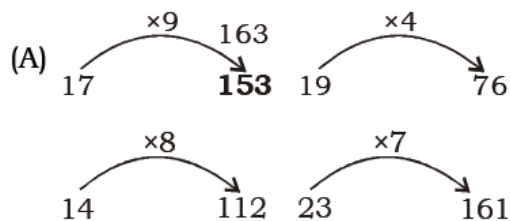
2.



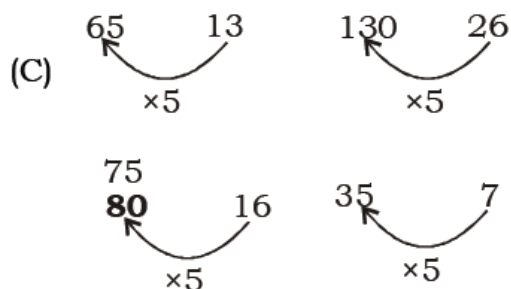
3. (A) Tadpole is transformed into **frog** and caterpillar is transformed into butterfly.

4. (A) Elated is the opposite of despondent and enlightened is the opposite of **Ignorant**

5.



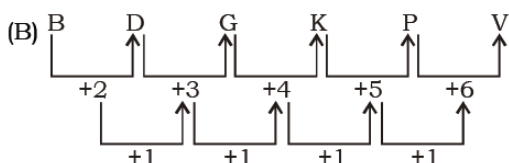
6.



7. (B) All except river contain stagnant water.

8. (B) Except hamlet, rest are put on head.

9.



10. (C) Suresh is the father of that Boy.

11.

(B)  $(6 \times 8) + (7 \times 9) = 48 + 63 = 111$   
 $(5 \times 6) + (9 \times 7) = 30 + 63 = 93$   
 $(6 \times 6) + (8 \times 7) = 36 + 56 = 92$

12.

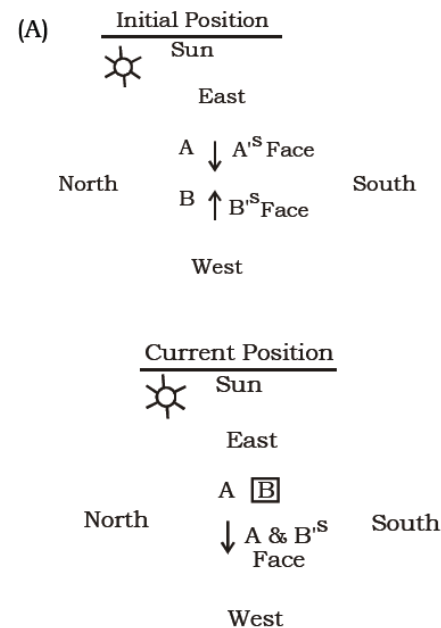
(C)  $24 \times 6 = 144 \Rightarrow \frac{144}{2} = 72$

$152 \times 2 = 304 \Rightarrow \frac{304}{2} = 152$

$9 \times 18 = 162 \Rightarrow \frac{162}{2} = 81$

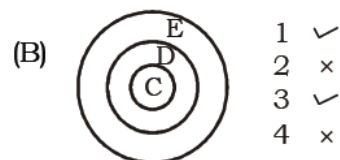
$\therefore ? = 9$

13.



So, it is clear that both A & B are now facing towards west.

14.



Only (I) and (III) follows

15. (C)

16.

(C) Product of two numbers = L.C.M  $\times$  H.C.F

$$\Rightarrow \frac{24 \times 1224}{72} = \text{other no.}$$

$$\Rightarrow \frac{1224 \times 1}{3} = \text{other no.} \Rightarrow \text{other no.} = 408$$

17.

(B)  $7a - 3b = 8a - 4b = \frac{2400}{12}$

$$\Rightarrow a = b, \text{ then } 7a - 3a = 200 \Rightarrow 4a = 200$$

$$\Rightarrow a = 50$$

$$\therefore \text{Sum of their income} = 7a + 8a = 15a = 15 \times 50 = ₹ 750$$

18.

(B) Req. numbers of cube =  $\frac{24 \times 12 \times 4}{(4)^3} = 18$

19.

(A)	A + B	8	}	24	2	
	B + C	12				
	C + A	8				
	2(A+B+C)	24			48	8
	A+B+C	48				8

$$\therefore \text{Required number of days} = \frac{48}{8} = 6 \text{ days}$$

20.

(A) Let  $x$  be the price of machine 3 years ago.

Its value after 1 year =  $0.9x$

Its value after 2 year =  $0.9x - 0.9 \times 0.1x = 0.81x$

Its value after 3 year =  $0.81x \times 0.9 = 0.729x$

ATQ,

$$0.729x = 7290 \Rightarrow x = 10,000$$

$\therefore$  3 years ago, price of the machine was ₹ 10,000.

21.

(B) Let ' $v$ ' km/hr be the speed of train B

Let ' $a$ ' km and ' $b$ ' km be the distance of passing point from  $y$  and  $x$  respectively

As, train A travels ' $b$ ' km

$$\Rightarrow 36 = \frac{b}{4} \Rightarrow b = 144 \text{ km}$$

Now, time taken for both to reach the passing point will be same

$$\Rightarrow \frac{a}{36} = \frac{b}{v} \Rightarrow a \times v = 36 \times 144 \dots(1)$$

Now, train B has taken 2 hrs

$$\Rightarrow a = v \times 2 \dots\dots(ii)$$

equating (1) and (II) we have

$$\frac{36 \times 144}{v} = 2v$$

$$\Rightarrow v^2 = 36 \times 72 = v = 36\sqrt{2} \text{ km/hr}$$

22.

(B)  $SI = \frac{P \times R \times T}{100}$

$$\Rightarrow \frac{4}{25} P = \frac{P \times T \times T}{100}$$

$$\Rightarrow T = 4 \text{ years} = 48 \text{ months}$$

23.

(C)  $\sqrt[3]{x} + \sqrt[3]{y} = \sqrt[3]{216}$

$$\Rightarrow \sqrt[3]{64} + \sqrt[3]{y} = 6$$

$$\Rightarrow 4 + \sqrt[3]{y} = 6 \Rightarrow \sqrt[3]{y} = 2$$

$$\Rightarrow y = 2^3 = 8$$

24.

(D) Let CP of 8 mangoes = SP of 9 mangoes = ₹ 72

$\therefore$  CP of 1 mango = ₹ 9

and SP of 1 mango = ₹ 8

$$\therefore \text{Loss} = ₹ 1 \therefore \text{Loss \%} = \frac{1}{9} \times 100 = 11\frac{1}{9}\%$$

25.

(B)  $\left(1 - \frac{1}{2}\right)\left(1 - \frac{1}{3}\right)\left(1 - \frac{1}{4}\right) \dots\dots \left(1 - \frac{1}{49}\right)$

$$= \frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \dots\dots \frac{47}{48} \times \frac{48}{49} = \frac{1}{49}$$

