

## Solutions

1. Ans. A

In the first few lines of the passage, it has been stated that "cheap personal computers (PCs) and servers, the Internet and its local wired/wireless feeder networks, and powerful, low-cost software..." has resulted into "a democratization of publishing and media production using digital technology" which implies that it is no more a privilege of the few.

2. Ans. C

It can be interpreted from the following statements of the passage "Nor is it to say that entertainment companies (e.g., film, music, radio, and television companies) and information companies (e.g., book, database, and serial publishers) have ceded the digital-content battlefield to the upstarts. Quite the contrary. High-quality, thousand-page-per-volume scientific journals and Hollywood blockbusters cannot be produced for pennies, even with digital wizardry."

3. Ans. E

It can be interpreted from the following statement of the passage, "Unconstrained access to past works helps determine the richness of future works."

4. Ans. C

The central theme that runs through the passage is digital technology and its impact on conventional media which is analysed while concluding by juxtaposing it to the challenge of copyright laws.

5. Ans. D

Statement (i) can be inferred from the following statements of the passage, "Information and entertainment companies still have an important role to play, and, even if they didn't, they hold the copyrights to a significant chunk of our cultural heritage." Moreover, it has been again stated in the passage that, "The thing about the future is that it is rooted in the past. Culture, even digital culture, builds on what has gone before."

Hence, option (i) is correct.

Statement (ii) can be inferred from the following statement, "Citizens have morphed from passive media consumers to digital-media producers and publishers".

Statement (iii) can be inferred from the following statements of the passage, "Not to say that print and conventional media are dead, of course, but it is clear that their era of dominance is waning."

6. Ans. C

Concocting stands for "creating or devising" whereas "manipulating" has a negative connotation that means "to control or influence". Hence, "devising" is the most similar word.

7. Ans. D

"Ceded" refers to "give up" or "yield" whereas "contended" means the contrary. Hence, "relinquish" is the most similar word.

8. Ans. B

"Connote" means to imply or suggest whereas "infer" is used for deducing from the explicit statements. Hence, the word "Predicate" is the most similar word.

9. Ans. E

All other words except "subservience" are synonyms of "dominance".

10. Ans. D

"Waning" means to "decrease in strength" whereas "accentuating" means to make more "noticeable" or "prominent".

11. Ans. C

The passage talks about the \$625 million grid-connected rooftop solar fund and not \$652.

12. Ans. C

Refer to the fourth line of the passage.

13. Ans. A

Refer to the following statement of the passage, 'Developing a strong solar manufacturing industry is essential for sustained economic growth, and to connect those who never had the boon of electricity.'

14. Ans. E

It can be inferred from the first paragraph.

15. Ans. D

After considering the context of the passage, 'Sunny times for solar' seems to be the most apt title for the passage.

16. Ans. E

'Aspiration' is the most similar word for ambition.

17. Ans. A

'Hurdle' refers to a barrier or an obstacle. Contrary to that 'opening' is the most apt response.

18. Ans. C

Stipulation refers to a condition of agreement. Corresponding to that clause is the most suitable response.

19. Ans. D

'Metering' refers to a proper measurement. Contrary to that 'guessing' is the most apt response.

20. Ans. A

Here, 'to exploit' has a positive meaning. Corresponding to that adventure is the most apt response which means an unexpected undertaking or experience.

21. Ans. D

The problem with the given statement is that of parallelism. The whole statement should use verb+ 'ing' form. Only C and D adhere to this. Out of these two, C is eliminated due to the use of 'avoiding of' which is incorrect. Only D is grammatically correct.

Hence D is the correct answer.

22. Ans. E

'To put a check on something' means to reduce or stop something. Since the given statement is correct, preference is given to 'no error'.

23. Ans. A

The answer to this is 'exorbitant prices are costing them an arm and a leg.' The phrase 'costs an arm and leg' is used to describe anything that is considered to be extremely expensive or excessively pricey.

24. Ans. B

A- 'Facilitate' needs to be replaced with 'facilitating' because the action in context hasn't finished and is in continual phase.

C- 'Transferring to power' is the incorrect phrase and needs to be replaced with 'transfer'.

D- The regulatory body has to 'work for' not 'work to', thus here is the wrong use of modal.

E- 'During' makes the statement timeline ambiguous. So, **option B is correct.**

25. Ans. E

A- The subject is 'trees', which is plural, so the use of 'has' is incorrect as a helping verb.

B- 'Approaching' is the wrong form of the verb.

C- This option mixes two tenses. The first part uses 'approached' which makes the action of shedding trees as an action of past but the use of 'gets' in the end makes the action of getting back leaves a present action; this ambiguity in tenses is incorrect.

D- The subject is plural and therefore 'its' can't be used to address the subject.

So, **option E is correct.**

26. Ans. E

The first statement tells us that the Austrian army has some kind of an advantage in the war since they are acquainted with the field where the French have to be fought. The word 'manoeuvre', which also means a military exercise of the troops, completes the sentence correctly. Manoeuvre also means 'to move skilfully', which makes it an ideal choice for the second statement as well. In the second statement, the cart has to be moved skilfully through the crowded store.

27. Ans. D

Multiple options may appear to fit in. However, 'Blatant' which means egregious, conspicuous is the most suitable according to the context and the tone of the statements.

28. Ans. A

The first question hints towards some kind of disagreement due to poor quality of goods received by the importer. Hence, 'contention' fits in well here. The word 'contention' also means an 'assertion in an argument', which makes it the suitable choice for the second statement as well.

29. Ans. C

In the first statement, the word negotiated fits in correctly as the 'terms' of the industrial issues are settled after negotiations. In the second statement, negotiated fits well as the word 'negotiated' also means 'finding a way through a difficult route'.

30. Ans. B

'Devised' is the most suitable response. It fits both the blanks contextually as well as grammatically.

31. Ans. B

'Splendid' means dazzling, distinguished, priceless. It fits in the context of both the statements aptly.

32. Ans. C

Scale is the most appropriate word for both the blanks. For first, it refers to the level and amount of operations. For the second it specifies a measurement degree.

33. Ans. D

Without is a preposition which means not using or taking something. It makes both the statements grammatically as well as contextually correct.

34. Ans. B

Since the baby was later adopted by the mayor, it must have been found 'abandoned'. Also, the political party must have 'abandoned' its prior policy since it led to the party's defeat in the elections.

35. Ans. B

Collapse means to fall down suddenly because of pressure or having no strength or support. Statement A, among all the options, collapse is the word that is suitable for the economy and budget. Statement B- If something falls down, it collapses. The word collapsing is appropriate for the sentence.

36. Ans. A

Refer to the last question of the series.

37. Ans. B

Refer to the last question of the series.

38. Ans. C

Refer to the last question of the series.

39. Ans. B

Refer to the last question of the series.

40. Ans. A

Option D should be the first statement as it introduces us to the subject i.e increasing fiscal vulnerabilities in the EMDEs as highlighted in the World Bank's new Global Economic Prospects report. Next follows statement E further elaborating the facts stated in the report that the government debt is soaring and fiscal balance has deteriorated. It should be followed by Statement C as it connects to the worsening government finances stated in the preceding statement. The next statement should be option A as it states that as far as the financial conditions of the global market is concerned, there is nothing to worry but a slight pressure on it may adversely affect these EMDEs. Next follows statement F that states the good performance of India during the given period. The use of "it" in statement B obviously relates to India mentioned in statement F.

The correct Sequence is DECAF B

41. Ans. B

The error in I is that the verb 'requiring' is incorrect and needs to be replaced with the noun 'requirement'. The preposition in II should not be 'up' but 'out' after the verb 'pointed'. The phrase 'pointed out' means 'identified or focused on.'

42. Ans. D

The verb 'backed' must be in simple past tense to make the sentence correct. The whole sentence is in past tense. Thus the verb 'back' in simple present is incorrect. The preposition after the word fight 'of' is incorrect and must be replaced with 'for' as people fight 'for' certain things and not 'of'.

Thus D is the correct answer.

43. Ans. C

The error lies only in II as the verb 'to passage' is incorrect and needs to be replaced with the conjugated form of the verb 'to be passed' to make the sentence correct. Thus C is the correct answer.

44. Ans. A

The error lies only in II of the sentence where the preposition 'upon' is incorrect and needs to be replaced with 'to'. 'Upon' is more formal term for on, especially in abstract senses. Things are shifted from one state to another. Thus 'to' is the correct preposition here.

45. Ans. C

The error in part I is that the verb 'wondered' in simple past is incorrect and needs to be replaced in present continuous form which is 'wondering'.

The error in part III is that the pronoun 'her' is missing after the verb 'loved' and it is mandatory to be written there to make the sentence grammatically correct.

Without the pronoun the sentence is incomplete.

Thus C is the correct answer.

46. Ans. D

The error lies only in part II of the sentence where the word 'judge' must be in plural form to make the sentence correct. It should read as: 'the three other judges held that it was.'

47. Ans. B

The error is in part III only where the word 'influencing' is incorrect and needs to be replaced with 'influential' to make the sentence correct. The correct adjective should be placed here.

48. Ans. B

The error in I is that the preposition 'on' must be present after the verb 'brought'. The phrase 'brought on' means 'led to the development of.'

The correct preposition to be used after the word 'challenges' is 'to' and not 'of'. The point mentioned is something positive so 'to' is the correct preposition. Had it been a problem mentioned here the preposition 'of' would have been correct.

49. Ans. E

The verb 'show' is plural and is incorrect with the singular noun 'experience'. The verb should also be singular, which is 'shows'.

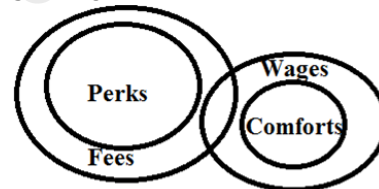
The correct adjective to be used before the word 'difficult' should be in comparative form 'more' and not superlative form 'most'. The word 'than' makes it clear that a comparison is being made between two things.

Thus E is the correct answer.

50. Ans. A

The verb 'set' in simple present tense is incorrect and needs to be replaced with the verb 'setting' in present continuous form to make the sentence correct.

51. Ans. B

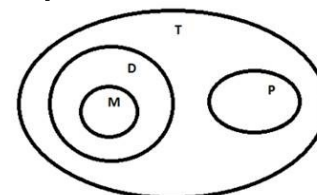


(Basic Diagram)

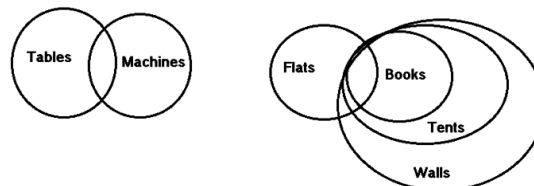
None of the conclusion follow from basic diagram. Either I or II follow.

52. Ans. C

**Explanation:**



53. Ans. B

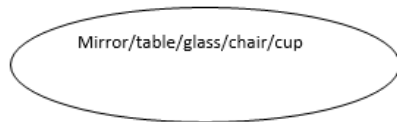


54. Ans. E

A possible Venn-diagram is:



Another possible Venn-diagram is :

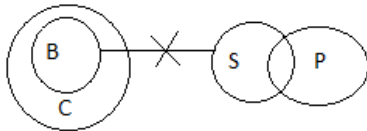


From the above Venn-diagram all the given conclusion follows. Hence answer is 5).

Shortcut: When All and Some's conditions are given is possibility case then all the possible answer follows.

55. Ans. E

The diagram is as follows:-



conclusion II, III & IV does not follow

56. Ans. B

• 3 persons watched movie between U and the one who watched Avengers and U watched movie before the one who watched Avengers but not on Monday. So U either watched on Tuesday or Wednesday.

**Case 1: If U watched on Wednesday-**

- P watched Inception two days before the one who watched Avengers. P watched on Friday.
- One person watched movie between P and the one who watched Logan. Then U watched Logan.
- Q watched Avatar just before U. So Q watched on Tuesday.
- One person watched movie between Q and T. T didn't watch movie on Thursday. So this case gets rejected.

Day	Person	Movie
Monday		
Tuesday	Q	Avatar
Wednesday	U	Logan
Thursday		
Friday	P	Inception
Saturday		
Sunday		Avengers

**Case 1: If U watched on Tuesday-**

- P watched Inception two days before the one who watched Avengers. P watched on Thursday.
- One person watched movie between P and the one who watched Logan. Then U watched Logan.
- Q watched Avatar just before U. So Q watched on Monday.
- One person watched movie between Q and T. T watched on Wednesday.
- S watched Batman before R who watched Thor. S watched on Friday and R watched on Sunday.
- T watched Superman and V watched Avengers.

Here is the final table:

Day	Person	Movie
Monday	Q	Avatar
Tuesday	U	Logan
Wednesday	T	Superman
Thursday	P	Inception
Friday	S	Batman
Saturday	V	Avengers
Sunday	R	Thor

Q watched on Monday.

57. Ans. A

• 3 persons watched movie between U and the one who watched Avengers and U watched movie before the one who watched Avengers but not on Monday. So U either watched on Tuesday or Wednesday.

**Case 1: If U watched on Wednesday-**

- P watched Inception two days before the one who watched Avengers. P watched on Friday.
- One person watched movie between P and the one who watched Logan. Then U watched Logan.
- Q watched Avatar just before U. So Q watched on Tuesday.
- One person watched movie between Q and T. T didn't watch movie on Thursday. So this case gets rejected.

Day	Person	Movie
Monday		
Tuesday	Q	Avatar
Wednesday	U	Logan
Thursday		
Friday	P	Inception
Saturday		
Sunday		Avengers

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Here is the final table:

Day	Person	Movie
Monday	Q	Avatar
Tuesday	U	Logan
Wednesday	T	Superman
Thursday	P	Inception
Friday	S	Batman
Saturday	V	Avengers
Sunday	R	Thor

T watched Superman.

58. Ans. C

• 3 persons watched movie between U and the one who watched Avengers and U watched movie before the one who watched Avengers but not on Monday. So U either watched on Tuesday or Wednesday.

**Case 1: If U watched on Wednesday-**

- P watched Inception two days before the one who watched Avengers. P watched on Friday.
- One person watched movie between P and the one who watched Logan. Then U watched Logan.
- Q watched Avatar just before U. So Q watched on Tuesday.
- One person watched movie between Q and T. T didn't watch movie on Thursday. So this case gets rejected.

Day	Person	Movie
Monday		
Tuesday	Q	Avatar
Wednesday	U	Logan
Thursday		
Friday	P	Inception
Saturday		
Sunday		Avengers

**Case 1: If U watched on Tuesday-**

- P watched Inception two days before the one who watched Avengers. P watched on Thursday.
- One person watched movie between P and the one who watched Logan. Then U watched Logan.
- Q watched Avatar just before U. So Q watched on Monday.
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- S watched Batman before R who watched Thor. S watched on Friday and R watched on Sunday.
- T watched Superman and V watched Avengers.

Here is the final table:

Day	Person	Movie
Monday	Q	Avatar
Tuesday	U	Logan
Wednesday	T	Superman
Thursday	P	Inception
Friday	S	Batman
Saturday	V	Avengers
Sunday	R	Thor

Two persons watched movie between P and R.

59. Ans. A

The arrangement is:

Day	Person	Movie
Monday	Q	Avatar
Tuesday	U	Logan
Wednesday	T	Superman
Thursday	P	Inception
Friday	S	Batman
Saturday	V	Avengers
Sunday	R	Thor

As per the given arrangement, 'Thor' would be related to 'Friday', since there is a gap of one day for the given movies.

60. Ans. E

The arrangement is:

Day	Person	Movie
Monday	Q	Avatar
Tuesday	U	Logan
Wednesday	T	Superman
Thursday	P	Inception
Friday	S	Batman
Saturday	V	Avengers
Sunday	R	Thor

As clearly mentioned in the above arrangement, 'V' watches 'Avengers' on 'Saturday'. Hence all the given statements are incorrect.

61. Ans. C

$$J = K \leq L$$

$$I. L > J$$

$$II. L = J$$

62. Ans. E

$$I > J = K$$

$$I. I > K \text{ (true)}$$

$$Q > K = J$$

$$II. Q > J \text{ (true)}$$

63. Ans. D

$$A = M > P, N > R, A > T$$

I.  $T = P$  (false) There is no relation between T and P.

For conclusion II -

$$A = M > P, N > R$$

II.  $R < A$  (false) - there is no relation between R and A. Hence, neither conclusion I nor II follows.

64. Ans. B

$$X = M < A < S = T < R$$

**Conclusions:**

For conclusion I -  $M < A < S = T$  - There is no relation between M and T.

I.  $M = T$  (false)

For conclusion II -

$$A < S = T < R$$

II.  $R > A$  (True) - R is greater than A.

Hence, only conclusion II follow.

65. Ans. A

$$Y > A < N, Y = B < P$$

$$P > B = Y > A < N$$

For conclusion I -

$$P > B = Y > A$$

$$P > Y > A$$

I.  $P > A$  (True) P is greater than A is true.

For conclusion II -

$$B = Y > A < N$$

II.  $N > B$  (false) There is no relation between N and B.

Hence, only conclusion I follow.

66. Ans. B

Floor	Person	City
8	T	Jaipur
7	P	Pune
6	U	Delhi
5	W	Patna
4	Q	Raipur
3	S	Mumbai
2	R	Kolkata
1	V	Ranchi

67. Ans. C

Floor	Person	City
8	T	Jaipur
7	P	Pune
6	U	Delhi
5	W	Patna
4	Q	Raipur
3	S	Mumbai
2	R	Kolkata
1	V	Ranchi

68. Ans. A

Floor	Person	City
8	T	Jaipur
7	P	Pune
6	U	Delhi
5	W	Patna
4	Q	Raipur
3	S	Mumbai
2	R	Kolkata
1	V	Ranchi

69. Ans. D

Floor	Person	City
8	T	Jaipur
7	P	Pune
6	U	Delhi
5	W	Patna
4	Q	Raipur
3	S	Mumbai
2	R	Kolkata
1	V	Ranchi

70. Ans. D

Floor	Person	City
8	T	Jaipur
7	P	Pune
6	U	Delhi
5	W	Patna
4	Q	Raipur
3	S	Mumbai
2	R	Kolkata
1	V	Ranchi

71. Ans. C

'wo' stands for value.

in	to
market -	ki
loss -	le
value -	wo
increase -	xo
money -	bc
now -	pu
making -	na
the/decrease	bo/co

72. Ans. A

Code for making is - na

in	to
market -	ki
loss -	le
value -	wo
increase -	xo
money -	bc
now -	pu
making -	na
the/decrease	bo/co

73. Ans. E

Either co or bo is the code for decrease

in	to
market -	ki
loss -	le
value -	wo
increase -	xo
money -	bc
now -	pu
making -	na
the/decrease	bo/co

74. Ans. E

none of these is the correct option for **the increase you value**

in	to
market -	ki
loss -	le
value -	wo
increase -	xo
money -	bc
now -	pu
making -	na
the/decrease	bo/co

75. Ans. D

'to na ki bc' is a code of - making money in market.

in	to
market -	ki
loss -	le
value -	wo
increase -	xo
money -	bc
now -	pu
making -	na
the/decrease	bo/co

76. Ans. A

V is the daughter of S, S is the wife of T, So, wife's daughter=daughter

From the above information

i. There are eight people P, Q, R, S, T, U, V & W. Each of the female is sitting between two males and vice versa i.e. there are equal number of male and female i.e. four female, four male present in that family

ii. Four persons are sitting at the middle of each side of the table. All the mothers present in that family is facing their own respective daughters i.e. all four females are sitting at the middle of each side of the table and facing each other & mothers are facing their own daughter. It's clear that all the males of the family are sitting at the corners

iii. W is son in law of S i.e. W is male, Grandmother of Q is sitting to his left i.e. Q is male, R is the wife of U i.e. U is male and granddaughter of T is sitting to his right i.e. T is male.

I.e. males are W, U, Q, T and females are P, R, S, V

iv. U is sitting third to the right of R, R is the wife of U i.e. daughter of R is facing towards R.

v. Only S is sitting between U & Q, grandmother of Q is sitting to his first left

vi. Mother of U is sitting to his first right and father of U is sitting to his 2<sup>nd</sup> left i.e. S is the mother of U and S is

the grandmother of Q.

vii. W is sitting 3<sup>rd</sup> to the left of S and W is the son in law of S

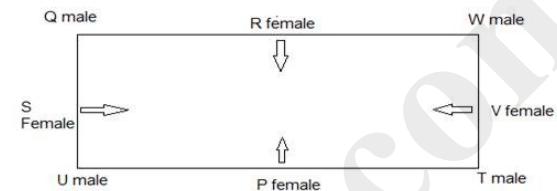
viii. Clearly T sits 3<sup>rd</sup> to the right of S since T is a male(all males are sitting at the corners)

ix. Father of U is sitting to his 2<sup>nd</sup> left i.e. T is the father of U i.e. S is the wife of T.

x. R is the mother of Q, P is the sister of Q i.e. P is the daughter of R. P is sitting 4<sup>th</sup> to the right of R i.e.

granddaughter of T is sitting to his first right

xi. Clearly V is the daughter of S sitting 4<sup>th</sup> to the right of S.



77. Ans. B

From the above information

i. There are eight people P, Q, R, S, T, U, V & W. Each of the female is sitting between two males and vice versa i.e. there are equal number of male and female i.e. four female, four male present in that family

ii. Four persons are sitting at the middle of each side of the table. All the mothers present in that family is facing their own respective daughters i.e. all four females are sitting at the middle of each side of the table and facing each other & mothers are facing their own daughter. It's clear that all the males of the family are sitting at the corners

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I.e. males are W, U, Q, T and females are P, R, S, V

iv. U is sitting third to the right of R, R is the wife of U i.e. daughter of R is facing towards R.

v. Only S is sitting between U & Q, grandmother of Q is sitting to his first left

vi. Mother of U is sitting to his first right and father of U is sitting to his 2<sup>nd</sup> left i.e. S is the mother of U and S is the grandmother of Q.

vii. W is sitting 3<sup>rd</sup> to the left of S and W is the son in law of S

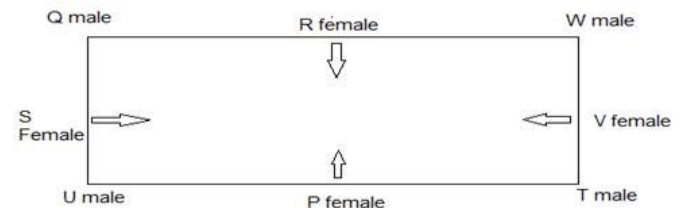
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x. R is the mother of Q, P is the sister of Q i.e. P is the daughter of R. P is sitting 4<sup>th</sup> to the right of R i.e.

granddaughter of T is sitting to his first right

xi. Clearly V is the daughter of S sitting 4<sup>th</sup> to the right of S.



78. Ans. C

From the above information

i. There are eight people P, Q, R, S, T, U, V & W. Each of the female is sitting between two males and vice versa i.e. there are equal number of male and female i.e. four female, four male present in that family

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I.e. males are W, U, Q, T and females are P, R, S, V

iv. U is sitting third to the right of R, R is the wife of U i.e. daughter of R is facing towards R.

v. Only S is sitting between U & Q, grandmother of Q is sitting to his first left

vi. Mother of U is sitting to his first right and father of U is sitting to his 2<sup>nd</sup> left i.e. S is the mother of U and S is the grandmother of Q.

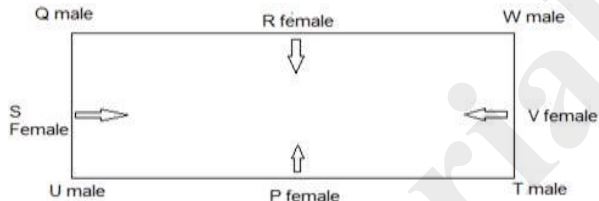
vii. W is sitting 3<sup>rd</sup> to the left of S and W is the son in law of S

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x. R is the mother of Q, P is the sister of Q i.e. P is the daughter of R. P is sitting 4<sup>th</sup> to the right of R i.e. granddaughter of T is sitting to his first right

xi. Clearly V is the daughter of S sitting 4<sup>th</sup> to the right of S.



79. Ans. A

From the above information

i. There are eight people P, Q, R, S, T, U, V & W. Each of the female is sitting between two males and vice versa i.e. there are equal number of male and female i.e. four female, four male present in that family

ii. Four persons are sitting at the middle of each side of the table. All the mothers present in that family is facing their own respective daughters i.e. all four females are sitting at the middle of each side of the table and facing each other & mothers are facing their own daughter. It's clear that all the males of the family are sitting at the corners

iii. W is son in law of S i.e. W is male, Grandmother of Q is sitting to his left i.e. Q is male, R is the wife of U i.e. U is male and granddaughter of T is sitting to his right i.e. T is male.

I.e. males are W, U, Q, T and females are P, R, S, V

iv. U is sitting third to the right of R, R is the wife of U i.e. daughter of R is facing towards R.

i.e. daughter of R is facing towards R.

v. Only S is sitting between U & Q, grandmother of Q is sitting to his first left

vi. Mother of U is sitting to his first right and father of U is sitting to his 2<sup>nd</sup> left i.e. S is the mother of U and S is the grandmother of Q.

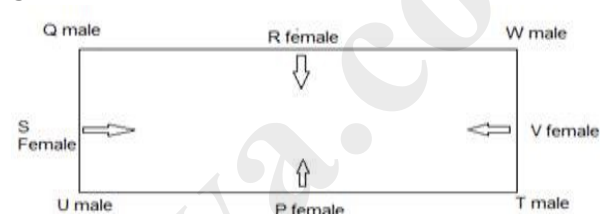
vii. W is sitting 3<sup>rd</sup> to the left of S and W is the son in law of S

viii. Clearly T sits 3<sup>rd</sup> to the right of S since T is a male (all males are sitting at the corners)

ix. Father of U is sitting to his 2<sup>nd</sup> left i.e. T is the father of U i.e. S is the wife of T.

x. R is the mother of Q, P is the sister of Q i.e. P is the daughter of R. P is sitting 4<sup>th</sup> to the right of R i.e. granddaughter of T is sitting to his first right

xi. Clearly V is the daughter of S sitting 4<sup>th</sup> to the right of S.



80. Ans. B

from the arrangement only S, U, P are only serially sitting in the table in the above question

From the above information

xii. There are eight people P, Q, R, S, T, U, V & W. Each of the female is sitting between two males and vice versa i.e. there are equal number of male and female i.e. four female, four male present in that family

xiii. Four persons are sitting at the middle of each side of the table. All the mothers present in that family is facing their own respective daughters i.e. all four females are sitting at the middle of each side of the table and facing each other & mothers are facing their own daughter. It's clear that all the males of the family are sitting at the corners

xiv. W is son in law of S i.e. W is male, Grandmother of Q is sitting to his left i.e. Q is male, R is the wife of U i.e. U is male and granddaughter of T is sitting to his right i.e. T is male.

I.e. males are W, U, Q, T and females are P, R, S, V

xv. U is sitting third to the right of R, R is the wife of U i.e. daughter of R is facing towards R.

xvi. Only S is sitting between U & Q, grandmother of Q is sitting to his first left

xvii. Mother of U is sitting to his first right and father of U is sitting to his 2<sup>nd</sup> left i.e. S is the mother of U and S is the grandmother of Q.

xviii. W is sitting 3<sup>rd</sup> to the left of S and W is the son in law of S

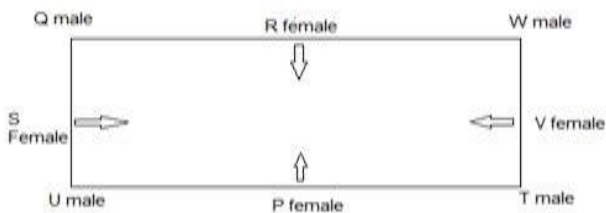
xix. Clearly T sits 3<sup>rd</sup> to the right of S since T is a male (all males are sitting at the corners)

xx. Father of U is sitting to his 2<sup>nd</sup> left i.e. T is the father of U i.e. S is the wife of T.

xxi. R is the mother of Q, P is the sister of Q i.e. P is the daughter of R. P is sitting 4<sup>th</sup> to the right of R i.e. granddaughter of T is sitting to his first right

xxii. Clearly V is the daughter of S sitting 4<sup>th</sup> to the right of S.





81. Ans. C

In the rearrangement, first numbers are arranged and then words are rearranged. In the first step the smallest even number comes at the left end and the largest odd number comes at right end. In the second step second smallest even number comes at the left end and the second largest odd number comes at the right end and so on till the numbers are rearranged. After that words are rearranged. The words beginning with consonant are rearranged in alphabetical order on the left end and words beginning with vowels are rearranged in reverse alphabetical order on the right end till the final arrangement.

**Input:** enough 57 plum 12 67 sense other 44 amount 71 hill 98

**Step I:** 12 enough 57 plum 67 sense other 44 amount hill 98 71

**Step II:** 44 12 enough 57 plum sense other amount hill 98 71 67

**Step III:** 98 44 12 enough plum sense other amount hill 71 67 57

**Step IV:** hill 98 44 12 enough plum sense amount 71 67 57 other

**Step V:** plum hill 98 44 12 sense amount 71 67 57 other enough

**Step VI:** sense plum hill 98 44 12 71 67 57 other enough amount

82. Ans. B

In the rearrangement, first numbers are arranged and then words are rearranged. In the first step the smallest even number comes at the left end and the largest odd number comes at right end. In the second step second smallest even number comes at the left end and the second largest odd number comes at the right end and so on till the numbers are rearranged. After that words are rearranged. The words beginning with consonant are rearranged in alphabetical order on the left end and words beginning with vowels are rearranged in reverse alphabetical order on the right end till the final arrangement.

**Input:** enough 57 plum 12 67 sense other 44 amount 71 hill 98

**Step I:** 12 enough 57 plum 67 sense other 44 amount hill 98 71

**Step II:** 44 12 enough 57 plum sense other amount hill 98 71 67

**Step III:** 98 44 12 enough plum sense other amount hill 71 67 57

**Step IV:** hill 98 44 12 enough plum sense amount 71 67 57 other

**Step V:** plum hill 98 44 12 sense amount 71 67 57 other enough

**Step VI:** sense plum hill 98 44 12 71 67 57 other enough amount

83. Ans. A

In the rearrangement, first numbers are arranged and then words are rearranged. In the first step the smallest even number comes at the left end and the largest odd number comes at right end. In the second step second smallest even number comes at the left end and the second largest odd number comes at the right end and so on till the numbers are rearranged. After that words are rearranged. The words beginning with consonant are rearranged in alphabetical order on the left end and words beginning with vowels are rearranged in reverse alphabetical order on the right end till the final arrangement.

**Input:** enough 57 plum 12 67 sense other 44 amount 71 hill 98

**Step I:** 12 enough 57 plum 67 sense other 44 amount hill 98 71

**Step II:** 44 12 enough 57 plum sense other amount hill 98 71 67

**Step III:** 98 44 12 enough plum sense other amount hill 71 67 57

**Step IV:** hill 98 44 12 enough plum sense amount 71 67 57 other

**Step V:** plum hill 98 44 12 sense amount 71 67 57 other enough

**Step VI:** sense plum hill 98 44 12 71 67 57 other enough amount

84. Ans. D

In the rearrangement, first numbers are arranged and then words are rearranged. In the first step the smallest even number comes at the left end and the largest odd number comes at right end. In the second step second smallest even number comes at the left end and the second largest odd number comes at the right end and so on till the numbers are rearranged. After that words are rearranged. The words beginning with consonant are rearranged in alphabetical order on the left end and words beginning with vowels are rearranged in reverse alphabetical order on the right end till the final arrangement.

**Input:** enough 57 plum 12 67 sense other 44 amount 71 hill 98

**Step I:** 12 enough 57 plum 67 sense other 44 amount hill 98 71

**Step II:** 44 12 enough 57 plum sense other amount hill 98 71 67

**Step III:** 98 44 12 enough plum sense other amount hill 71 67 57

**Step IV:** hill 98 44 12 enough plum sense amount 71 67 57 other

**Step V:** plum hill 98 44 12 sense amount 71 67 57 other enough

**Step VI:** sense plum hill 98 44 12 71 67 57 other enough amount

85. Ans. B

In the rearrangement, first numbers are arranged and then words are rearranged. In the first step the smallest even number comes at the left end and the largest odd number comes at right end. In the second step second smallest even number comes at the left end and the second largest odd number comes at the right end and so on till the numbers are rearranged. After that words are

rearranged. The words beginning with consonant are rearranged in alphabetical order on the left end and words beginning with vowels are rearranged in reverse alphabetical order on the right end till the final arrangement.

**Input:** enough 57 plum 12 67 sense other 44 amount 71 hill 98

**Step I:** 12 enough 57 plum 67 sense other 44 amount hill 98 71

**Step II:** 44 12 enough 57 plum sense other amount hill 98 71 67

**Step III:** 98 44 12 enough plum sense other amount hill 71 67 57

**Step IV:** hill 98 44 12enough plum sense amount 71 67 57 other

**Step V:** plum hill 98 44 12 sense amount 71 67 57 other enough

**Step VI:** sense plum hill 98 44 12 71 67 57 other enough amount

86. Ans. B

South	U(Black)	T(Brown)	Q(Yellow)	S(Grey)	R(White)
North	W(Orange)	Y(Blue)	V(Pink)	Z(Red)	X(Green)

87. Ans. C

South	U(Black)	T(Brown)	Q(Yellow)	S(Grey)	R(White)
North	W(Orange)	Y(Blue)	V(Pink)	Z(Red)	X(Green)

88. Ans. A

South	U(Black)	T(Brown)	Q(Yellow)	S(Grey)	R(White)
North	W(Orange)	Y(Blue)	V(Pink)	Z(Red)	X(Green)

89. Ans. D

South	U(Black)	T(Brown)	Q(Yellow)	S(Grey)	R(White)
North	W(Orange)	Y(Blue)	V(Pink)	Z(Red)	X(Green)

90. Ans. B

South	U(Black)	T(Brown)	Q(Yellow)	S(Grey)	R(White)
North	W(Orange)	Y(Blue)	V(Pink)	Z(Red)	X(Green)

91. Ans. E

**From both the statements:**

eat and drink healthy  $\Rightarrow$  se ta pa me . . . (i)

drink hot beverages  $\Rightarrow$  ta nu fa . . . (ii)

eat hot meal daily  $\Rightarrow$  fa me la du . . . (iii)

cold and hot  $\Rightarrow$  pa fa ga . . . (iv)

From (i) and (ii), drink  $\Rightarrow$  ta

From (i) and (iii), eat  $\Rightarrow$  me

From (i) and (iv), and  $\Rightarrow$  pa

The code for 'healthy' is 'su'.

92. Ans. A

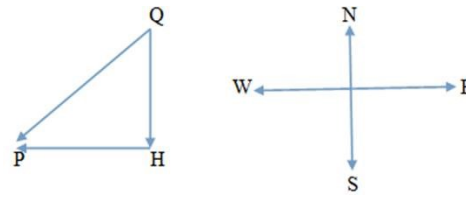
if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

Using statement I alone, C is the brother of D.

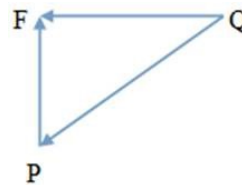
From Statement II, gender of C cannot be determined.

93. Ans. C

From statement I ,



Hence P is the south-west of Q



From statements II, P is the South-West of Q.

94. Ans. D

From statements I,

(J & T) > M > (L & R)

From statement II,

L & R

Hence from statements I & II ,

(J & T) > M > L > R

95. Ans. E

From I Neha's birthday, according to Ramesh, falls on Wednesday or Thursday.

From II Neha's birthday, according to kiran, falls on Tuesday or Wednesday.

From I and II Neha's birthday falls on Wednesday.

96. Ans. B

The amount of disposable income is higher in rural household than semi urban even though they get same monthly income is because semi urban household have to pay more rent and maintenance expenses for their basic amenities. The services are costlier in semi urban so they need to spend more and will have lesser disposable cash than rural households

97. Ans. B

It's a laptop for all. The statement says students will get an offer that does not mean other can't buy it. So I does not follow. Since students are given an offer we can conclude that Lenovo wants students to buy their laptops. So II follow.

98. Ans. D

Choice (A): Based on some assessment, the school has come to the understanding that the students are not getting proper meal at home. No facts are provided to conform this. Hence, (A), is not implicit. Choice (B): There is no information given about the donation, which is given to the charity. Hence (B) is out of context. Statement (C) the statement has no reference to the utilization of funds. Hence it is out of context. Choice (D) The school authority was providing the breakfast to the students assuming that they are not getting a proper meal. Hence Choice (D) is an assumption.

99. Ans. A

Educating the school going children on politics will definitely acquaint them with the intricacies and modalities of the same thus help them to make informed decision. Hence, argument I is strong.

100. Ans. C

Both are the viable course of action and results in immediate response.

101. Ans. C

The pattern followed is:

$$4 = 3.5 + 0.5$$

$$5 = 4 + 1 \text{ (i.e. } 0.5 \times 2)$$

$$8 = 5 + 3 \text{ (i.e. } 1 \times 3)$$

$$20 = 8 + 12 \text{ (i.e. } 3 \times 4)$$

$$? = 20 + 60 \text{ (i.e. } 12 \times 5)$$

$$? = 80$$

102. Ans. A

The pattern followed is:

$$86 = 88 - 2 \text{ (} 1^3 + 1)$$

$$95 = 86 + 9 \text{ (i.e. } 2^3 + 1)$$

$$67 = 95 - 28 \text{ (i.e. } 3^3 + 1)$$

$$132 = 67 + 65 \text{ (i.e. } 4^3 + 1)$$

$$? = 132 - 126 \text{ (i.e. } 5^3 + 1)$$

$$? = 6$$

103. Ans. B

The pattern followed is:

$$4 = 3 * 1 + 1$$

$$9 = 4 * 2 + 1$$

$$28 = 9 * 3 + 1$$

$$113 = 28 * 4 + 1$$

$$? = 113 * 5 + 1$$

$$? = 566$$

104. Ans. D

The pattern followed is:

$$491 = 500 - 9$$

$$478 = 491 - 13 \text{ (i.e. } 9 + 2^2)$$

$$449 = 478 - 29 \text{ (i.e. } 13 + 4^2)$$

$$384 = 449 - 65 \text{ (i.e. } 29 + 6^2)$$

$$? = 384 - 129 \text{ (i.e. } 65 + 8^2)$$

$$? = 255$$

105. Ans. A

The pattern followed is:

$$5 = 9 * 0.5 + 0.5$$

$$6 = 5 * 1 + 1$$

$$10.5 = 6 * 1.5 + 1.5$$

$$23 = 10.5 * 2 + 2$$

$$? = 23 * 2.5 + 2.5$$

$$? = 60$$

106. Ans. D

Total Dangal tickets sold in Mumbai = 24000

45% of the sold tickets ranged between INR 1 and INR 250

⇒ 55% of the sold tickets ranged between INR 251 and INR 350

∴ Number of tickets sold of Dangal ranged between INR 251 and INR 350 = 55% of 24000

⇒ Number of tickets sold of Dangal ranged between INR

251 and INR 350 = 13200

Additional 8% entertainment duty should be imposed duty on movie tickets priced between INR 251 and INR 350

⇒ Amount collected as entertainment duty = 8% of 13200

⇒ Amount collected as entertainment duty = INR 1056

The government has also allowed theatre owners to collect INR 11 as service charges on the tickets

⇒ Amount collected as service charge = 11 × 24000

⇒ Amount collected as service charge = INR 264000

Now, total amount collected as revenue by theatre and government = 264000 + 1056 = INR 265056

Hence, an amount of INR 265056 is collected as revenue by theatre and government on movie Dangal from Mumbai.

107. Ans. A

Total number of Neerja tickets sold in all six cities = 19000+ 17000+28000+23000+22000+14000 = 123000

The number of tickets sold of film Neerja in these six cities is 75% of the total tickets of film Neerja sold in India

⇒ Total number of Neerja tickets sold in India

$$= \frac{123000}{75} \times 100 = 164000$$

∴ Total number of Neerja tickets sold in India = 164000

Let the number of tickets sold over the globe be x

The total number of ticket sold over the globe except India is 36% of the total number of ticket sold over the globe

⇒ Total number of Neerja tickets sold over the globe

$$= \frac{164000}{64} \times 100$$

⇒ Total number of Neerja tickets sold over the globe = 256250

Hence, number of Neerja tickets sold over the globe is 256250

108. Ans. C

Total number of Airlift tickets sold in Manali = 18000

7% of the total number of Airlift tickets sold in Manali was sold by one multiplex

⇒ Number of Airlift tickets sold by the multiplex = 7% of 18000

⇒ Number of Airlift tickets sold by the multiplex = 1260

Let the number of children tickets sold be x

And number of adult tickets sold be y

According to the question:

$$\Rightarrow x + y = 1260 \text{ ..... (1)}$$

The cost of tickets for movie Airlift is 120 for children and 250 for adults and INR 274050 was collected in total for movie Airlift by the multiplex

$$\Rightarrow 120x + 250y = 274050 \text{ ..... (2)}$$

Now, multiply equation (1) by 120 and subtract equation (1) from (2)

$$\Rightarrow 120x + 250y - 120x - 120y = 274050 - 151200$$

$$\Rightarrow 130y = 122850$$

$$\Rightarrow y = 945$$

Putting value of y in equation (1)

$$\Rightarrow x + 945 = 1260$$

$$\Rightarrow x = 315$$

Hence, 315 tickets of children and 945 tickets of adults were sold by the multiplex of the airlift.

109. Ans. B

Let price of sultan ticket be x

Price of Dangal ticket be y

And price of Neerja ticket be z

Anita buys 2 sultan tickets, 1 Dangal ticket and 3 Neerja tickets for a total of INR 1500

$$\Rightarrow 2x + y + 3z = 1500 \dots\dots\dots (1)$$

Gunjan buys 1 sultan ticket, 2 Dangal ticket and 2 Neerja tickets for INR 1225

$$\Rightarrow x + 2y + 2z = 1225 \dots\dots\dots (2)$$

Khushboo buys 2 sultan tickets, 3 Dangal tickets and 1 Neerja tickets for INR 1200

$$\Rightarrow 2x + 3y + z = 1200 \dots\dots\dots (3)$$

Now, subtract (3) from (1)

$$\Rightarrow 2x + y + 3z - 2x - 3y - z = 300$$

$$\Rightarrow 2z - 2y = 300 \dots\dots\dots (4)$$

Multiply equation (2) by 2 and then equation (1) by (2)

$$\Rightarrow 2x + 4y + 4z - 2x - y - 3z = 2450 - 1500$$

$$\Rightarrow 3y + z = 950 \dots\dots\dots (5)$$

Multiply equation (4) by 3 and equation (5) by 2 and then add both of them

$$\Rightarrow 6z - 6y + 6y + 2z = 900 + 1900$$

$$\Rightarrow 8z = 2500$$

$$\Rightarrow z = 350$$

Putting value of z in equation (5)

$$\Rightarrow 3y + 350 = 950$$

$$\Rightarrow 3y = 600$$

$$\Rightarrow y = 200$$

Now putting value of y and z in (1)

$$\Rightarrow 2x + 200 + 3(350) = 1500$$

$$\Rightarrow 2x = 1500 - 1250$$

$$\Rightarrow x = 125$$

Hence, price of one Sultan ticket is INR 125

Number of Sultan tickets sold in Bangalore = 24000

∴ Collection made by sultan from Bangalore = 24000 × 125

⇒ Collection made by sultan from Bangalore = INR 30,00,000

Hence, movie Sultan collected INR 30,00,000 from Bangalore.

110. Ans. D

Let total number of tickets sold in day be x

∴ Total collection in day = 76x

Let the total number of tickets sold in night be y

∴ Total collection in night = 60y

Total day and night customers = x + y

Total average collection = 65(x + y)

According to the question:

$$\Rightarrow 76x + 60y = 65(x + y)$$

$$\Rightarrow 76x - 65x = 65y - 60y$$

$$\Rightarrow 11x = 5y$$

$$\Rightarrow x/y = 5/11$$

Total number of M.S. Dhoni tickets sold in Ahmedabad = 32000

15% of the total number is sold by the theatre

⇒ Number of M.S. Dhoni tickets sold by theatre = 15% of 32000

⇒ Number of M.S. Dhoni tickets sold by theatre = 4800

∴ Number of tickets sold by theatre in night = 11/16 × 4800

⇒ Number of tickets sold by theatre in night = 3300  
Total number of M.S. Dhoni tickets sold in Hyderabad = 15000

$$\text{Now, required percentage} = \frac{3300}{15000} \times 100 = 22\%$$

Hence, the number of tickets sold in the night is 22% of total M.S. Dhoni tickets sold in Hyderabad.

111. Ans. B

$$\frac{68}{100} \times 595 - \frac{45}{100} \times 372$$

$$404.6 - 167.4$$

$$237.2$$

112. Ans. D

Let the answer be Y

$$\frac{49.84}{\sqrt{5.2}} \times 18.12 = 62.21 \times \sqrt{Y}$$

By approximation,

$$\frac{50}{\sqrt{4}} \times 20 = 60 \times \sqrt{Y}$$

$$\frac{50}{2} \times 20 = 60 \times \sqrt{Y}$$

$$500 = 60 \times \sqrt{Y}$$

$$\sqrt{Y} \approx 8$$

Squaring both sides

$$Y \approx 64$$

Hence the answer is option (D).

113. Ans. C

$$\Rightarrow \frac{(?)^{\frac{9}{4}}}{(?)^{\frac{1}{4}}} = \frac{324}{9}$$

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

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

$$\Rightarrow ? = 6$$

114. Ans. B

By approximation,

$$\left(\frac{70}{100} \times 260\right) - 63 = Y - \left(\frac{5}{100} \times 900\right)$$

$$(7 \times 26) - 63 = Y - (5 \times 9)$$

$$182 - 63 = Y - 45$$

$$Y = 182 - 63 + 45 = 164$$

Hence the answer is option (B).

115. Ans. E

$$\frac{17}{7} - \frac{9}{4} - \frac{5}{4} + \frac{29}{28} = -\frac{1}{28}$$

Hence option E is correct

116. Ans. E

$$\text{Boys \%} = \frac{(4000 - 2500)}{4000} \times 100 = 38\% \text{ approx.}$$

117. Ans. A

Total students enrolled in singing & craft

$$= \frac{4000 \times (20 + 20)}{100} = 1600$$

Total girls enrolled in singing & craft

$$= \frac{2500 \times (20 + 25)}{100} = 1125$$

No. of boys enrolled = 1600 - 1125 = 475

118. Ans. B

$$\frac{2500 \times (20 + 14)}{100} = 850$$

119. Ans. C

No. of girls enrolled in dancing

$$= \frac{21 \times 2500}{100} = 525$$

$$\% = \frac{525}{4000} \times 100 = 13.12\%$$

120. Ans. D

Total students in swimming = 840

$$\text{No. of girls enrolled in swimming} = \frac{2500 \times 20}{100} = 500$$

No. of boys enrolled in swimming = 340

Ratio = 500 : 340 = 25 : 17

121. Ans. E

$$(X + 5)(5X + 3) = 0 \Rightarrow X = -5, -3/5$$

$$(Y + 5)(6Y + 5) = 0 \Rightarrow Y = -5, -5/6$$

No relation

122. Ans. C

$$\text{I. } 12x^2 + 82x + 140 = 0$$

$$x = -7/2, -10/3$$

$$\text{II. } 16y^2 + 48y + 32 = 0$$

$$y = -1, -2$$

Y > X

123. Ans. E

$$(2X - 11)(2X - 13) = 0 \Rightarrow X = +11/2, +13/2$$

$$(2Y - 11)(2Y - 15) = 0 \Rightarrow Y = +11/2, +15/2$$

say  $x = 11/2$  and  $y = 15/2$ ;  $y > x$

but if say  $x = 13/2$  and  $y = 11/2$ ; then  $x > y$

Hence, No relation.

124. Ans. E

$$(X - 3)(X + 7) = 0 \Rightarrow X = +3, -7$$

$$(Y - 4)(Y - 2) = 0 \Rightarrow Y = +4, +2$$

No relation

125. Ans. E

From I,

$$\frac{8}{\sqrt{x}} + \frac{6}{\sqrt{x}} = \sqrt{x}$$

$$\Rightarrow x = 14$$

From II,

$$y^2 - (14^{5/2} / y^{1/2}) = 0$$

$$\Rightarrow y^{5/2} = 14^{5/2}$$

$$\Rightarrow y = 14$$

So,  $x = y$

126. Ans. C

Average number of students (males and females) passed out from all the colleges together.

$$\frac{(15 + 22.5) + (17.5 + 20) + (27.5 + 35) + (25 + 30) + (7.5 + 10)}{5}$$

$$= \frac{210.0}{5} \text{ thousands}$$

$$= 42000$$

127. Ans. B

Number of females passed out from college C = 35

Total number of females passed out from all the college together.

$$= 22.5 + 20 + 35 + 30 + 7.5$$

$$= 115$$

Required percentage

$$= \frac{35}{115} \times 100 = 30.43\%$$

$$\approx 30\% (\text{approx.})$$

128. Ans. E

Total number of students passing out from college A

$$= 15 + 22.5$$

$$= 37.5 \text{ thousand}$$

Total number of students passing out from college E

$$= 7.5 + 10$$

$$= 17.5 \text{ thousand}$$

$$\text{Required difference} = (37.5 - 17.5) \text{ thousand}$$

$$= 20 \text{ thousand} = 20000$$

129. Ans. A

Required ratio

$$= \frac{15 + 17.5 + 27.5 + 20 + 10.0}{22.5 + 20 + 35 + 30 + 7.5}$$

$$= \frac{95}{115} = \frac{19}{23} = 19 : 23$$

130. Ans. D

Number of males passing out from college A and B

$$= 15 + 17.5 = 32.5$$

Number of females passing out from college C and D

$$= 35 + 30 = 65$$

Required percentage

$$= \frac{32.5}{65} \times 100 = 50\%$$

131. Ans. E

From II: it is clear that out of 180 students, 120 students scored over 70% In the test.

From I: 15 boys scored over 70%.

Hence using both the statements, number of girls who scored over 70% = 120-15 = 105.

132. Ans. E

From statement I,

Given: The ratio of speed in upstream to the speed in downstream is 2 : 3

Let speed in upstream be 2x km/hr and speed in downstream be 3x km/hr.

Since x is not known, so speed of the stream cannot be obtained.

Thus, the data in Statement I alone are not sufficient to answer the question

From statement II,

Given: The distance travelled in upstream in 2 hours by a man is more than distance travelled by him in downstream in 1 hour by 4km.

⇒ distance travelled in upstream - distance travelled in downstream = 4 km

$$(2 \times \text{speed in downstream} - 1 \times \text{speed in upstream}) = 4 \text{ km}$$

∴ Speed in upstream and downstream is not known, so speed of the stream cannot be found using these data.

Thus, the data in Statement II alone are not sufficient to answer the question

Combining I and II,

$$\text{Speed in upstream} = 2x$$

$$\text{Speed in downstream} = 3x$$

$$(2 \times \text{speed in downstream} - 1 \times \text{speed in upstream}) = 4 \text{ km}$$

$$\Rightarrow (2 \times 3x - 1 \times 2x) = 4 \text{ km}$$

$$\Rightarrow 6x - 2x = 4$$

$$\Rightarrow x = 1 \text{ km/hr}$$

∴ Speed in upstream and downstream are 2 km/hr and 3 km/hr respectively.

Speed of the stream =  $\frac{1}{2}$  (speed in downstream - speed in upstream)

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

$$= \frac{1}{2} \text{ km/hr}$$

133. Ans. C

From I:  $x+(x+2) = 34$  i.e.  $x = 16$ , hence, fourth consecutive even number is  $(x+6) = 22$ .

From II:  $x+4+(x+6) = 42$  i.e.  $x = 16$ , hence, fourth consecutive even number is  $(x+6) = 22$ .

134. Ans. A

From statement 1,

Marks in English =  $\frac{1}{2}$  Hindi

Marks in chemistry = 50% of Hindi

$$\text{Hindi} = 42 \times 2$$

$$\text{English} = \frac{1}{2} \times 42 \times 2 = 42$$

In statement 2 total marks is not given

135. Ans. A

Our aim is to calculate the ratio of the total number of girls to the total number of boys in a college.

From statement A,

There are 2000 students in the college out of which 40% are girls.

$$\Rightarrow \text{Number of girls} = \frac{40}{100} \times 2000 = 800$$

Thus, number of boys = 2000 - 800 = 1200

Ratio of number of boys to the total number of girls in a college = 1200 : 800

⇒ Ratio of number of boys to the total number of girls in a college = 3 : 2

So, statement A is sufficient to reach at the solution.

From statement B,

The ratio of the total number of boys to the total number of girls in the last year was 5 : 5.

Here, only last year ratio is given but this data is not sufficient to calculate ratio of number of girls to the total number of boys in a college.

So, Statement B alone is not sufficient to reach at the solution.

136. Ans. C

Let the age of A, 5 years ago be X

Then, the age of B, 5 years ago will be 3X

According to question

$$\frac{(3X+5+6)}{(X+5+12)} = \frac{7}{4}$$

$$\frac{(3X+11)}{(X+17)} = \frac{7}{4}$$

$$12X+44 = 7X+119$$

$$5X = 119-44$$

$$5X = 75$$

$$X = 15$$

A's present age = 15+5 = 20

B's present age = 3\*15 + 5 = 45+5 = 50

Ratio = (20-3):(50+3) = 17:53

137. Ans. A

Let CP1 = 100 CP2 = 100 overall CP= 200

15% 20%

SP1= 115 overall SP= 240

SP2= overall SP - SP1= 240 - 115 = 125

Difference in SP = 125-115= 10

Therefore CP =  $48000 \times \frac{10}{100} = \text{Rs.} 48000$  Ans.

138. Ans. B

Speed of boat going downstream = 30 + 5 = 35 kmph

Speed of boat going upstream = 30 - 5 = 25 kmph

Speed of approach = 35 + 25 = 60 kmph

Distance to be travelled = 300 km

Time required = 300/60 = 5 hours

139. Ans. A

Ratio of weight of three types of rice = (5\*6) : (4\*5) : (3\*4) = 15:10:6

Weight of type one rice =  $248 \times \frac{15}{31} = 120$  kg

140. Ans. D

Let Rakesh's salary be '100x'.

Salary spent in PPF = 12x

Remaining Salary = 88x

So, Salary spent on clothes = 3/8 of 88x = 33x

As per the question,

$$33x - 12x = 10500$$

$$21x = 10500,$$

$$\text{i.e. } x = 500$$

So, Rakesh's Salary = Rs. 50000/-

Amount spent on Remaining expenses = 50000 -

$$((12 \times 500) + (33 \times 500))$$

$$= 50000 - (6000 + 16500) = 50000 - 22500 = 27500.$$

Now, let House rent be 'a'

Other expenses = a + 1500

As per question,

$$a + (a + 1500) = 27500$$

$$2a = 26000$$

$$a = \text{Rs. } 13000/-$$

141. Ans. B

X, Y, and Z invested Rs. 14000 in total in a business.

Let Y invested Rs. x in the business.

X invested Rs. 3120 more than Y and Z, Rs. 1720 less than Y.

So, we can write now,

$$(x + 3120) + x + (x - 1720) = 14000$$

$$\Rightarrow 3x + 3120 - 1720 = 14000$$

$$\Rightarrow 3x = 14000 - 1400$$

$$\Rightarrow x = 12600/3$$

$$\Rightarrow x = 4200$$

So, the investment of Y = Rs. 4200

The investment of X = Rs. 4200 + 3120 = Rs. 7320

And, the investment of Z = Rs. 4200 - 1720 = Rs. 2480

Then, the ratio of their shares = X : Y : Z = 7320 : 4200 : 2480 = 183 : 105 : 62

The total profit was Rs. 35000.

$$\therefore \text{The share of Z} = \text{Rs. } 35000 \times (62/350) = \text{Rs. } 6200$$

142. Ans. E

Let the sum invested at 6% be Rs. x

Total sum = Rs. 5500

The interest of one part at 6% for 4 years is equal to the interest of another at 10% for 2 years.

We know,

Simple interest =  $P \times T \times R$  [Where, P = Principal amount, T = duration in years, R = Interest percentage annually]

So, we can write now,

$$x \times 4 \times 6\% = (5500 - x) \times 2 \times 10\%$$

$$\Rightarrow 6x/25 = (5500 - x) \times 1/5$$

$$\Rightarrow 6x = (5500 - x) \times 25 \times (1/5)$$

$$\Rightarrow 6x = 27500 - 5x$$

$$\Rightarrow 11x = 27500$$

$$\Rightarrow x = 2500$$

$$\therefore \text{The sum invested at 6% interest} = \text{Rs. } 2500.$$

143. Ans. D

Total no of balls = 8 + 7 + 6 = 21

Let, E be the event where the ball can be selected which is neither yellow nor black

Number of events where the ball can be selected which is neither yellow nor black = 7

$$P(E) = 7/21 = 1/3$$

144. Ans. A

Given, A certain work is completed by A and B together in 10 days.

Let the number of days taken by A alone be 'a' and by B alone be 'b'

In 1 day,

A completes 1/a part and B completes 1/b part.

$$1/a + 1/b = 1/10 \text{ ---- (1)}$$

Now, if A had worked at twice the speed and B had worked at half his speed it would have taken them 8 days to finish the work.

$$\text{Thus, } 2/a + 1/2b = 1/8 \text{ ----- (2)}$$

$$2 \times (1) - (2)$$

$$\Rightarrow 2/b - 1/2b = 1/5 - 1/8$$

$$\Rightarrow 3/2b = 3/40$$

$$\Rightarrow b = 20 \text{ days}$$

145. Ans. A

Let the radius of cylinder A = 4X and that of cylinder B = 7X

And height of cylinder A = 5Y and that of cylinder B = 2Y

Volume of cylinder =  $22/7 \times r^2 \times h$ .

$$\text{Ratio} = [22/7(4X)^2 \times 5Y] / [22/7(7X)^2 \times 2Y] = 40:49$$

146. Ans. C

The relative speed = (58+50) km/hr = 108km/hr

$$= 108 \times \frac{5}{18} \text{ m/sec} = 30 \text{ m/s}$$

The distance covered to pass each other = 60+90 = 150m

$\therefore$  The time taken to pass each other

$$= \frac{\text{distance}}{\text{relative speed}} = 150/30 = 5 \text{ second}$$

147. Ans. D

Let the capacity of the tank be C

Speed of inlet tap = C/16

Speed of outlet tap = C/8

Difference in speed = C/8 - C/16 = C/16 hours

Time to empty 3/4<sup>th</sup> of the tank =  $(3C/4) / C/16 = 3C/4$

$$\times 16/C = 12 \text{ hours}$$

148. Ans. D

Suppose MP = 100

Then CP =  $100 \times 80 / 100 = 80$

According to question

Half the goods at MP =  $100/2 = 50$

One quarter =  $100/4 = 25$  at 10% discount =

$$25 \times 90 / 100 = 22.5$$

And rest =  $100 - 50 - 25 = 25$  at 30% discount =

$$25 \times 70 / 100 = 17.5$$

Total sold =  $50 + 22.5 + 17.5 = 90$

$$\text{Gain\%} = (90 - 80) \times 100 / 80 = 12.5\% \text{ Ans.}$$

149. Ans. B

Let the principal amount be Rs. x

Calculating SI:

SI for 1 year at 12% rate is Rs  $(12/100) \times x$ . For 3 years it will be Rs  $(36/100) \times x$  ----- (1)

Calculating CI:

$$\text{For 1<sup>st</sup> year, Interest} = (12/100) \times x$$

For 2<sup>nd</sup> year, interest =  $(12/100)*x + (12/100)*x + (144/10000)*x$

For 3<sup>rd</sup> year, interest =  $(12/100)*x + (12/100)*x + (12/100)*x + (144/10000)*x + (144/10000)*x + (1728/1000000)*x$ . ----- (2)

Subtracting equation 2 and 1 and solving further,  
 $312*144*x/1000000 = 112.32$

X = Rs 2500.

150. Ans. D

Let us suppose Women give 10 units a day

Therefore, a man gives  $1.4 * 10 = 14$  units a day

Similarly, a child gives  $0.6 * 10 = 6$  units a day

Total job (units) = (7 days \* per day contribution) = 7 \*

$(3 * 14 + 5 * 10 + 4 * 6) = 812$  units

New combination = 2 M + 7 W + 3 C

Contribution per day =  $2 * 14 + 7 * 10 + 3 * 6 = 116$  units

Days required to complete the job =  $812/116 = 7$  days

151. Ans. E

Safety – Assurance on safety of money deposited in the bank account

Location – Access to bank branches regarding any service required by customer

Range of Services – Whether the bank offer the services that a customer may need/want

Interest Rate – Interest rate on deposits in the account or advances taken from bank also influence customers orientation.

Therefore, we can conclude that all the given options influence consumer behaviour in banking industry.

152. Ans. B

Salon, Beauty Parlour, Bank, Insurance etc. come under services and are not concerned with transfer of ownership of a tangible good. On the other hand selling of Computer, Notebook, Shoes etc. are concerned with transfer of ownership of a tangible good

153. Ans. E

To maximise sales, marketers either need to increase their share in the existing market or make presence in new markets. Product mix which can be adjusted are, Product development, Market development, Market penetration, Diversification. Hence option E

154. Ans. C

Marketing Information system is a type of Management Information System designed to support decision making in marketing.

A marketing information system is a combination of people, technologies, and processes for managing marketing information, overseeing market research activities, and using customer insights to guide marketing decisions and broader management and strategy decisions. (Source: <https://courses.lumenlearning.com/>)

The subsystems of Marketing Information System are Internal reporting/accounting systems Marketing research systems, Marketing intelligence systems and Marketing models. Read more about Marketing Information system at

<http://www.fao.org/docrep/W3241E/w3241e0a.htm>

155. Ans. E

According to Pareto the satisfaction of consumer with a product is not measurable in absolute terms, but a consumer can provide ranking of products in order and performance, if they are unbiased about which of the two product they buy.

156. Ans. D

Product differentiation technique of advertising involves creating and promoting awareness about company's product with its competitor's products. This helps the company to dodge the price competition easily as it can easily bank on its product specification.

157. Ans. E

In Long Term Planning, companies mostly focus on achieving overall goals of the company. It involves planning based on achievements from short term and medium term planning. Capital expansion, product development and Strategic alliance etc. are part of medium term planning.

158. Ans. C

According to the Marshallian Model there are three types of behavioural hypotheses.

- Lower the price of the product, higher will be the sale of the product

- Lower the price of an alternate product, lower will be the sale of the product

- Lower the price of complementary products, higher will be the sale of the product.

159. Ans. E

All the given options have participated in changing the landscape of banking operations in India. Deregulation of interest rate helped in smooth functioning as banks started to customize products based on market/customers needs. Liberalization in branch licensing made more players participate in the industry. Technology implementation help banks become more efficient in their operation.

160. Ans. E

Services are intangible, inseparable, perishable and they lack uniformity. Participation of customer is also one important characteristic of Services.

161. Ans. C

The main objective of Market research is to assess a market for a particular product/offering. A company assesses its market and based on the outcomes of those assessment it can understand feasibility and hence saleability of the product. It is thus clear that the main objective of market research/market assessment is to minimise the risk involved.

162. Ans. C

According to Philip Kotler, Strategic Marketing is the link between a society's needs and its pattern of industrial response.



163. Ans. C

Sales promotion can be defined as the set of marketing activities other than personal selling, advertising, publicity which help stimulate purchasing by target consumers. Sales promotion are generally done for a short period of time.

164. Ans. E

Integrated marketing concept is based on the four fundamental premises.

- a) Target Market
- b) Customer Needs
- c) Inter-departmental cooperation & co-ordination
- d) Profitability

165. Ans. C

Servuction is the process where Consumption and Production happen at the same time. The idea of Servuction was given by Eiglier and Langedard. The term is a blend of two words "Service" and "Production" demonstrating that these happen together and can't be isolated.

166. Ans. C

Hub and Spoke Banking refers to the bank branches (Spoke) who functions for some specific type of product/services but depend on some nearby branches to carry out other activities. This concept helps in efficient utilisation of resources. It proved to be very successful in financial inclusion of Rural India.

167. Ans. D

Intermittent Operations as the name suggests, are the services in which delivery of service is not regular. Bank Branches, ATM and Education institutions give regular services. The Consultancy for projects are not regular services, so they are counted in Intermittent Operation Services.

168. Ans. E

According to Philip Kotler there are five levels of Product. Core Product, Generic Product, Expected Product, Augmented Product and Potential Product. Potential Product is the level of product which is feasible to hold and attract customers.

169. Ans. C

All the factors except 'Aggressive advertising' does not influence the price of services. Pricing is dependent on the market, competition, lifestyle stage of product, organisation type, organisational objectives and government regulations etc. Advertising comes in picture after the decisions related to pricing is already. Increasing and decreasing price can be a part of Sales promotion which is not same as aggressive advertising.

170. Ans. B

When a service is delivered, the ownership is not transferred. E.g., When we consult a doctor for a disease, he/she recommends medicines for the disease. The recommendation does not include transfer of ownership of anything. When we purchase medicines based on the recommendation of the doctor transfer of ownership of medicine takes place. Service cannot be measured. Innovation in Physical Goods can be patented but innovation in services cannot be patented.

171. Ans. E

Automation of regular and predictable activities can directly reduce Moments of Truth. Automated Teller Machines (ATMs) reduce it because people can withdraw/deposit cash without going to bank. Similarly, Snacks vending machines does not require human to human interaction. Web check-in allows travellers to get their boarding passes without meeting airline executives. So all of the given options reduce Moments of Truth.

172. Ans. D

Promotion can be defined as the process of communicating information to the potential customers to stimulate the buying process. Promotion plays an important role in informing, educating, persuading and reminding the customers.

Promotional mix comprises of Advertising, Personal Selling, Sales Promotion, Public Relation.

173. Ans. E

Market can be defined based on all three i.e., Product, Price, Target customer. All these factors are included in the plan for marketing of a product.

174. Ans. A

Interaction between Customers and employees of a company is termed as Moments of Truth. Such situation offers the company to demonstrate what they can do for customers. They also gives them opportunity to understands customers' needs and wants. Many companies use Moments of Truth to cross sell products and to enhance the perceived value of their Goods/Services in front of the customers.

175. Ans. B

Selling concept of marketing is customer oriented. According to this concept if customers are left alone they are not expected to buy enough of products from the selling company. This concept tells that consumers can always be induced to purchase more. Therefore, the selling company should give importance to Aggressive Selling.

176. Ans. C

Satisfaction is driven through Product quality and specification rather than Pricing. Other four parameters represent the objective of pricing.

177. Ans. D

A, B, C came in banking industry in India post liberalization (1991). Before that banking companies were not very sensitive to risk management and recovery of advances heavily dependent on legal processes.

178. Ans. E

All the mentioned functions are served by bank branches. Under cross selling Credit Card, Insurance, SIPs etc are sold. Apart from these, the bank branches are involved in providing inputs for future plan, strategic decisions as well as new initiative (product and services development).

179. Ans. C

Segmentation of market should be Measurable and should be relatable to the buying and consumption behaviour of consumers. Here, A,B,D and E are one of the required criterion for market segmentation. Hence, option C.

180. Ans. E

All three optioned mentioned are the Habit related Goals of Marketers.

Habit-breaking means, getting the customer out of the habit of buying a competitor's product.

Habit-acquisition means making a customer acquire either a totally new habit or habit of buying their company's product.

Habit-reinforcement activity ensures consumers' habit of buying a particular product continuously.

181. Ans. A

Pavlov Learning model is not based on Imposition. It is based on following.

- 1) Drive: Hunger, Thirst etc.
- 2) Cue: Advertisement
- 3) Reaction,
- 4) Reinforcement

The model emphasizes on the importance of repetition in advertising. A single exposure is not likely to create sufficient impact and hence cannot penetrate an individual's consciousness to push one's drive to the required level.

182. Ans. C

According to Bill Gates the desirable qualities of an employee are as follows

Knowledge of company's products

Interest in engaging customers in discussions about how they use products

Understanding how a product can help consumers

Maintaining long-term approach skill development and motivation

Generating specific knowledge while having broad perspective

Flexible to take advantage of opportunities that

Interest in learning the economics of the business

Focus on competitors

Problem Analysis effectively

Honesty, Hard work and ethical practices.

Read more at :

[https://blogs.msdn.microsoft.com/polo\\_lee/2007/03/29/en-attributes-of-a-good-employee-bill-gates/](https://blogs.msdn.microsoft.com/polo_lee/2007/03/29/en-attributes-of-a-good-employee-bill-gates/)

183. Ans. B

The fifth and most important marketing tool in Service Industry is People.

184. Ans. B

Integrated marketing believes that Organisation as a whole should be focused on the Customer. This marketing concept is based on the following four fundamental premises: Target Market. Customer Needs, Integrated Marketing or inter-departmental cooperation & co-ordination and Profitability.

185. Ans. D

The various stages of Product Development are Idea Generation, Screening of the Ideas, Business analysis, Development of Product, Testing and commercialization of the product.

186. Ans. E

There are mainly 6 types of benefit segmentation Status Seeker, Swinger, Conservative, Rational, Inner Directed and Hedonist.

The consumers who come in the Swinger group always try to be up-to-date in all of their activities.

e.g., An iPhone user of this kind will rush to buy its latest model as soon as its made available in the market.

187. Ans. C

The four Ps of marketing are Product, Price, Place and Promotion. Patience does not come under 4 Ps of marketing. The three other Ps are People, Physical evidence and Process.

188. Ans. B

Sales promotion stands for the promotional activities that are intended to provide added value or incentives to consumers, wholesalers, retailers to stimulate sales. The essential aspect of Sales Promotion are Product Knowledge, Market Information and Target Market Segmentation.

189. Ans. C

Volume segmentation is the type of segmentation of market where consumers are classified based on volume of product purchased/used/consumed by consumers. This type of segmentation comes handy while deciding on product features and startegising advertising. e.g., Out of total consumers of a cellphone manufacturing company only 4% consumers might be interested in its high end cellphone. So the company can decide on its features and advertising based on the characteristic and behaviour of these 4% people rather than all its consumers.

190. Ans. C

Foreign Exchange Market is a market on geographical basis, as the participating people (countries) are differentiated because of the world geography. The wholesale market (and other options) not based on geography at all.

191. Ans. A

Market Research process Collation is the stage where categorised information are put in logical order. In the standard Market Research process first information is collected and different type of information is classified post which Collation occurs.

192. Ans. D

Qualitative research of market is done to understand the thoughts and feelings of consumers towards products, brands, advertising etc.

In-depth interviews, focus groups, projective methods, and case studies or pilot studies are the methods of Qualitative Research in marketing.

Projective technique of market research is more effective as compared to direct interviews as people generally

don't have 100% understanding of their own taste, behaviour etc. or it becomes difficult for them to put those taste, desire and behaviour etc. in words. Through Projective technique researchers try to understand consumer's behaviour, belief etc. deeply.

193. Ans. A

Full cost pricing is the most common method for pricing. In this pricing method the price is set to cover total material cost and other overheads plus a targeted profit.

194. Ans. E

According to Service Quality Model or Gap Model following five gaps are identified as gap between quality of service.

1) Gap between consumer expectation and management perception: arises when the management or service provider does not correctly perceive what the customers wants or needs.

2) Gap between management perception and service quality specification: this is when the management or service provider might correctly perceive what the customer wants, but may not set a performance standard.

3) Gap between service quality specification and service delivery: may arise pertaining to the service personnel. This could arise due to there being poor training, incapability or unwillingness to meet the set service standard.

4) Gap between service delivery and external communication: consumer expectations are highly influenced by statements made by company representatives and advertisements. The gap arises when these assumed expectations are not fulfilled at the time of service delivery.

5) Gap between expected service and experienced service: this gap arises when the consumer misinterprets the service quality.

Hence, option E.

Source: <http://rachel.golearn.us/>

195. Ans. E

Marketing research Is used by Companies for Identification of problems and for solving them. The main areas of market research are:

Sales and Market Research

Product Research

Research related to Promotion

Business and Corporate Research

Corporate Social Responsibility

196. Ans. C

Augmented Product comprises of the additional features beyond customer's expectation from the product, which sets the product apart from its competition. Here the "Reward point" is the additional feature that bank is offering to its customer through the product.

Here Core product is Over-draft facility; Expected Product is ATM withdrawal; Augmented product is Reward points; Potential Product is Gold Coin lottery participation.

197. Ans. C

The fundamental reason behind packaging of products is Protection. Branding and Improvement of Aesthetics can also be achieved through packaging but these are not the main reason behind it.

198. Ans. D

According to Abraham Maslow's Need Hierarchy Theory Self respect, self confidence, recognition, appreciation, applause prestige, power and control etc. come in the fourth level of hierarchy. Belongingness lies in the third level of hierarchy.

199. Ans. A

Christian Gronroos has given the Services Marketing Model. He has done pioneering work has in Services marketing concepts and according to him any attempt to improve quality of Service should first understand how Customer perceives Service Quality & then determine how the service quality is affected.

200. Ans. B

The four Ps of marketing are Product, Price, Place and Promotion. Patience does not come under 4 Ps of marketing.

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