Solutions

1. Ans. A
The error is in the first part. 'Have been' is used in the part along with 'news', but grammatically 'news' always takes a singular helping verb. Thus, 'have been' needs to be replaced with 'has been'.

2. Ans. A
Instead of using the words 'most vile', 'vilest' should be used in the sentence to make it correct.

3. Ans. E
The sentence is grammatically and logically correct.
So, option E is correct.

4. Ans. A
The statement is about something in past, thus 'wonder' should be replaced with 'wondered'. So, option A is correct.

5. Ans. C
The error lies in part C of the sentence as the verb 'were' is incorrect and needs to be replaced with 'was' as the subject is singular which is 'the decline'. To make the subject and the verb agree it should read as:'..and reciprocity was identified as..'

6. Ans. E
Refer to the last question of the series.

7. Ans. B
Refer to the last question of the series.

8. Ans. C
Refer to the last question of the series.

9. Ans. D
Refer to the last question of the series.

10. Ans. D
While arranging sentences in a paragraph, it is important to understand the central idea or the major event being talked about so that subsequent themes or events can be judged accordingly.
The first statement should be B as it introduces us to the major issue around which the events revolves. Next should be statement D as it introduces the incident being talked about in specific. It should be followed by statement A which talks about the action taken by the farmer. Next should be statement F which states what happened next. It should be followed by statement E which states how the mule used the mud to his advantage for getting out of the well. The last sentence should be C as it concludes and states what happened as a result of the entire event.
Hence, the correct sequence is BDAFEC.

11. Ans. B
Correct Spelling: Commemoration

12. Ans. A
Correct Spelling: Solemness

13. Ans. D
Correct Spelling: Connive

14. Ans. C
Correct Spelling: Flamboyant

15. Ans. A
Correct Spelling: Sparse

16. Ans. D
DEPARTURE means "the action of leaving, especially to start a journey". Birbal was leaving from Persia. Hence Option D is correct.

17. Ans. A
The nobleman asked Birbal how he would compare the king of Persia to his own king. Hence Option A is correct.

18. Ans. E
THOUGHT means an idea or opinion produced by thinking. Birbal said that the nobleman's king is the full moon whereas his king can be THOUGHT of as the quarter of the moon. Hence Option E is correct.

19. Ans. B
The helping verb COULD is used to show the past tense of 'can'. Hence Option B is correct

20. Ans. C
Birbal convinced Akbar that he compared him with the quarter of the moon because the full moon disappears and DIMINISHES in size that is reduced in size whereas the quarter moon grows with strength. Hence Option C is correct.

21. Ans. A
PROCLAIMED means "to announce officially or publicly". Hence Option A is correct according to the context of the passage.

22. Ans. C
Birbal convinced Akbar that his power is GROWING day by day just like a shining moon. Hence Option C is correct

23. Ans. C
The merchant when inquired the three brothers if they had seen somebody cross by that road, the three brothers answered the merchant through their power of reasoning and logic and could not get him to reason out. He thus took them to the king.

24. Ans. C
It can be inferred from the following statements of the passage, 'The footprints we saw were large ones, so first brother deduced that it was a big camel. The camel had grazed on only one side of the road,' said the second, so I knew it was one-eyed.'

25. Ans. C
It can be inferred from the following statements of the passage, 'If you three claim to be so clever, let me set a task for you. I will place before you a wooden box which will be locked. You will have to tell me what it contains without looking inside'.

26. Ans. A
Panic is a sudden sensation of fear which is so strong as to dominate or prevent reason and logical thinking. Contrary to this, 'calm' is the most suitable response.

27. Ans. C
Deduced means closely fixed in place; not easily moved; Inferred means deduce or conclude (something) from evidence and reasoning rather than from explicit statements.
Hence option C is correct

28. Ans. C
'Firmly' means tightly or in a way that will not become loose.
'Tightly' means closely fixed in place; not easily moved.
Hence, 'tightly' is similar in meaning to 'firmly'.

29. Ans. B
'Closely' means being near and in close proximity to.
'Watchfully' means closely observant or alert. Hence, 'watchfully' is similar in meaning to 'closely'.

30. Ans. B
None of the brothers saw the camel carrying a lady along with a child on its back, they saw the footprints of a woman and a child where the camel had sat down to rest.
It can be inferred from the last few lines of the passage.

31. Ans. B
Statements:
R > S $\leq$ T < U, T > V, W $\geq$ U
Conclusions:
R > S $\leq$ T > V
I. R > V - No relation can be established.
W $\geq$ U > T > V
II. W>V (true)
Hence, conclusion II is true.

32. Ans. D
A $\geq$ B = C $\leq$ D, E < B $\geq$ F
Conclusions:
A $\geq$ B > E
I. A $\geq$ E (false)
D$\geq$C=B >E
II. D $\geq$ E (false)
Hence, Neither conclusion I nor II is true.

33. Ans. A
I $\leq$ J < K $\geq$ L, J $\leq$ M, N > K
Conclusions:
I $\leq$ J < K < N
I. I < N (true)
M $\geq$ J < K $\geq$ L
II. L $\leq$ M (false)
Hence, conclusion I is true.

34. Ans. E
I. M$\geq$J & J$\geq$I which means M$\geq$I
So conclusion I is true.
II. N>K & K$\geq$L which means N>L
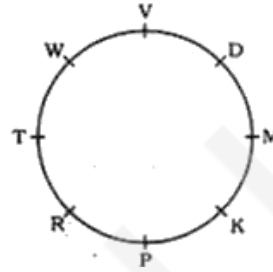So conclusion II is also true.

35. Ans. E
I. P$\geq$N & N$\geq$M which means P$\geq$M
So conclusion I is true.
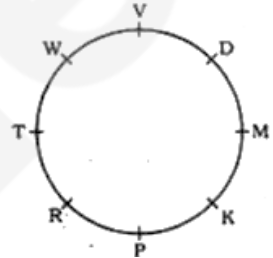II. Q>N & N>O which means Q>O
So conclusion II is also true.

36. Ans. B

R is second to the left of K
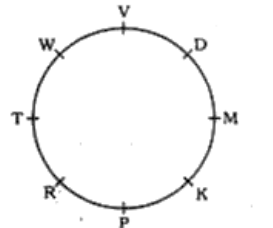Hence Option B is correct

37. Ans. A

D is to the immediate left of V
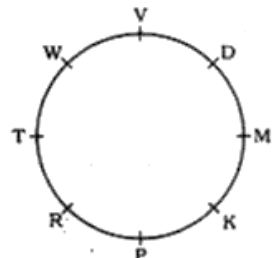Hence Option A is correct

38. Ans. E

R is third to the right of V
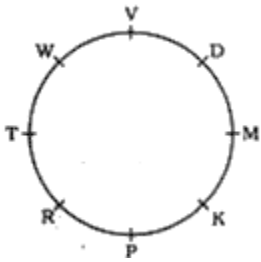Hence Option E is correct

39. Ans. A

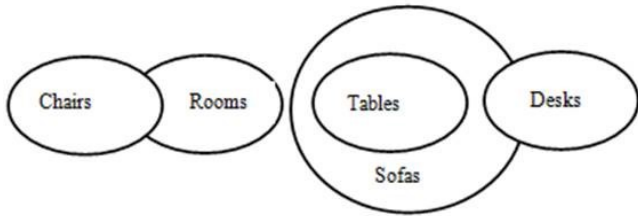R's position with respect to V is Third to the right.
Hence Option A is correct
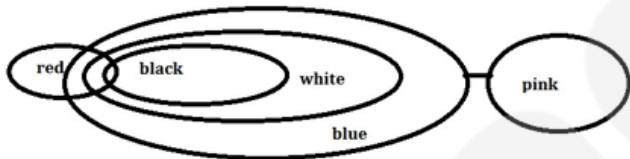
40. Ans. D

R faces D. In all others there is one person between the two. Thus RD is the odd one out.
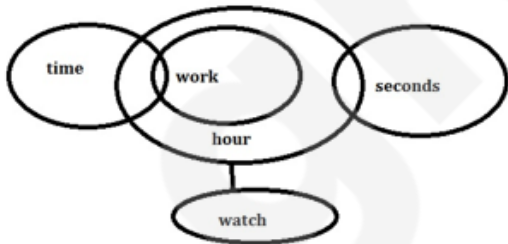Hence Option D is correct

41. Ans. A

Conclusions:
I No
II No
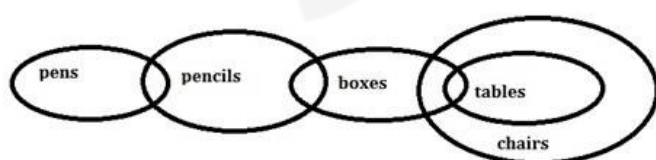III No
IV No
Hence none follows.

42. Ans. C

All red can never be pink hence All red being pink is a possibility does not follow.
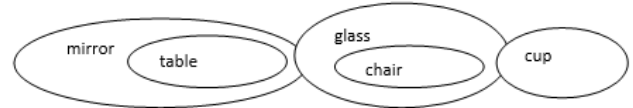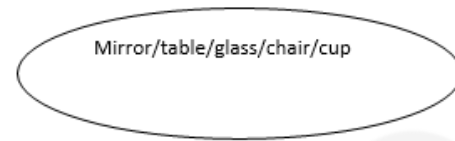
43. Ans. E

44. Ans. D

Only Conclusion I & III follows

45. Ans. E
A possible Venn-diagram is:

Another possible Venn-diagram is :

From the above Venn-diagram all the given conclusion follows. Hence answer is 5).
Shortcut: When All and Some's conditions are given is possibility case then all the possible answer follows.

46. Ans. D
F is sitting fifth to the right of A
⇒ A, - , - , -, -, F
D is sitting fifth to the right of E
⇒ E, - , - , -, -, D
E is on the immediate right of A
⇒ A, E
H is third to the left of D
⇒ H, -, -, D
B is third to the right of G
⇒ G, -, -, B
G is an immediate neighbour of A
⇒ G, A, E
Therefore the setting arrangement of A, B, C, D, E, F, G and H
G, A, E, B, H, C, F, D
Clearly E is 3rd to the left of C.

47. Ans. B
F is sitting fifth to the right of A
⇒ A, - , - , -, -, F
D is sitting fifth to the right of E
⇒ E, - , - , -, -, D
E is on the immediate right of A
⇒ A, E
H is third to the left of D
⇒ H, -, -, D
B is third to the right of G
⇒ G, -, -, B
G is an immediate neighbour of A
⇒ G, A, E
Therefore the setting arrangement of A, B, C, D, E, F, G and H
G, A, E, B, H, C, F, D
E is 6th from the right end
C is third in right from E.

48. Ans. A
F is sitting fifth to the right of A
⇒ A, - , - , -, -, F
D is sitting fifth to the right of E
⇒ E, - , - , -, -, D
E is on the immediate right of A
⇒ A, E
H is third to the left of D
⇒ H, -, -, D

B is third to the right of G
⇒ G, -, -, B
G is an immediate neighbour of A
⇒ G, A, E
Therefore the setting arrangement of A, B, C, D, E, F, G and H
G, A, E, B, H, C, F, D
Clearly G and D are in extreme end position.

49. Ans. B
F is sitting fifth to the right of A
⇒ A, - , - , -, -, F
D is sitting fifth to the right of E
⇒ E, - , - , -, -, D
E is on the immediate right of A
⇒ A, E
H is third to the left of D
⇒ H, -, -, D
B is third to the right of G
⇒ G, -, -, B
G is an immediate neighbour of A
⇒ G, A, E
Therefore the setting arrangement of A, B, C, D, E, F, G and H
G, A, E, B, H, C, F, D
Between HD, EC, AH and GB there are two persons between them but in BE there is no other person between them they are two immediate nighbours. Therefore BE is odd from others.

50. Ans. C
F is sitting fifth to the right of A
⇒ A, - , - , -, -, F
D is sitting fifth to the right of E
⇒ E, - , - , -, -, D
E is on the immediate right of A
⇒ A, E
H is third to the left of D
⇒ H, -, -, D
B is third to the right of G
⇒ G, -, -, B
G is an immediate neighbour of A
⇒ G, A, E
Therefore the setting arrangement of A, B, C, D, E, F, G and H
G, A, E, B, H, C, F, D
If A, B, C, D, E, F, G and H are sit in alphabetic order then
A, B, C, D, E, F, G, H

	1	2	3	4	5	6	7	8
arrangement	G	A	E	B	F	C	F	D
alphabetic	H	G	F	E	D	C	B	A

Therefore only one (C) has same sitting position.

51. Ans. C

Symbol	Digit

Such combination are: %7:?3:@2
Option C is correct.

52. Ans. C
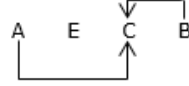
53. Ans. E
C B % 7 D $ B 5 C ? 3 D 9 @ 2 #
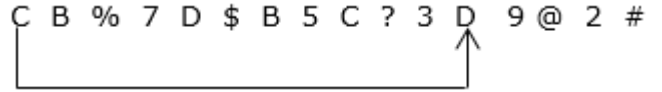
Option E is correct.

54. Ans. E
Second to the left of the 14th from the left end means 12th from the left. i.e. C

55. Ans. B
A E C B % 2 D $ E B 3 C ? 5 D E 7 @ 9 #
14th from the left after arrangement i.e. 5.
Option B is correct.

56. Ans. E

DAYS	SUBJECT
MONDAY	MATHEMATICS
TUESDAY	PSYCHOLOGY
WEDNESDAY	CHEMISTRY
THURSDAY	COMPUTER
FRIDAY	BIOLOGY
SATURDAY	PHYSICS
SUNDAY	ENGLISH

Computer is schduled for Thursday.

57. Ans. A

DAYS	SUBJECT
MONDAY	MATHEMATICS
TUESDAY	PSYCHOLOGY
WEDNESDAY	CHEMISTRY
THURSDAY	COMPUTER
FRIDAY	BIOLOGY
SATURDAY	PHYSICS
SUNDAY	ENGLISH

Saturday-Physics combinations of day-lecture is correct.

58. Ans. C

DAYS	SUBJECT
MONDAY	MATHEMATICS
TUESDAY	PSYCHOLOGY
WEDNESDAY	CHEMISTRY
THURSDAY	COMPUTER
FRIDAY	BIOLOGY
SATURDAY	PHYSICS
SUNDAY	ENGLISH

Two lectures are scheduled between Chemistry and Physics

59. Ans. A

DAYS		SUBJECT
MONDAY	→	MATHEMATICS
TUESDAY	→	PSYCHOLOGY
WEDNESDAY	→	CHEMISTRY
THURSDAY	→	COMPUTER
FRIDAY	→	BIOLOGY
SATURDAY	→	PHYSICS
SUNDAY	→	ENGLISH

60. Ans. C

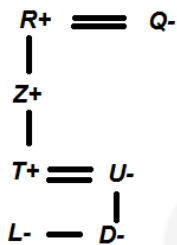| DAYS		SUBJECT
MONDAY	→	MATHEMATICS
TUESDAY	→	PSYCHOLOGY
WEDNESDAY	→	CHEMISTRY
THURSDAY	→	COMPUTER
FRIDAY	→	BIOLOGY
SATURDAY	→	PHYSICS
SUNDAY	→	ENGLISH

61. Ans. B
Family tree:

R+ ═══ Q-
|
Z+
|
T+ ═══ U-
|
L- ━ D-
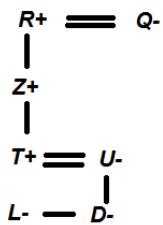
T is the only son of Z, so X will be daughter of Z.
Hence X is sister-in-law of U. So the answer is b).

62. Ans. D
Family tree:

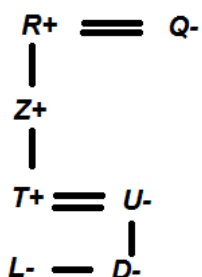R+ ═══ Q-
|
Z+
|
T+ ═══ U-
|
L- ━ D-

U is Mother of L. So answer is D).

63. Ans. C
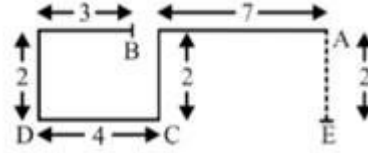Family tree:

R+ ═══ Q-
|
Z+
|
T+ ═══ U-
|
L- ━ D-
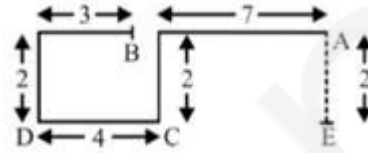
Q is Grandmother of T. So answer is c).

64. Ans. D
Point C, D would fall in a straight line.

65. Ans. E
8 m towards east.

66. Ans. A
7, 21, 5, 23, 3, ?
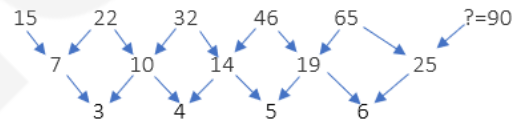The series follows difference and sum of 2 in alternate numbers, i.e.,
7 -2 = 5 (3rd number)
21 + 2 = 23 (4th number)
5 – 2 = 3 (5th Number)
Thus, 23 + 2 = ?, i.e. 25 (6th or the missing number)

67. Ans. D
The series follows a double step operation:

15   22   32   46   65   ?=90
   7   10   14   19   25
      3   4   5   6

68. Ans. C
9, 10, 18, 27, 91, ?
$10 = 9 + 1^2$
$18 = 10 + 2^3$
$27 = 18 + 3^2$
$91 = 27 + 4^3$
$? = 91 + 5^2$ i.e., ? = 116

69. Ans. B
17, 23, 35, 59, ?, 203
23 = 17 + 6
35 = 23 + 12 (i.e. 6x2)
59 = 35 + 24 (i.e. 12x2)
? = 59 + 48 (i.e. 24x2)
203 = + 96 (i.e. 48x2)

70. Ans. B
6, 7, 16, 51, 208, ?
7 = 6 * 1 + 1
16 = 7 * 2 + 2
51 = 16 * 3 + 3
208 = 51 * 4 + 4
? = 208 * 5 + 5, i.e. ? = 1045

71. Ans. C
Total number of units manufactured by company C
= 2.6 + 2.2 + 2.1 + 2.8 + 2.6
= 12.3
= 12.3 × 100 = 1230

72. Ans. E
Units sold by company E in the year 2006 = 1.4
Units sold by company E in the year 2007 = 1.7

% Increase = $\dfrac{1.7 - 1.4}{1.4} \times 100$

$= \dfrac{0.3}{1.4} \times 100 \approx 21$

73. Ans. D
Units sold by company D in the year 2006 = 3.0
Units manufactured by company D in the year 2007 = 2.2

Required percentage = $\dfrac{2.2}{3} \times 100 = 73.33$

74. Ans. E
Units manufactured by Company A and B together in year 2009 = 1 + 2.4
Units sold by Company A and B together in year 2009 = 0.4 + 1.3
Required ratio = 3.4 : 1.7
= 2 : 1

75. Ans. B
Total number of units sold by Company D over all the years
= 2.2 + 1.9 + 1.5 + 1.2 + 1.1
= 7.9

Required Average, $= \dfrac{7.9 \times 100}{5} = 158$

76. Ans. E
$4^4 \div 4^{2 \times 3} \times 4^4 = 4^{?-6}$

$\Rightarrow 4^{4-6+4} = 4^{?-6}$

$\Rightarrow 4^2 = 4^{?-6}$

$\Rightarrow 2 = ? - 6$

$\Rightarrow ? = 8$

77. Ans. B
650 × ?/100 = 1000 − 844
=>? = (156×100)/650 = 24

78. Ans. C
$\Rightarrow \dfrac{(?)^{\frac{9}{4}}}{(?)^{\frac{1}{4}}} = \dfrac{324}{9}$

$\Rightarrow (?)^{\left(\frac{9}{4} - \frac{1}{4}\right)} = 36$

$\Rightarrow (?)^2 = 36 = 6^2$

$\Rightarrow ? = 6$

79. Ans. C
$2\dfrac{1}{4} + 1\dfrac{1}{3} - 4\dfrac{1}{2} = ?$

$? = \dfrac{9}{4} + \dfrac{4}{3} - \dfrac{9}{2} = \dfrac{27 + 16 - 54}{12} = \dfrac{-11}{12}$

80. Ans. A
126/14 x 81 - 53 = 729 – 53 = 676
676 = (?)² → 26² = (?)²
Thus (?) = 26
Hence Option A is correct

81. Ans. E
$724 - 336 + 499 = ? + 112$

887 = ? + 112
? = 887 – 112 = 775
Hence option E is correct

82. Ans. E
$? = \dfrac{869.4 + 604.8}{489.5 - 398.5} = \dfrac{1474.2}{91} = 16.2$

83. Ans. C
$\sqrt{24^4} + 224 = ? \times 20^2$

» 24² + 224 = ? × 400
» 576 + 224 = ? × 400
» 800 = ? × 400
» ? = 800/400
? = 2

84. Ans. A
$\dfrac{185}{100} \times 1360 + \dfrac{16.5}{100} \times 1220$
2516 + 201.3
2717.3
2715 (approx.)

85. Ans. C
$\dfrac{80}{100} \times 220 + \left(\dfrac{x \times 655}{100}\right) = 250$

$176 + 6.55x = 250$

$6.55x = 74$

$x = 11.29 \approx 11$

86. Ans. B

Rate downstream $= \left(\dfrac{20}{2} =\right) 10$ kmph

Rate upstream $= \left(\dfrac{20}{4} =\right) 5$ kmph

Speed of boat in still water

$$= \frac{1}{2}(10+5)$$

$$= \frac{15}{2} = 7.5 \ kmph$$

87. Ans. D

S.I. $\dfrac{78000 \times 3 \times 13}{100}$ = ₹ 30420

Amount = 78000 + 30420 = ₹ 108420

88. Ans. E

Rate per annum = $\dfrac{30240 \times 100}{84000 \times 3}\% = 12\%$

∵ Compound Interest

$$= 84000\left[\left(1+\frac{12}{100}\right)^3 - 1\right]$$

$$= 84000\left[\left(1+\frac{3}{25}\right)^3 - 1\right]$$

$$= 84000\left[\left(\frac{28}{25}\right)^3 - 1\right]$$

$$= 84000\left[\frac{28\times28\times28 - 25\times25\times25}{25\times25\times25}\right]$$

$$= 84000\left[\frac{21952 - 15625}{15625}\right]$$

$$= 84000 \times \frac{6327}{15625}$$

= ₹ 34013.95

89. Ans. A

Let a woman takes W days & Child takes C days to complete the work.
Hence, ATQ:
6[{6/W}+{10/C}] = 1
And W = 10*6 = 60
Putting the value of W in above equation:
C = 150
Hence for completing the work in 10 days, (150/10) = 15 children will be needed.
Short trick: Number of days required = (6*10)/(10-6) = 15 days

90. Ans. B

C.P. of 20 kg of rice = (672/14) × 20 = Rs.960
C.P. of 15 kg of wheat = (432/12) × 15 = Rs.540
C.P. of 16kg of sugar = (504/18) × 16 = Rs.448
Total cost = 960 + 540 + 448 = Rs.1948
Hence option B is correct

91. Ans. C

Let the no. of girls be x.
So, the no. of boys = 4500 – x
The no. of boys and girls is increased by 12% and 17% respectively. As a result, the strength of the university becomes 5125.
So, we can write now,
[(4500 – x) × 12%] + [x × (17/100)] = 5125 – 4500
⇒ 54000 – 12x + 17x = 62500
⇒ 5x = 62500 – 54000
⇒ x = 8500/5
⇒ x = 1700
∴ The no. of girls = 1700.

92. Ans. B

Let nishant capital is x
(8500×36)/(x×24) = 15/12
x=10200

93. Ans. D

Let Pujan's present age be x years.

∴ Aruna's present age = $1.5x$ years

∴ Somy's present age = $\dfrac{1.5x}{2}$ years

After six years,

Pujan's age = $(x+6)$ years

Aruna's age = $(1.5x+6)$ years

Now, $1.4(x+6)=(1.5x+6)$

or, $1.4x+8.4=(1.5x+6)$

or, $0.1x = 2.4$

or, $x = 24$ years

∴ Somy's present age = 1.5*24/2=18
= 18 years

94. Ans. B

Distance travelled in 1st part
= 30 * (12/60) = 30 *(1/5) = 6 km
Distance travelled in 2nd part
= 45 * (8/60) = 45 * (2/15) = 6 km
Total distance = 12 km
Total time = 12 + 8 = 20 minutes = 20/60 hours = 1/3 hour
Average Speed = 12/ (1/3) = 36 km/hr

95. Ans. D

Let the number of days taken by C to complete the job be X.
Part of the job completed by A in a day= 1/24 and part of the job completed by B in a day= 1/40.
Part of the job completed by C in a day= 1/x.
Now A, B and C working for 6 days complete the job together in 12 days
Thus (1/24 + 1/40) * (12-6) + (1/24 +1/40 +1/x) * 6
=1 (Since only A and B will work for 6 days and A, B and C will work for the other 6 days)
Hence (1/15) * 6 + (1/15 +1/x) * 6 =1 (1/15 +1/x) * 6
= 1- 6/15 =9/15. Hence 1/15 +1/x =1/10. Thus,

10x+150 =15x, x=150/5 =30. Hence C alone can complete the job in 30 days. Hence option d

96. Ans. B
Let the cost price of the Radio = Rs. x
So, the cost price of the USB speaker = Rs. (840 – x)
Now, according to the question we can write,
[x × (15/100)] + [(840 – x) × (10/100)] = 102
⇒ 15x + 8400 – 10x = 10200
⇒ 5x = 10200 – 8400
⇒ x = 1800/5
⇒ x = 360
So, the cost price of Radio = Rs. 360
Then, the cost price of USB speaker = Rs. (840 – 360) = Rs. 480
∴ The required difference in price = Rs. (480 – 360) = Rs. 120.

97. Ans. A
Money used for savings + investments + miscellaneous = 25000 = 62.5% of salary
Money used for savings = money used for investments = 25000/3 = 8333.33
Salary = 25000/0.625 = 40000
Money used for expenditures = 0.25 * 40000 = 10000
Money used for education = 0.125 * 40000 = 5000
Money used for expenditures + savings = 10000 + 8333.33 = 18333.33
Money used for education and investment = 5000 + 8333.33 = 13333.33
Difference = 5000

98. Ans. A
There are total 12 balls in a buckets.
Required Probability .

$$P(E) = \frac{n(E)}{n(S)}$$

$$= \frac{4}{12} \times \frac{6}{11} \times \frac{2}{10} \times 3!$$

$$= \frac{4}{12} \times \frac{6}{11} \times \frac{2}{10} \times 6 = \frac{12}{55}$$

99. Ans. A
Let the selling price be X
Then loss = 0.30X
Cost price = X + 0.3X = 1.3X
Cost price: loss = 1.3: 0.3 = 13:3

100. Ans. B
Original radius= r   New radius=1.5r
Original height=" h   New Height= H
Acc. To question
$1.75 \times \pi r^2 h = \pi (1.5r)^2 H$

7h = 9H

Therefore, percentage increase = $\frac{9-7}{9} \times 100$

$= 22\frac{2}{9}\%$

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