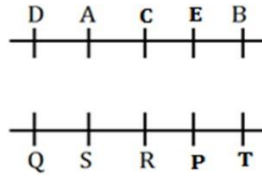


## SBI PO Mains 2019 Memory Based Paper (Solutions)

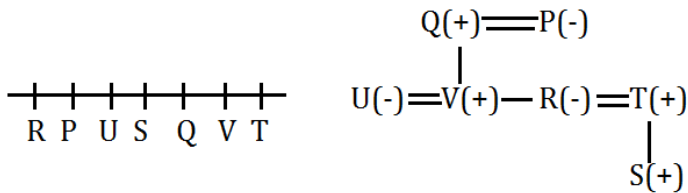
**Solutions (1-2):**



**S1. Ans.(e)**

**S2. Ans.(b)**

**Solutions (3-5):**



**S3. Ans.(c)**

**S4. Ans.(c)**

**S5. Ans.(a)**

**Solutions (6-9):** Logic: Step I: 1<sup>st</sup> digit is replaced by 6<sup>th</sup> digit, 2<sup>nd</sup> digit is replaced by 5<sup>th</sup> digit and so on until 6<sup>th</sup> digit is replaced by 1<sup>st</sup> digit in each number.

Step II: numbers are arranged in ascending order from left to right

Step III: first arranged odd digits then even digits in ascending order in each number.

Step IV: multiplied 1<sup>st</sup> and 2<sup>nd</sup> digit, 3<sup>rd</sup> and 4<sup>th</sup> digit, 5<sup>th</sup> and 6<sup>th</sup> digit in each number.

Step V: total sum of the numerical value of all digits in each number.

Input: 856347 745982 329584 512379 954267 463512

Step I: 743658 289547 485923 973215 762459 215364

Step II: 215364 289547 485923 743658 762459 973215

Step III: 135246 579248 359248 357468 579246 135792

Step IV: 31024 351832 151832 152848 351824 33518

Step V: 10 22 20 28 23 20

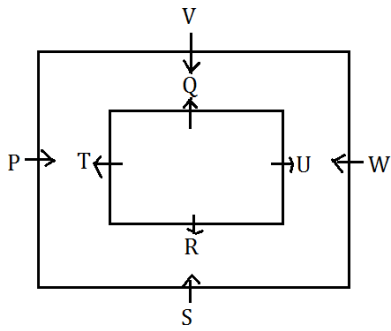
**S6. Ans.(c)**

**S7. Ans.(e)**

**S8. Ans.(b)**

**S9. Ans.(d)**

**Solutions (10-12):**

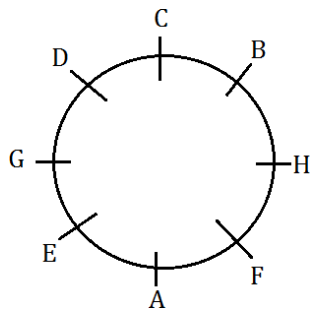


**S10. Ans.(c)**

**S11. Ans.(d)**

**S12. Ans.(a)**

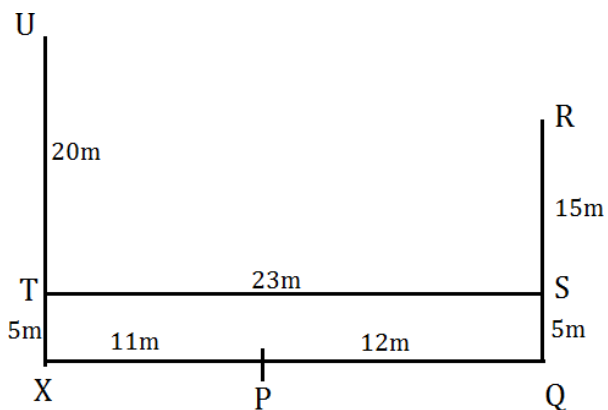
**Solutions (13-14):**



**S13. Ans.(a)**

**S14. Ans.(c)**

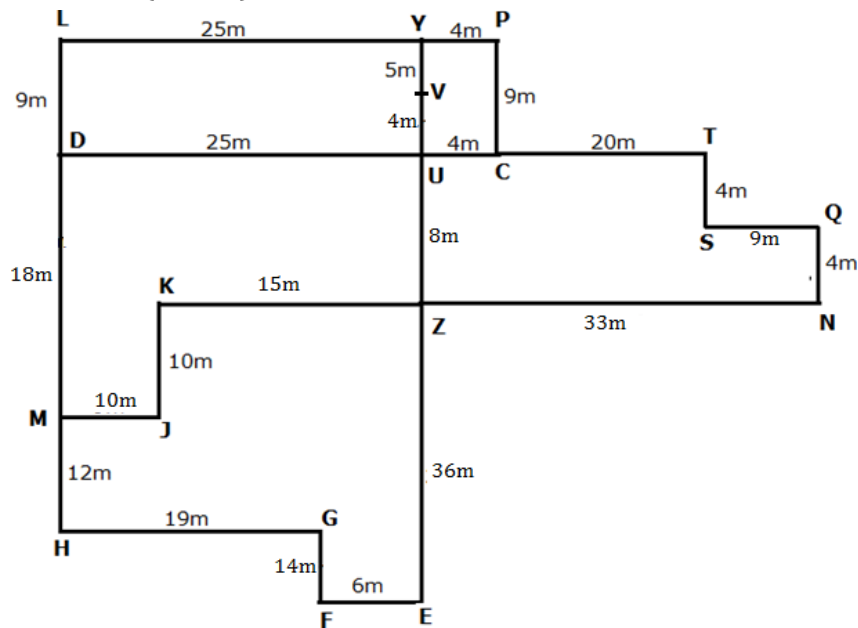
**Solutions (15-16):**



**S15. Ans.(d)**

**S16. Ans.(c)**

**Solutions (17-18):**



**S17. Ans.(a)**

**S18. Ans.(c)**

**Solutions (19-21):** Alphabets- third letter from the right end of the given word.

Number- If the number of letters in the given word is odd then subtract three from the number and If the number of letters in the given word is Even then add four from the number.

First letter of each word represents specific symbols as below-

<b>words</b>	W	M	S	R	E	P	T	F
<b>code</b>	!	\$	#	^	+	%	~	@

Example: World – 2 ! R

**S19. Ans.(a)**

**S20. Ans.(e)**

**S21. Ans.(c)**

**S22. Ans.(d)**

**Sol.** For I- Statement I weakens the given statement as according to it large number of people migrating to urban areas for better job opportunities whereas the given statement suggests that people are willing to compromise on their standard of living in order to live in a healthier/pollution free environment

**For II-** Statement II weakens the given statement as according to it migration from the rural areas is increasing whereas according to the statement, more and more people are willing to migrate to rural/semi-urban areas.

**For III-** Statement III strengthens the statement as it states that there has been a decline in number of migrants but it is due to the poor condition of urban slum areas, mostly acquired by the migrants and because of the policies of the government.

**S23. Ans.(e)**

**Sol.** As all options other than (e) can be the reason of the downfall of the revenue of a company but option (e) cannot be a reason as nothing regarding the Chinese/Indian companies have been stated in the given statement and is not related with the downfall of revenue of company A.

**S24. Ans.(a)**

**Sol.** Only I weakens the given statements as the statement suggest that the today's children are weaker than previous generation and are not as much active and also lack in developing their personality whereas the statement I states that today's children are mentally more active so it weakens the given statement.

**S25. Ans.(a)**

**Sol.** (a) mention a flaw in the survey which weakens the conclusion drawn from it.

(b) supports the statement by pointing out that some people embrace religion to achieve financial success.

(c) poor people might not have enough time to engage in religious practices but it does not eliminate the possibility of them having religious beliefs.

(d) mentions a fact which is irrelevant as the given statement talks about the general population of financially successful people which includes both developed and developing countries.

(e) is irrelevant to the statement.

**S26. Ans.(d)**

**Sol.** All the statement except (d), cannot be assumed from the given statement as data provided in the statement is not enough to assume the increase or decrease in NPA from the previous year also it is not clear whether NPA is the only cause of pain to banking sector. Further we also cannot assume from the given statement that steps taken by the government are not enough or some other sector is performing better than it. But it can be clearly assumed from the given statement that after the proper implementation of the policies and reforms there will be some improvement in the condition of the banking sector.

**S27. Ans.(a)**

**Sol.** Only statement (a) can be deduced from the given statement as by burning the coal the concentration of its particles is increased which lead to excessive amount of air pollution. But for others (b) and (e) can be assumed but cannot be deduced. While for (c) and (d) the amount of average rainfall and its consistency in not directly given in the statement.

**S28. Ans.(e)**

**Sol.** Except (e), all the statement strengthens the given statement by pointing out the effects of water scarcity India is currently facing and problems related to it but option (e) states that the crisis was more in 1960 from now which contradicts the given statement as it states that India is facing its "worst" water crisis in history. So (e) weakens the given statement.

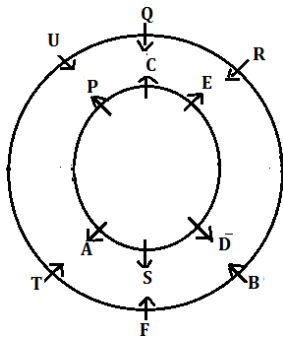
**S29. Ans.(e)**

**Sol.** Statement (e), can be assumed from the given statement as better quality is always a major factor of concern for customers and for it paying a bit higher amount is convenient. All other option except (e) cannot be assumed quality and price offered by company V for the product is not mention in the given statement. And also quality is only parameter to increase the number of customer or it is the only way also cannot be hypothesized from the given statement.

**S30. Ans.(c)**

**Sol.** Only statement I can be inferred from the given statement as HRA allowance increase after reallocation which clearly indicates that both are directly related to each other. But II and III cannot be inferred as we cannot state that strike is the reason behind the rise in allowance. And also increase in profit cannot be a factor to increase the allowance which the statement also states that the decision has been taken after the reallocation.

**Solutions (31-35):**



**S31. Ans.(c)**

**S32. Ans.(a)**

**S33. Ans.(e)**

**S34. Ans.(a)**

**S35. Ans.(d)**

**Solutions (36-40):**

	Case 2		
Floors	Flat A	Flat B	Flat C
3	4 rooms	6 rooms	10 rooms
2	3 rooms	7 rooms	5 rooms
1	2 rooms	9 rooms	8 rooms

**S36. Ans.(b)**

**S37. Ans.(c)**

**S38. Ans.(d)**

**S39. Ans.(a)**

**S40. Ans.(a)**

**Solutions (41-45):** Three persons are standing between L and F. O is standing immediately ahead of L. P is standing adjacent to F. Only two persons are standing between P and Z who is standing behind F. Only one person stands between Z and G. H is standing exactly behind G.

Case-1	Case-2	Case-3
O	O	O
L	L	L
P		
F	F	F
	P	P
Z		G
		H
G	Z	Z
H		
	G	
	H	

Q is standing at one of the extreme end. Four persons are standing between Q and K. K is standing immediately behind L. Not more than 14 persons are standing in the row. So, from this case-2 gets eliminated.

Case-1	Case-3
Q	Q
O	O
L	L
K	K
P	
F	F
	P
Z	G
	H
G	Z
H	

C is standing immediately behind of T. X is standing behind V but ahead of M. M is not standing behind G. So, from this case-3 gets eliminated. So, the arrangement is—



Case-1
Q
T
C
O
L
K
V
P
F
X
Z
M
G
H

Now for the amount earn by them, the informati on given is—

S@P means S earn 500 more than P.

S#P means S earn 1000 less than P.

S\$P means S earn equal to P.

The amount earn by all of them is given below—

V@Z\$H@X\$Q\$G i.e.  $V > Z = H > X = Q = G$

M\$F#G i.e.  $M = F < G$

V#L#T i.e.  $V < L < T$

T\$C#O i.e.  $T = C < O$

F@K@P i.e.  $F > K > P$

By combining all we get---

$O > C = T > L > V > Z = H > X = Q = G > M = F > K > P$

**S41. Ans.(e)**

**Sol.** From  $O > C = T > L > V > Z = H > X = Q = G > M = F > K > P$ , if the amount earn by M is 7000

Then the amount earn by Q, Z and L is 8000, 8500 and 10000 respectively. So, the sum is= 26500

**S42. Ans.(b)**

**Sol.** Six persons

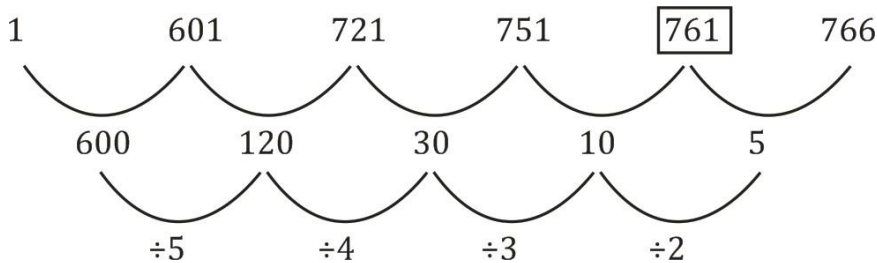
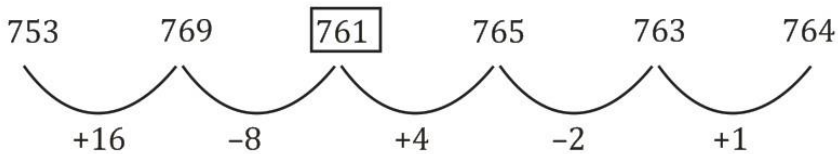
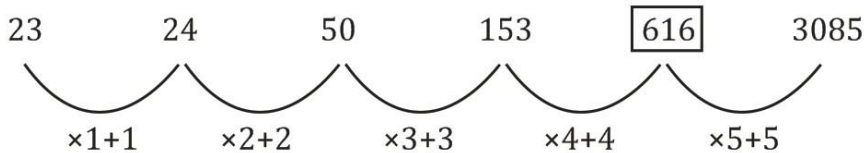
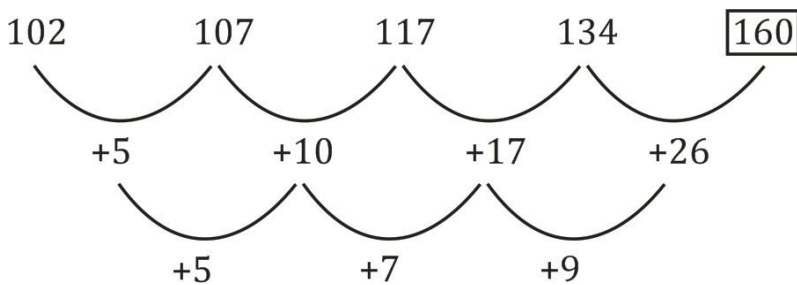
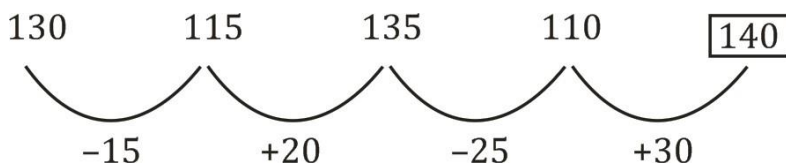
**S43. Ans.(a)**

**Sol.** Two

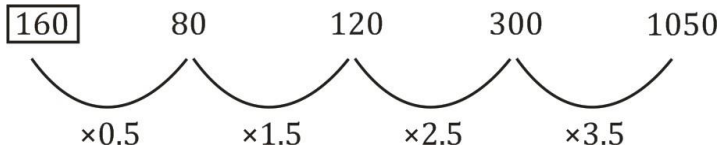
**S44. Ans.(b)**

**Sol.** From  $O > C = T > L > V > Z = H > X = Q = G > M = F > K > P$ , if the amount earn by X is 4500

Then the amount earn by O and P is 8500 and 2500 respectively So, the difference is= 6000.

**S45. Ans.(e)****Sol.** The amount earn by T is—From  $O > C = T > L > V > Z = H > X = Q = G > M = F > K > P$ , if the amount earn by K is 5000, then the amount earn by T will be 9500.**S46. Ans.(d)****Sol.** $x = 761$  $y = 761$  $z = 616$  $\therefore x = y > z.$ **S47. Ans.(b)****Sol.** $x = 160$  $y = 140$





$$z = 160$$

$$\therefore x = z > y$$

**S48. Ans.(c)**

**Sol.** Total area of apple pie =  $X \times 0.77 \text{ cm}^2$

ATQ,

$$(X - 3) \times 0.616 \times 2 = X \times 0.77 \Rightarrow X = 8$$

**S49. Ans.(e)**

**Sol.** Radius of original pie be R cm.

Area of the pie =  $8 \times 0.77 \text{ cm}^2$

ATQ,

$$\pi R^2 = 8 \times 0.77 \Rightarrow R = \frac{7}{5} \text{ cm.}$$

$$\text{Required circumference} = 2 \times \frac{22}{7} \times \frac{7}{5} = 8.8 \text{ cm}$$

**S50. Ans.(b)**

**Sol.** Total area of entire pie =  $0.77 \times 8 \text{ cm}^2$

Required area of each piece =  $\frac{0.77 \times 8}{11} = 0.56 \text{ cm}^2$

**Solutions (51-53):**

For project A:

$$X \times 88 = (X + 8) \times 66 \Rightarrow X = 24$$

For project B:

$$Y \times (Y - 1) = (Y + 6) (Y - 6)$$

$$\Rightarrow Y^2 - Y = Y^2 - 36$$

$$\Rightarrow Y = 36$$

For project C:

$$Z^2 \times 75 = M^2 \times 108$$

$$\Rightarrow Z = 1.2 M$$

**S51. Ans.(c)**

**Sol.** Total number of workers in team P

$$= 0.5 \times 1.2M \times 2M$$

$$= 1.2M^2$$

Required days =  $\frac{108 \times M^2}{1.2M^2} = 90 \text{ days.}$

**S52. Ans.(c)**

**Sol.** Required days =  $\frac{24 \times 88}{64} = 33$  days.

**S53. Ans.(b)**

**Sol.** In 10 days, work done =  $0.5 \times 36 \times 10 = 180$  units

Now, total people =  $0.5Y + 0.5Y = 36$

Let 36 people work for A days to complete the remaining work.

ATQ,

$$36 \times A + 180 = 36 \times 35$$

$$\Rightarrow A = 30 \text{ days.}$$

Total required days = 40 days

**S54. Ans.(b)**

**Sol.** male population in village

$$A = 20 \times 300 - 2400 = 3600$$

$$\text{Required gender ratio} = \frac{3600}{2400} \times 100 = 150$$

**S55. Ans.(d)**

**Sol.** Let number of female in village A be x.

So, the number of female in village C = x

Total population of village A = 6000.

Total population of village C = 4000

ATQ,

$$\frac{(6000-x)}{x} \times 100 = \left( \frac{4000-x}{x} \times 100 \right) + 125$$

$$\Rightarrow x = 1600$$

Number of male in village C = 2400

**S56. Ans.(a)**

**Sol.** total population of village B in 2001 =  $6 \times 400 = 2400$

Total population of village E in 2001 = 9600

Population of E in 2010 =  $9600 \times 1.5 = 14400$

**Solutions (57-59):**

Let the number of green balls in bag X be 'a'

Then number of red balls in the bag =  $(30-a)$

ATQ

$${}^a C_1 \times {}^{(30-a)} C_1 / {}^{30} C_2 = \frac{40}{87}$$

$$a \times (30-a) = 200$$

$$a = 10 \text{ or } 20$$

If green balls = 10  
 Then, red balls = 20  
 According to II statement,  
 Green balls = (10 - B)  
 Red balls = (20 + B)  
 According to III statement.  
 $\frac{{}^{(10-B)}C_2}{{}^{30}C_2} = \frac{7}{29}$   
 $\Rightarrow \frac{(10-B)(9-B) \times 2}{30 \times 29 \times 2} = \frac{7}{29}$   
 $\Rightarrow (10 - B)(9 - B) = 210$   
 On solving, B = -5,24

If green balls = 20  
 Then, red balls = 10  
 According to II statement  
 Green balls = (20 - B)  
 Red balls = (10 + B)  
 According to III statement  
 $\frac{{}^{(20-B)}C_2}{{}^{30}C_2} = \frac{7}{29}$   
 $\Rightarrow (20-B)(19-B) = 210$   
 $\Rightarrow B = 5, 34$   
 But  $0 < B \leq 20$   
 So, B = 5

But  $0 < B \leq 10$

So, in bag Y:

Green balls = 15

Red balls = 15

After statement IV:

Number of green balls in bag Y = (15 - C)

Number of red balls in bag Y = (15 + C - 5) = (10 + C)

ATQ,

$$= \frac{{}^{(10+C)}C_2}{{}^{25}C_2} = \frac{2}{5} \Rightarrow C = 6, -25$$

But  $C \neq -25$

So, C = 6

**S57. Ans.(a)**

**Sol.** Value of A=10

**S58. Ans.(d)**

**Sol.** Required probability =  $\frac{{}^{20}C_2}{{}^{30}C_2} = \frac{38}{87}$

**S59. Ans.(b)**

**Sol.** Value of C=6

**S60. Ans.(c)**

**Sol.** ATQ,

$$9600 - \left(X \times \frac{30}{100}\right) = 3600 \Rightarrow X = 20000$$

People who are eligible for loan

$$= \frac{20}{100} \times 20000 = 4000$$

$\therefore$  number of people to whom loan are disbursed

$$= 4000 - 400 = 3600.$$

**S61. Ans.(e)****Sol.** ATQ

$$X = \frac{9600}{100} \times 100 = 16000$$

$$Y = \frac{16000}{40} \times 100 = 40000$$

And

$$X + Y + Z = 20000 \times 3$$

$$Z = 60000 - 40000 - 16000$$

$$Z = 4000$$

People who are eligible for loan

$$= 16000 \times \frac{30}{100} = 4800$$

$$\text{Required percentage} = \frac{4800}{4000} \times 100 = 120\%$$

**S62. Ans.(b)****Sol.** total people who are approached for loan

$$= 9600 + 8400 = 18000$$

total population of the city

$$= \frac{18000}{30} \times 100 = 60000$$

$$\text{Required\%} = \frac{18000 \times \frac{10}{100}}{60000} \times 100 = 3\%$$

**S63. Ans.(d)****Sol.** Let p men can do the task in (d - 2) days

And q boys can do the task in d days

Ratio of efficiency of man to boy = 3:1

$$3p(d - 2) = 1 \times q \times d$$

Now value of d should be positive to satisfy the equation.

**From (i)**

Let, p = a

q = 2a

$$3a(d - 2) = 2a(d)$$

$$d = 6, \text{ it is possible}$$

**From (ii)**

Let, p = 2x

q = 5x

$$3 \times 2x(d - 2) = 5x(d)$$

$$6d - 12 = 5d$$

$$d = 12, \text{ it is possible}$$

**From (iii)**

Let, p = 2b

q = 3b

$$3 \times 2b(d - 2) = 3b(d)$$

$$6d - 12 = 3d$$

$$d = 4, \text{ it is possible}$$

**From (iv)**

$$\text{Let, } p = 16e$$

$$q = 35e$$

$$3 \times 16e(d - 2) = 35e(d)$$

$$48d - 96 = 35d$$

$$13d = 96$$

$$d = \frac{96}{13} \text{ it is possible}$$

**S64. Ans.(a)**

**Sol.** Let 'X' liters of mixture taken out from the vessel and 'Y' liters of acid B added

Initial ratio of acid A to acid B in vessel = 5 : 1

$$400 - \frac{5}{6}X = 80 - \frac{X}{6} + Y + 250$$

$$210 = 2X + 3Y \text{----- (i)}$$

Only option A, B & D are possible options which satisfy the equation (i)

**S65. Ans.(c)**

**Sol.** Let CP of article = 100x Rs.

So, MP of article = 140x Rs.

**From (A)**

When profit is 22.5%, then selling price of article = 122.5x Rs.

$$\text{Discount (d)\%} = \frac{140x - 122.5x}{140x} \times 100 = 12.5\%$$

$$\text{And, when discount doubled then profit} = 140x \times \frac{75}{100} - 100x = \text{Rs. } 5x$$

$$\text{Profit \%} = \frac{5x}{100x} \times 100 = 5\%$$

So, option (A) possible to fill the both respective fillers

**From (B)**

When profit is 33%, then selling price of article

$$= 133x \text{ Rs.}$$

$$\text{Discount (d)\%} = \frac{140x - 133x}{140x} \times 100 = 5\%$$

And, when discount doubled then profit

$$= 140x \times \frac{90}{100} - 100x = \text{Rs. } 26x$$

$$\text{Profit \%} = \frac{26x}{100x} \times 100 = 26\%$$

So, option (B) possible to fill the both respective fillers

**From (C)**

When profit is 19%, then selling price of article

$$= 119x \text{ Rs.}$$

$$\text{Discount (d)\%} = \frac{140x - 119x}{140x} \times 100 = 15\%$$

And, when discount doubled then profit

$$= 140x \times \frac{70}{100} - 100x = \text{Rs. } -2x$$

So, option (C) can't fill the both respective fillers, because it gave a loss

**From (D)**

When profit is 26%, then selling price of article

$$= 126x \text{ Rs.}$$

$$\text{Discount (d)\%} = \frac{14x}{140} \times 100 = 10\%$$

And, when discount doubled then profit

$$= 140x \times \frac{80}{100} - 100x = 12x \text{ Rs.}$$

$$\text{Profit \%} = \frac{12x}{100x} \times 100 = 12\%$$

So, option (D) possible to fill the both respective fillers

**From (E)**

When profit is 23.2%, then selling price of article = 123.2x Rs.

$$\text{Discount (d)\%} = \frac{140x - 123.2x}{140x} \times 100 = 12\%$$

$$\text{And, when discount doubled then profit} = 140x \times \frac{76}{100} - 100x = \text{Rs. } 6.4x$$

$$\text{Profit \%} = \frac{6.4x}{100x} \times 100 = 6.4\%$$

So, option (E) possible to fill the both respective fillers

So, only option A, B, D & E possible to fill both respective fillers

**S66. Ans.(d)**

**Sol.** Let the number of spelling mistakes and whole word mistakes be  $5x$  and  $3x$  respectively in long questions.

Let number of correct questions in long section be  $y$

ATQ

Total marks obtained in long section

$$= 10y - (5x \times 0.5 + 3x \times 0.75) = 150.5$$

For  $x=2$ ,  $y$  will have integral value i.e.  $y$

$$= 16 \text{ and } y < 18$$

So, number of questions corrected by him in short section = 32

Total marks obtained by him in short section

$$= 32 \times 5 = 160$$

**S67. Ans.(b)**

**Sol.** Let number of spelling errors made by A in short question be  $4x$

Then number of spelling errors in long section

$$= 5x$$

ATQ

$$16 \times 10 - 5x \times 0.5 = 135 \Rightarrow$$

$$x = 10$$

Let number of questions corrected in short section be 'a'

ATQ

$$a \times 5 - 40 \times 0.5 = 160 \Rightarrow a = 36$$

And as he attempted 38 short questions

Number of questions did wrong by him in short section = 2

**S68. Ans.(b)**

**Sol.** Number of questions answered correctly by B in short section =  $\frac{175+43 \times 0.5+18 \times 0.75}{5} = 42$

Total questions answered correctly by B

$$= 42 + 14 = 56$$

Spelling errors done by D = 56

Spelling errors done by D in short sections = 32

And spelling errors done by D in long sections = 24

$$\text{Total marks obtained by D} = (15 \times 10 - 24 \times 0.5) + (40 \times 5 - 32 \times 0.5) = 322$$

**S69. Ans.(e)**

**Sol. From I -**

Let  $X - Y = -2$  ( $X < Y$ )

Let  $a = 4$  and  $b = 2$

Then  $(-2)^4 > (-2)^2$  so this condition is also satisfying ( $X < Y$ )

Hence, we can't determine of  $X > Y$

**From II -**

If we take  $p = 4$  and  $q = 2$  or  $p = 6$  and  $q = 4$  so on

And  $X = -1$  and  $Y = -2$

Then it will be false.

So, Statements **(I)** and **(II)** taken together are not sufficient to answer the question

**S70. Ans.(e)**

**Sol.** Let total profit of Bharat and Ekta is = Rs. 100x

Let investment of Ekta is Rs. y

Profit share of Bharat and Ekta

$$= 6000 \times 11 : 12 \times y = 5500 : y$$

Final profit share of Bharat = Rs. 50x

ATQ

$$100x \times \frac{20}{100} + 80x \times \frac{5500}{5500+y} = 50x$$

$$20x + 80x \times \frac{5500}{5500+y} = 50x$$

$$8 \times 5500 = 3 \times 5500 + 3y$$

$$= \frac{5 \times 5500}{3}$$

$$y = \text{Rs. } 9166.67$$

**S71. Ans.(c)**

**Sol.** ATQ,

$$\text{On Monday} = \frac{900-750}{750} \times 100 = 20\% \text{ more}$$

$$\text{On Tuesday} = \frac{1000-800}{800} \times 100 = 25\% \text{ more}$$

$$\text{On Wednesday} = \frac{1000-700}{700} \times 100 = 42\frac{6}{7}\%$$

$$\text{On Thursday} = \frac{950-950}{950} \times 100 = 0\%$$

$$\text{On Friday} = \frac{1200-800}{800} \times 100 = 50\% \text{ more}$$

Required number of instances = 3

**S72. Ans.(e)**

**Sol.** Cost price of 1234 units of share for individual (on Monday) =  $1234 \times 600 = \text{Rs.}740,400$

$$\text{Required difference in \%} = \frac{(1100-950) \times 1234}{740400} \times 100$$

$$= 25\%$$

**S73. Ans.(e)**

**Sol.** ATQ,

Profit/loss earned on Monday

$$= 600 - 750 = \text{Rs.}150 \text{ loss}$$

Profit/loss earned on Tuesday

$$= 700 - 800 = \text{Rs.}100 \text{ loss}$$

Profit/loss earned on Wednesday

$$= 1000 - 700 = \text{Rs.}300 \text{ profit}$$

Profit/loss earned on Thursday

$$= 800 - 950 = \text{Rs.}150 \text{ loss}$$

Profit/loss earned on Friday

$$= 1200 - 800 = \text{Rs.}400 \text{ profit}$$

**S74. Ans.(c)**

**Sol.** ATQ,

$$\text{On Monday} = 750 - 600 = \text{Rs.} 150$$

$$\text{On Tuesday} = 800 - 600 = \text{Rs.} 200$$

$$\text{On Wednesday} = 700 - 650 = \text{Rs.} 50$$

$$\text{On Thursday} = 950 - 800 = \text{Rs.} 150$$

$$\text{On Friday} = 800 - 650 = \text{Rs.} 150$$

Required day is Wednesday.

**S75. Ans.(c)**

**Sol.** Number of defective fans found during testing in March =  $\frac{5600}{20} = 280$

Total number of defective fans in that month

$$= \frac{280}{70} \times 100 = 400$$

$$\text{Required \%} = \frac{400}{2400} \times 100 = 16\frac{2}{3}\%$$

**S76. Ans.(b)**

**Sol. Option I:** Extra cost

$$= 1600 \times 2.5 + 150 \times \frac{70}{100} \times 20 + \frac{150 \times 30}{100} \times 60$$

$$= \text{Rs} (4000 + 2100 + 2700) = \text{Rs} 8800$$

**Option II:** Extra cost

$$= 1600 \times 4 + 150 \times \frac{90}{100} \times 20 + \frac{150 \times 10}{100} \times 60$$

$$= \text{Rs} 10000$$

Required difference = 1200



**S77. Ans.(d)**

**Sol.** Let number of all defective units in January and April be x and y respectively.

ATQ,

$$y \times \frac{90}{100} \times 20 - \frac{x \times 70}{100} \times 20 = 5300$$

$$\Rightarrow 18y - 14x = 5300$$

...(i)

And,

$$\frac{x \times 30}{100} \times 60 - \frac{y \times 10}{100} \times 60 = 900$$

$$\Rightarrow 18x - 6y = 900$$

...(ii)

From (i) & (ii)

$$X = 200 \text{ and } y = 450$$

$$\text{Required ratio} = \frac{200}{450} = 4 : 9$$

**S78. Ans.(b)**

**Sol.** Number of defective items sold to the customer =  $\frac{1620}{60} = 27$

Number of all defective units in may

$$= \frac{27}{10} \times 100 = 270$$

$$\text{Total manufactured units} = \frac{270 \times 7}{180} \times 100 = 1050$$

**S79. Ans.(d)**

**Sol.** Let the number of girls be x

Then, numbers of boys = (x + 50)

Let number of girls who joined the college be y

Atq,

$$\frac{x+50}{x+y} = \frac{2}{5}$$

$$\Rightarrow 5x + 250 = 2x + 2y$$

$$\Rightarrow 3x + 250 = 2y$$

$$\Rightarrow y = \frac{3x+250}{2} = \frac{3x}{2} + 125$$

For y to be minimum, x will be 2

$$y = \frac{3 \times 2}{2} + 125 = 128$$

**S80. Ans.(b)**

**Sol.** Let gold and copper used in first ornament be 6a and 5a

Let gold and copper used in second ornament be 5b and 3b

$$\Rightarrow 6a + 5b = 122 \text{ ... (i)}$$

$$5a + 3b = 90 \text{ ... (ii)}$$

Solving equation (i) and (ii) we get

$$a = 12$$

$$b = 10$$

Weight of second type ornament

$$= (5 + 3) \times 10 = 80 \text{ gm}$$

$$\text{Number of ornaments} = \frac{80}{8} = 10$$

**S81. Ans.(c)**

**Sol.** The first part in the arrangement will be (4) because it is the most appropriate starter of the sentence which is discussing about coal fired power plants. And will be followed by (2) as it completes (4). The next part in the arrangement will be (3) followed by (1) to make a meaningful sentence. Hence the correct arrangement is 4231.

**S82. Ans.(b)**

**Sol.** The first part in the arrangement will be (2) because it is the only viable starter. Next in the arrangement will be (1) as at the end of (2) article 'an' is used which will be followed by 'investment'. So the second part in the arrangement will be (1) which will be later followed by (4) and (3) to make a meaningful sentence. Hence, the correct option choice would be option (b)

**S83. Ans.(a)**

**Sol.** First part in the arrangement could be either (4) or (3) but choosing (3) as the starting of the sentence will hinder the sentence structure. So, we will start the sentence with (4). Next in the arrangement will be (1) because it is explaining the process and procedures, this will be later followed by (2) and (3) to make a meaningful sentence. Hence, the correct answer choice would be option (a)

**S84. Ans.(d)**

**Sol.** In the given sentence, only option only (3) is the most viable starter of the given sentence. This will be later followed by (1) because it forms a coherent part of the sentence as, 'action points'. Next in the arrangement will be (2) followed by (4). Hence, the correct answer choice would be option (d)

**S85. Ans.(b)**

**Sol.** The correct sequence of the rearrangement will be DCA. However, sentence (B) fails to make coherent sense with the passage because the remaining sentences are discussing about The White Paper that goes on to enumerate several action points that the government must work on to enhance the transmission sector and sentence (B) is discussing about the process to develop transport system in the country. Hence, the correct answer choice would be option (b)

**S86. Ans.(c)**

**Sol.** Crunches means crush (a hard or brittle foodstuff) with the teeth, making a loud but muffled grinding sound.

Sanctions mean a threatened penalty for disobeying a law or rule. Impinge means to have an effect on something, often causing problems by limiting it in some way

Distinguish means very successful, authoritative, and commanding great respect.

Hence, the correct combination of word to fill the given blanks would be option (c)

**S87. Ans.(b)**

**Sol.** Deter means prevent the occurrence of. Ripen means become or make ripe.

Conscious means determined and intentional

Debilitating means (of a disease or condition) making someone very weak and infirm Impacting means a powerful effect that something, especially something new, has on a situation Unsparing means given freely and generously

So, from the given options, only option (b) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (b)

**S88. Ans.(e)**

**Sol.** Drastically means severe and sudden or having very noticeable effects Eloquently means fluency or persuasiveness in speaking or writing.

Unravelling: investigate and solve or explain (something complicated or puzzling) Hauled means propel or pull oneself with difficulty.

So, from the given options, only option (e) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (e)

**S89. Ans.(c)**

**Sol.** Tricky: If a piece of work or problem is tricky, it is difficult to deal with and needs careful attention or skill

Assiduity: constant or close attention to what one is doing Reprobate: a person without morals who is disapproved of

Devious means showing a skilful use of underhand tactics to achieve goals.

So, from the given options, only option (c) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (c)

**S90. Ans.(e)**

**Sol.** Altercate means dispute or argue noisily and publicly.

Duping means to deceive someone, usually by making that person do something that they did not intend to do

Extraordinary means very unusual, special, unexpected, or strange Protract means lasting for a long time or longer than expected or usual. Perspicuous means clearly expressed and easily understood; lucid

So, from the given options, only option (e) will fill the given blanks to make the given sentences both grammatically and contextually correct. Hence, the correct choice would be option (e)

**S91. Ans.(b)**

**Sol.** The lines in the paragraph 1st “While President Hassan Rouhani clinched the agreement in 2015 despite opposition from hardliners, his promise was that it would help lift sanctions, providing relief to Iran’s economy.” make option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

**S92. Ans.(b)**

**Sol.** As per the lines given in the passage “European countries have been working on a mechanism, which is still in the initial stages, that allows Europe to trade with Iran through a barter system avoiding the dollar and circumventing sanctions.” the option (b) is correct answer choice.

**S93. Ans.(d)**

**Sol.** As per the line of which (A) is part options (a) and (b) do not form a grammatically correct sentence. Option (c) also does not fit as per the theme of the sentence. But using option (d) makes a grammatically and contextually correct sentence. Hence, option (d) is the correct answer choice.

**S94. Ans.(b)**

**Sol.** The lines in the paragraph 3rd “the most basic way to secure our space capabilities is to distribute them across many different satellites and spacecraft, so that business continuity is unaffected even if an adversary manages to disable one or more of our satellites” makes option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

**S95. Ans.(d)**

**Sol.** From the paragraph 4th, one can infer the meaning of the phrase. That is for space technology, ISRO is the only option that India is using now. But India should go for privatising the Space Technology too. Hence, option (d) is the correct answer choice.

**S96. Ans.(c)**

**Sol.** As per the starting of the passage and the lines given on the beginning of the passage “must ramp up both our capacity to use space and our capacity to deny our adversaries the reliable use of space” the option (c) is correct answer choice.

**S97. Ans.(c)**

**Sol.** Only option (c) can be inferred from the given passage. Hence, option (c) is the correct answer choice.

**S98. Ans.(b)**

**Sol.** The lines in the paragraph 3rd “ If the top court had upheld the tribunal’s verdict – on the grounds that the law wasn’t clear about how sale proceeds would be divided – banks would have had to kiss goodbye to substantial recoveries, step up bad-loan provisions and push more salvageable debtors into liquidation, leading to unnecessary job losses.” make option (b) as the correct answer. Other options are either not mentioned in the passage or not correct as per the context of the passage. Hence, option (b) is the correct answer choice.

**S99. Ans.(c)**

**Sol.** As per the paragraph given in the end of the passage “would have required financial creditors to share the money from any new buyer of a bankrupt business equally with miscellaneous suppliers and other unsecured lenders.” the option (c) is correct answer choice.

**S100. Ans.(c)**

**Sol.** The meaning of the word ‘mired’ is ‘to be involved in a difficult situation, especially for a long period of time’. Thus the meaning of the phrase is “to get stuck or entangled in something.” So, the meaning of the phrase can be inferred from the (I) and (II) statements. Hence, option (c) is the correct answer choice.

**S101. Ans.(d)**

**Sol.** Both options (a) and (c) can be inferred from the given passage. Hence, option (d) is the correct answer choice.

**S102. Ans.(d)**

**Sol.** To validate the answer, refer to the first paragraph of the passage, which states, “One of the main constraints in trade between Russia and India is the lack of smooth independent banking infrastructure connecting the two countries.” Here, the statement given in option (d) clearly justifies the quoted text. Hence, option (d) is the most suitable answer choice.

**S103. Ans.(b)**

**Sol.** To validate the answer, refer to the second paragraph, which states, “With US dollar payments put on hold in 2018, India and Russia had to urgently look for alternative solutions. Options on the table included coming back to trading in rupees and roubles, in euros, Singaporean dollars, etc. Importantly, this situation attracted the attention of bankers and decision-makers on both sides to the issue of payments.” Here, the statement given in option (b) clearly justifies the quoted text. Hence, option (b) is the most suitable answer choice.

**S104. Ans.(d)**

**Sol.** Refer to the second paragraph of the passage given above, which mentions, “Although India aims to diversify its’ defence supplies and localize development and production, Indian officials have iterated consistently that India’s relations with Russia in the sphere of defence will remain a priority despite the unprecedented pressure coming from the West.” The statement given in option (d) clearly justifies the quoted text. Hence, option (d) is the most suitable answer choice.

**S105. Ans.(b)**

**Sol.** Pass up: Decline a chance

Queer up: Mess up, ruin

Rattle off: Quote figures rapidly. Clear off: Leave somewhere quickly. Close Up: Join together.

**S106. Ans.(c)**

**Sol.** Mark out: Draw lines to enclose an area.

Max out: Take something to the limit, reach a limit.

Pack away: Put something where it belongs.

Palm off: Pretend something is better than it is in order to sell it.

Bawled Out: to reprimand loudly or severely

**S107. Ans.(c)**

**Sol.** Claw Back: an act of retrieving money already paid out, typically by taxation.

Hook Up: Meet someone.

Knuckle Under: Submit to authority

Lash Out: React angrily

Latch on: Understand, often after a long time.

**S108. Ans.(d)**

**Sol.** Jaw away: Talk just for the point of talking rather than having anything to say.

Keel Over: Surrender, give in.

Jazz Up: Make something more interesting or attractive.

Jerk Around: Behave stupidly.

Jam On: Apply or operate something forcefully.

**S109. Ans.(c)**

**Sol.** Refer to the fourth last line of the passage given above, which mentions, "Plastics may be less expensive than other inputs in manufacturing, but recycling them into new products extends their life and provides a substitute for virgin material." Here, the quoted text can be clearly inferred from the statement given in option (c). Hence, option (c) is the most suitable answer choice.

**S110. Ans.(d)**

**Sol.** To validate the answer, refer to the lines mentioned in the paragraph, "There is also a big opportunity here, which the trade, municipal governments and pollution control authorities need to see. The two prongs of the solution are packaging innovation that reduces its use by using alternatives, and increasing the process of separation, collection and dissemination of waste." Here, statements given in options (b) and (c) clearly justify the quoted text. Hence, option (d) is the most suitable answer choice.

**S111. Ans.(b)**

**Sol.** Here, the passage given above has discussed the huge amount of plastic wastes especially the plastic which is used by corporates for packaging. It further mentions the need to recycle it to prepare fresh material. Hence, option (b) is the most suitable answer choice.

**S112. Ans.(c)**

**Sol.** To validate the answer, refer to the passage, which states, “It is eight years since the concept of Extended Producer Responsibility (EPR) was incorporated into the Plastic Waste Management Rules, but municipal and pollution control authorities have failed to persuade commercial giants to put in place a system to collect and process the waste.” Here, the statement given in option (c) clearly justifies the quoted text. Hence, option (c) is the most suitable answer choice.

**S113. Ans.(d)**

**Sol.** To validate the answer, refer to the lines, “For one, the current account deficit widened to 2.4% of gross domestic product in the first quarter of 2018-19 and is expected to reach 3% for the full year. The rupee, which is down about 16% since the beginning of the year, doesn’t seem to be showing any signs of recovery either. Further, the growth in the sales of petrol and diesel has already been affected adversely as their prices have shot through the roof. All this will likely weigh negatively on the prospects of the Indian economy, the world’s fastest-growing, in the coming quarters.” From the quoted text, we can infer all the three given statements. Hence, option (d) is the most suitable answer choice.

**S114. Ans.(c)**

**Sol.** To validate the answer, refer to the lines, “Notably, speaking at the same event, Saudi Arabian Energy Minister Khalid A. Al-Falih refused to openly commit to lower oil prices, opting instead to say that the price of oil could have been much higher but for the efforts taken by his country to boost supply.” Here, the statement given in option (c) clearly justifies the quoted text. Hence, option (c) is the most suitable answer choice.

**S115. Ans.(d)**

**Sol.** To validate the answer, refer to the first few lines of the passage given above, which mentions, “At a gathering of prominent oil ministers in New Delhi on Monday, Prime Minister Narendra Modi urged oil-producing countries to reduce the cost of energy in order to aid the global economy in its path towards recovery. Mr. Modi also called for a review of payment terms, demanding the partial use of the rupee instead of the U.S. dollar to pay for oil, in order to ease the burden on oil-importing countries in the wake of the strengthening of the dollar.” Here, we can infer the quoted text from the statements given in options (a) and (c). Hence, option (d) is the most suitable answer choice.

