1. d) "I suppose the vitality of a group, an individual or a society is measured by the extent to which it possesses courage and above all, creative imagination. If that imagination is lacking our growth becomes more and more stunted, which is a sign of decay. What then is happening today?" justifies 4 by implication. The other options are overridden by the 'if' attached to them.

2.a) " … At the same time, it is corroding the life of the mind and thereby encouraging a process of self destruction," completely justifies 1. The other options are unsustainable on analysis, though apparently correct.

3.a) Towards the end of the first paragraph, the writer states, " … In the past anyway, one great consolation was that things happened only in one particular part of the world. If there was a collapse in one part of the world, … disaster was also limited in extent and intensity. Today, when we have arrived at a period of great disaster and it is a little difficult for us to choose a middle way which would enable us to achieve a little progress and, at the same time to limit the scope of disaster," – this makes option a) correct.

4.e) The answer is directly stated at the end of the passage, and in detail in the second paragraph about democracy.

5. c) The passage in the beginning talks about man's creativity, goes on to explain how industrialization and the consequent progress has created unthinking human beings as well as a better connected world open to large scale destructions, hence option 3 is the purpose of the passage.

6. b) A and D are opposites. Stupendous means imposing or huge or awe inspiring; pretentious is means showy

7. b) In this passage, statement D makes sense as the start of the passage because introduces the topic of Appalachian type of music. Statement B should logically follow as it elaborates the topic introduced in statement D. Therefore, option b) makes sense as the right answer compared to the other options which are irrelevant and make no sense in the arrangement.

8. c) Option c) is spotted with an error and the correct statement should be 'and magnesium is produced from sea water'. The above statement is grammatically wrong by saying "magnesium is produced by sea water" whereas, "from sea water" is grammatically sound.

9. c) Optionc) is spotted with an error and the rectified statement should be 'are among the important policy challenges'. The above statement is incorrect because of the grammatical inconsistency. Therefore "among" is more appropriate while referring to one challenge among many.

10and 11 Correct Answer: BC – the word 'actually' before the second word calls for something contrary to expectations, hence deprecated and exacerbated fit most appropriately. The other combinations make only a grammatically correct sentence.

12. a) Since the main statement draws a conclusion that the government should encourage the setting up new cyber cafes in the country, thus, the only additional fact that can pose a serious threat to the validity of the conclusion is if a flip-side or a negative side of this intended action is shown, in this case, an additional fact that there has been drastic growth of cyber crimes which is mainly attributable to cyber cafes. Option b) talks about something related but in another direction. Options c) are d) actually support the main conclusion in a way.

13. e) In this passage, statement C makes sense as the start of the passage because it introduces the topic of classical guitar strings and to relate with the continuity of the statement, sentence A should follow after statement C because the sentence elaborates on classical guitar strings. Thus, option c) makes sense as the right answer compared to the other options.

n, there are what Myint calls "technical indivisibilities in social overhead capital." Public utilities, transport, and communication facilities must be in place before industrial development can occur, and they do not lend themselves to small-scale improvements…" by implication makes option d) correct.

15. e) "At subsistence levels, societies consume exactly what they produce. There is no remaining surplus for reinvestment. As per-capita income rises, however, the additional income will not be used for saving and investment. Instead, it will have the effect of increasing the population that will eat up the surplus and force the society to its former subsistence position, " makes option e) correct.

16. b) Stated throughout the passage. The purpose of the passage is to examine this issue.

17. c) The word cohesion means the act or state of sticking together tightly.

18. a) ' … obstacles are imposing …' refer to their size and difficulty.

19 and 20 Correct Answer: CB - 'Even though' indicates the need for opposites. This suggests that although he was cleared of the crime ('vindicated'), his reputation was damaged by the allegations. For the second blank 'tarnished' would fit, especially since it contrasts with the word 'unblemished'.

21. b) Option b) is spotted with an error and the rectified statement should be 'higher education has high payoffs', since the sentence denotes that higher education offers good returns. The use of the word "installments" is contrary to that and gives a wrong meaning to the statement.

22. b) option b) is spotted with an error and the rectified statement should be 'obtained both through' or 'procured both through' because the words "obtained" or "procured" in the place of "gained" is more suitable or apt in the above statement.

23. b) Since the main statement provides a conclusion that criminals must be given the harshest punishment to stop them from repeating their crime, if a n alternate view of offered, where it is being said that by another route the same end goal can be achieved, then that poses a serious doubt on the conclusion drawn. Option b) offers such an alternate view by stating that those who were counseled and trained did not repeat their crimes. Option a) and c) are related to the topic but in a way support the main conclusion drawn. Option d) is the closest second to option b) in being a possible answer, but between the two, option b) is more applicable and direct.

24. b) In this passage, statement B makes sense as the start of the passage because it introduces the topic of percussions and the understanding people have about drums being the only instrument that has something to do with percussions. Statement D should logically follow statement B as it gives a justification for this understanding. Therefore, option b) makes sense as the right answer compared to the other options.

25 and 26 Correct Answer: AA. The sense of the sentence tells us that since she is viewing fragmentary remains, there is nothing much left of the ancient city. The archaeologist is likely to reflect on the fact that human constructions do not last long. Hence, 'impermanence' of human 'endeavour' fits well.

27. d) Since buying stock in depression will get maximum returns, thus, to get maximum returns, an investor need not do anything else other than invest in stocks during depression. Option a) mentions that buying stocks in depression is the only way, which is not suggested by the main statement at all. Options b) and c) are related to the topic but irrelevant.

28. d) In this passage, statement C makes sense as the start of the passage because it introduces the topic of sugar art and elaborates on what it is about. Thus, option d) makes sense as the right answer compared to the other options and is the correct answer.

29 and 30 Answer: CB 'But' indicates a need for opposites. In the embarrassing situation he did the opposite of what he would do normally. Hence, he was normally 'forthright' (truthful), but was compelled to 'prevaricate' (lie, or avoid the truth).

31. c) A and D are opposites.

32. c) Since the main statement concludes that every child appearing for exams must be given the mentioned drug, the additional fact that would weaken this would be if amphetamine contains things that harm the same children in some way. Option a) and b) are irrelevant and d) actually strengthens the conclusion in a way.

33. d) Let the cost of horse and donkey beRs. H and Rs. D respectively.

Sum of the cost of horse and donkey = Rs. 24000

He sold the horse at a price of Rs. 17500.

Villager made overall profit of 20%.

So, he earned money which is = 24000 x 1.2 = Rs. 28800.

Therefore, he has to sellthe donkey at a price which is = Rs. 28800 – Rs. 17500 = Rs. 11300

34. a) Let original average of 8 people = n

Original weight of 8 people = 8n

New weight of 10 people = 10(n–2)

According to condition,

10(n–2) – 8n = 36

10n – 20 – 8n = 36

2n = 56

n = 28

Original weight of 8 people = 8n = 28 × 8 = 224 kgs

New weight of 10 people = 10(n–2) = 10 × 26 = 260 kgs

35. d) Considering they meet x hours after 7 a.m. We have the following,

(Distance travelled by Shyam in x hours) + (Distance travelled by Suman in (x – 1) hours) = 16

Therefore,

5x + 6(x – 1) = 16

5x + 6x – 6 = 16

11x = 22

x = 2

Therefore, they meet at 7 + 2 = 9 a.m.

36. e) If 7 are girls, then 8 students will be boys.

Let's take 7 girls as one group, so we have to arrange 8 boys and one group of girls in a row in 9! ways and 7 girls can be arranged amongst themselves in 7! ways.

Therefore, number of ways 7 girls sit together in a row = 9! × 7!

Number of ways 7 girls do not sit together = 15! − 9! × 7!.

37. d)

S = {1, 2, 3, 4,....., 25}.

Let E be the event of getting a page number multiple of 5 or 6.

Therefore, n(E) = {5, 6, 10, 12, 15, 18, 20, 24, 25}.

Therefore, $P(E) = \dfrac{n(E)}{n(S)} = \dfrac{9}{25} = 0.36$.

38. a) let Ram's expenditure is A and his salary = B

$A_1^2 \times B_1^2 = A_2^2 \times B_2^2$

$20000^2 \times 40000^2 = 80000^2 \times B_2^2$

$20000^2 = 4 \times B_2^2$

Taking square root on both sides, we get $20000 = 2 \times B_2$

$B_2 = 10000$

39. a) Part of work done by A will be $\left(\dfrac{1}{24}\right) \times 6 = \dfrac{1}{4}$

Similarly part of work done by B will be $\dfrac{1}{4}$

Total work done by A and B will be $\frac{1}{4} + \frac{1}{4} = \frac{1}{2}$

Hence C should complete the remaining $\frac{1}{2}$ of the work.

Hence he takes $\frac{60}{2} = 30$ days

40. e)
$(100C + 10B + A) - (100A + 10B + C) = 198$

$(100A + 10C + B) - (100A + 10B + C) = 9$

$(100B + 10A + C) - (100A + 10B + C) = 90$

Solving these three equations, we get the number as 123.

41. e) Statement A: We will be able to find the total marks obtained by Mohan in Hindi, Mathematics and Biology.

Statement B: We will be able to find the total marks obtained by Mohan in Hindi and Mathematics.

Statement C: We will be able to find the total marks obtained by Mohan in History and Biology.

Hence, even by using all three statements, we will not be able to find the marks obtained by him in Hindi.

42. c) Total stoppage time of train A = 2 min (Dadar) + 5 min (Kalyan) + 4 min (Karjat) + 3 min (Lonavala) = 14 min.

Total stoppage time of train B = 2 min (Dadar) + 7 min (Kalyan) + 2 min (Karjat) + 5 min (Lonavala) = 16 min.

Required ratio = 14 : 16 = 3.5 : 4

43. b) Average Speed = $\frac{TotalDis\tan ce}{Total\ Time}$

Since, the total distance is constant (192 kms.), the Average Speed is inversely proportional to the total time.

Time taken by Train A = 4 hours and 5 min (7.50 a.m. to 11.55 a.m.) i.e. 245 min.

Time taken by Train B = 4 hours and 20 min (12.50 a.m. to 17.10 a.m.) i.e. 260 min.

1 Average Speed of A : Average Speed of B = 260 : 245 (Inversely Proportional) = 1.06

44. a) Since the distance between any two trains would remain constant for both trains, the difference between the speeds of the two trains will be maximum if their time difference is maximum.

Dadar to Kalyan:
Time taken by train A = 48 min., Time taken by train B = 38 min.
Time difference = 10 min.

Kalyan to Karjat:
Time taken by train A = 43 min., Time taken by train B = 51 min.
Time difference = 8 min.

Karjat to Lonavala:
Time taken by train A = 50 min., Time taken by train B = 47 min.
Time difference = 3 min.

Lonavala to Pune:
Time taken by train A = 80 min., Time taken by train B = 98 min.
Time difference = 18 min.

Thus, we can see that the highest difference in the speeds of the two trains is in the stretch Lonavala-Pune.

45. c) Taking a cue from the first question in the set, the longest stop at any station is 7 min. i.e. Train B at Kalyan.

46. e) If the speed of train A is increased by 20%, i.e. its speed becomes $\frac{6}{5}$ times its normal speed,

then its run time would become $\frac{5}{6}$ times its normal time. (However the stoppage time would not change).

Total run time of train A (including stoppages) = 245 min. (Refer to the second question of the set).

Stoppage time for A = 14 min. (Refer to the first question of the set)

Thus, total run time = 245 – 14 = 231 min.

If the speed increases by 20%, the run time would be $\frac{5}{6} \times 231 = 192.5$ min

Add to this, the stoppage time of 14 min., we get the total time of the journey as 206.5 min. i.e. 3 hours and 27 min.

So, if it leaves VT at 7.50 a.m., it should reach Pune at 11.17 a.m.

47. a) If the two trains were to not halt at any stations, then only their run times would be taken into account.

Total run time for A = 231 min.

Total run time for B = 260 – 16 = 244 min. (Total time – Stoppage time).

Thus, Speed of train A = $\dfrac{192}{231}$ Speed of train B = $\dfrac{192}{244}$

Their relative speed = $\dfrac{192}{231} + \dfrac{192}{244}$ (since they are travelling in opposite direction).

Hence, time taken to meet = $\dfrac{192}{\left(\dfrac{192}{231} + \dfrac{192}{244}\right)} = \dfrac{231 \times 244}{231 + 244} = 119$ min. (approximately)

which is 1 min. less than 2 hours.

Hence, if the two trains leave at 7.50 a.m., they would meet at 9.49 a.m.

48. b) We have,

X = $\dfrac{25}{16}$,

Y = $\dfrac{13}{10}$,

Z = $\dfrac{144}{100}$

To find out which of the given statements are true, we first need to make all the denominators equal. After doing so we get,

X = $\dfrac{625}{400}$,

Y = $\dfrac{420}{400}$,

Z = $\dfrac{576}{400}$,

Therefore, statement B is true.

49. a) Let the number of chocolates be X.

$$X = \frac{96 \times 100}{22}$$

X = 436.36

X = 436 (approx)

Therefore, number of chocolates distributed among children = 436 – 96= 340

Chocolates are distributed among students such that each student gets 6% of the chocolates distributed.

Let the total number of students be Y.

Each student receives 6% of the total chocolates distributed.

So, 0.06× 340 = 20.4

= 20 (approx)

Therefore, number of students = $\frac{340}{20}$ = 17 .

50. e) Let us consider total capacity of the tank = L (10, 12, 20) = 60 liters.

∴ Rate of A is 6 liters / min

Rate of B is 5 liters / min

And Rate of C (wash pipe) is 3 liters / min

If all taps are open, then combined rate = 6 +5 – 3 = 8 liters /min

∴ Time $= \frac{60}{8} = 7.5 \min s$

51. d) First Minute - boy covers 2 m

Second minute - he slips down by 1 m

∴ In 2 mins, boy covers = 2 – 1 = 1 m distance

∴ 2 mins → 1 m

4 mins → 2m
.
.
.

24 mins → 12m

(∵ 25th → 2m) ∴ In 25 mins → 14 m

52. b) Let each glass capacity is 10 ml

Glass 1 (100 ml)   + Glass 2 (100 ml)   Jar (200 ml)
[Milk 75 ml, water 25 ml]   [Milk 50 ml, water 50 ml]   [Milk 125 ml, water 75 ml]

∴ m : w

= 5 : 3

53. b) Statement A: Will only give us the ratio of the ages of X and Y ten years from now, and not at present.

Statement B: Will give us the ratio of present ages of X and Y i.e. X : Y = 3 : 5. And hence, is sufficient to answer the question.

Statement C: Will gives the product of the present ages of X and Y and not the ratio.

However, if we combine the statements A and D, we will get (11a − 10)(15a − 10) = 240.

This will give us a quadratic equation, with two real roots, with one positive and the other negative root.

Hence, Statements A and C together are also sufficient to answer the question.

For the answers to questions 54 to 58:

In such type of questions, it is advisable to construct the full table first.

(1) Day	(2) Opening Stock	(3) Production	(4) Self-Consumption	(5) Sales	(6) Closing Stock	(7) Unsatisfied Demand	(8) Purchase	(9) Disposing	(10) Closing Stock
1	0	1,150	275	825	50	–	–	–	50
2	50	1,200	350	890	10	–	–	–	10
3	10	1,300	225	985	100	–	–	–	100
4	100	1,100	300	960	0	60	60	–	0
5	0	1,200	260	850	90	–	–	–	90
6	90	1,400	280	1,000	210	–	–	110	100
7	100	1,250	350	925	75	–	–	–	75
			2,040	**6,435**					**425**

Column (6) = (2) + (3) − (4) − (5) or 0 (zero), if closing stock becomes negative.

ly if column (6) is 0 (zero)will column (7) come in to picture.

Column (7) = (4) + (5) − (2) − (3) meaning that in case the demand is not satisfied, excess of sales + self-consumption over opening stock + production will come here.

Column (8) = If Column (7) is non-zero, Column (8) = Column (7)

Column (9) = Column (6) − 100 [i.e., excess of closing stock over 100]

Column (10) = Column (6) − Column (9)

54. e) From Column 10 of the table, the total storage is 425.

∴ Storage cost per unit day = 425 × 5 = Rs. 2,125.

55. b) Actual self-consumption average = $\dfrac{2040}{7}$ = 291.42.

Estimated average = 275.

∴ Difference = 16.

Hence actual consumption average is higher by 16.

56. b) From the table, it is clear that items purchased from outside = 60.

Hence, loss = 60 × 25 = Rs. 1,500

57. c) From the table, it is clear that items disposed off = 110.

Hence, loss = 110 ×35 = Rs. 3,850.

58. d) Sales (outside) = (825 + 890 + 985) × 60 = 162,000

Self-consumption sales = (275 + 350 + 225) × 55 = 46,750

Closing (at 3rd day's prod. cost) = 100 × 45 = 4,500

Total = 166,500.

Less: Opening stock (1st day) ... Nil

Production day 1 and 2 = (1,150 + 1,200) × 40 = 94,000

Production day 3 = 1,300 × 45 = 58,500

∴ Less = 1,52,500

∴ Total profit for the period of three days = 1,66,500 − 1,52,500 = 14,000.

59. e) We can find the number of multiples of 11 by finding the first and the last 5 digit multiple.
Smallest 5 digit multiple of 11 is 910th multiple and largest 5 digit multiple of 11 is 9090th multiple.
Therefore, number of multiples of 11 = 9090 − 910 + 1 = 8181.

60. b) Let Rs. 100 is invested in each part.

Total amount received from first part = $100 + \dfrac{100 \times 20 \times 2}{100}$ = Rs.140

Total amount received from second part = $100 + \dfrac{100 \times 20 \times 3}{100}$ = Rs.160

Total amount received from third part = $100 + \dfrac{100 \times 20 \times 4}{100}$ = Rs.180

Therefore, ratio of amount invested in each part

$= \dfrac{1}{140} : \dfrac{1}{160} : \dfrac{1}{180} = \dfrac{1}{14} : \dfrac{1}{16} : \dfrac{1}{18}$

Multiplying by 1008 in each ratio= 72 : 63 : 56

Sum of the ratio = 72 + 63 + 56 = 191

Amount invested in for 4 years = $\dfrac{56}{191} \times 5730$ = Rs.1680

61. c) A number is divisible by 3 if sum of its digits is divisible by 3.

Therefore, if any number is divisible by 3, the number obtained by reversing its digits will also be divisible by 3.

Hence, all two digit multiples of 3, that do not have 0 as one of the digits, will satisfy the criterion.

Total two digit multiples of 3 = 33 − 3 = 30

Numbers with 0 as one of the digit = 3

Answer = 30 − 3 = 27

62. c) Volume available $= 10^3 + 6^3 + 8^3$

$= 1728$

∴ The edge of new cube (x), is $x^3 = 1728$

$x = 12$

63. a) Ratio of Rate of X and Y is 5 : 8

X takes 40 days

$\therefore$ work = time ×rate

= 40 × 5

= 200

$\therefore$ Time taken by Y $= \dfrac{200}{8} = 25$ days

64. a) Statement A: We can find the area of the square, from which we can find the length of the side of the square. Hence this statement in itself is sufficient to answer the question.
Statement B: We can find the perimeter of the square, from which we can find the length of the side of the square. Hence this statement in itself is sufficient to answer the question.
Statement C: We can find the length of the diagonal of the square, from which we can find the length of the side of the square. Hence this statement in itself is sufficient to answer the question.

Explanation for the questions 65 to 68 :

65. a) The level of reserves located in the USA in billion barrels = 2.53% of 1146.49 ≈ 29 billion barrels.

66. e) The level of reserves located in the USA in billion barrels = 2.53% of 1146.49 ≈ 29

The number of years that the oil reserve would last is $= \dfrac{29 \times 10^9}{(20 - 8.84) \times 10^6 \times 360} = 7.23$ years ≈ 7 years.

67. d) Difference between India's Production and consumption = 2.2 − 0.66

= 1.54 million barrels.

Difference between Russia's Production and consumption

$= \dfrac{2.2 \times 7.69}{5.13} - \dfrac{11.27}{1.86} \times 0.66 = 3.29 - 3.99 = 0.69$ million barrels.

Countries	Production	Consumption	Difference
India	0.66	2.2	1.54

USA	8.83	22	13.17
China	4	6.6	2.6
Russia	4	3.29	0.7

68. b) The consumption for Saudi Arabia is not given. Hence, option a) is not true.

Option b) is true.

Saudi Arabia is the highest producer, i.e., 28.17%.

USA is the highest consumer, i.e., 51.28%.

69.d) Statement A: By only knowing the ratio, we cannot find the actual number of employees. Hence, this statement alone is not sufficient to answer the question.

Statement B: This statement only compares the monthly salaries of clerks and supervisors. This will not help us determine the number of employees. Hence, this statement alone is not sufficient to answer the question.

Statement C: This statement will give us monthly salary of a clerk and not the number of employees. Hence, this statement alone is not sufficient to answer the question.

However, if we combine all the three statements together, we will be able to find the total number of employees in the company.

From statement A, let the number of supervisors be 4x and number of clerks be 5x.
From statement C, a clerks monthly salary is Rs.1250 (since 20% is Rs.250)

So, total salary of all clerks = 1250 × 4x = 5000x.

From statement B: Total monthly salary of supervisors = 6400 x (28% more than clerks).

Thus, 5000x + 6400x = 285000   or x = 25.

Thus, number of employees = 9x = 225.

70. c) The number which has at least 1 odd power will have even number of factors. So, the out of the given options, option c satisfies this condition. Therefore, $a^2b^3c^2d^4$ has even number of actors.

... valuation happens for two cases

1) A speaks the truth (A_T) and B lies (B_L)

2) B speaks the truth (B_T) and A lies (A_L)

$\therefore$ Chances = [prob (A_T) and prob (B_L)] + [prob (A_L) and prob (B_T)]

$$= \left(\frac{60}{100} \times \frac{60}{100} \right) + \left(\frac{40}{100} \times \frac{40}{100} \right)$$

$$= \frac{52}{100} \text{ or } 52\%$$

72. e) $p + d = 15$ ……………. (1)

$2p + 4d = 40$ ………….. (2)

Solving Equ. (1) and (2), some intensely, we get

$d = 5$ and $p = 10$

73. a) $\frac{1}{8} \times X = 41.5$

$\therefore x = 332$

$\therefore 69\%$ of $X = \frac{69}{100} \times 332 = 229.08$

74. c)
Samarth : Vishal

Investment $\times$ time period = $55000 \times 12 : 40{,}000 \times 8$

$= 33 : 16$

$\therefore$ Ration of profit is $33 : 16$

$\therefore 33x + 16x = 33957$

$\therefore x = 693$

$\therefore$ Difference between share of profits = $33x - 16x$

$$= 17x$$

$$= 17(693)$$

$$= 11{,}781$$

For the answers to questions 75 to 79:

75. b)

	FII	Comment Compared to previous year
1992-93	200	
1993-94	3550	Increase
1994-95	3850	Increase
1995-96	2900	Decrease
1996-97	3200	Increase
1997-98	1900	Decrease

FII recorded negative growth rates in two years, i.e., in 1995-96 and in 1997-98.

76. b)

	FDI	Growth rate (%) Compared to previous year
1992-93	300	
1993-94	550	83.33
1994-95	1250	127.27
1995-96	2050	64.00
1996-97	2800	36.59
1997-98	3100	10.71

Thus, the growth is highest from 1993-94 to 1994-95.

77. e)

	FDI	FII
1992-93	300	200
1993-94	550	3550
1994-95	1250	3850
1995-96	2050	2900
1996-97	2800	3200
1997-98	3100	1900

In 1992-93 and 1997-98, the FDI flows were greater than FII.

78. d)

	FDI	FII	TOTAL
1992-93	300	200	500
1993-94	550	3550	4100
1994-95	1250	3850	5100
1995-96	2050	2900	4950
1996-97	2800	3200	6000
1997-98	3100	1900	5000

Both FII and Total are highly volatile in their flows, whereas FDI has a particular trend in every year.

79. b)

	FDI	FII	Difference

1992-93	300	200	100
1993-94	550	3550	3000
1994-95	1250	3850	2600
1995-96	2050	2900	850
1996-97	2800	3200	400
1997-98	3100	1900	1200

It is in the year 1993-94 that the difference is the maximum.

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By direct observation also, the difference is the maximum in 1993-94.

80. c) Statement A: Gives us the selling price of all the objects including a profit of 20%. We can easily get the cost price if we remove the profit component of this. Hence, this statement in itself is sufficient to answer the question.

Statement B: This statement is not sufficient to answer the question, as we do not know the individual costs of the book and the pen.

Statement C: This statement is sufficient to find the cost of a book, but not sufficient to find the cost of the pen.

Explanation forquestions81 to84:

The followingtablecan bemadeafterobservingtherules:

INPUT	lemon	apple	choco	college	girl	dream	room	book	calf	
	1	2	3	4	5	6	7	8	9	
STEP-1	3	1	2	4	5	6	9	8	7	**Rule-1**
STEP-2	1	2	3	6	5	4	7	8	9	**Rule-2**

MS LECTURE 9	1	2	8	3	4	7	5	6	**Rule-3**
STEP-4	2	9	1	8	3	4	6	7	5	**Rule-4**
STEP-5	1	9	2	4	3	8	5	7	6	**Rule-2**
STEP-6	6	1	9	7	2	8	5	3	4	**Rule-3**
STEP-7	9	1	6	7	2	8	4	3	5	**Rule-1**
STEP-8	6	1	9	8	2	7	5	3	4	**Rule-2**
STEP-9	4	6	1	3	9	7	5	2	8	**Rule-3**
STEP-10	1	4	6	3	9	7	8	5	2	**Rule-4**
STEP-11	6	4	1	7	9	3	2	5	8	**Rule-2**
STEP-12	8	6	4	5	1	3	2	9	7	**Rule-3**
STEP-13	4	6	8	5	1	3	7	9	2	**Rule-1**
STEP-14	8	6	4	3	1	5	2	9	7	**Rule-2**
STEP-15	7	8	6	9	4	5	2	1	3	**Rule-3**

81.c) From the table STEP10 is:

STEP-10	1	4	6	3	9	7	8	5	2
	lemon	**college**	**dream**	**choco**	**calf**	**room**	**book**	**girl**	**apple**

So STEP10 is option c).

82. b) From the table STEP8 is:

STEP-8	6	1	9	8	2	7	5	3	4
	dream	**lemon**	**calf**	**book**	**apple**	**room**	**girl**	**choco**	**college**

So option b) can be output.

83.e) By observing the table, we get none of the arrangement in options will fall between STEP11 to15.

84.b) Bychecktheoptions.Rule-1isappliedinoptions(iii)and(iv).

85. b) "has grounded' and "has been in dispute" are facts.

86. a) Answer is evident from '…..men and their mistresses turning out to be a social problem in China….'

87. c) The letters are O, C, E, N and A. From these letters two meaningful five-letter words can be formed: OCEAN and CANOE.

88. b) The word is divided into three parts: the first four letters, the next two letters and the third two letters. In the first part each of the four letters are replaced by the letter that follows them in English alphabet. In the second part each letter is replaced by the letter that precedes it in English alphabet. In the third part each letter is replaced by the letter that follows it in English alphabet and the order is reversed.

Hence, INFO = PGOJ, RM = QL, AL = BM

TOUCHING will be coded as TOUC = DVPU, HI = GH, NG = OH

Thus, TOUCHING $\Rightarrow$ DVPUGHOH

89. d) The code for BIOGRAPHY cannot be determined from the given data as there are two E's, F's and I's. So there can be more than six possible codes for BIOGRAPHY.

90. c) A CPLC student knows all the place values of letters in English alphabet.

The place value of T is 20, O is 15 and that of Y is 25.

In reverse order their place value will be

T: $(26 - 20) + 1 = 7$, O: $(26 - 15) + 1 = 12$, Y: $(26 - 25) + 1 = 2$

Therefore, the sum will be $7 + 12 + 2 = 21$.

91. b) Option a) is incorrect because 78 is M and not H.
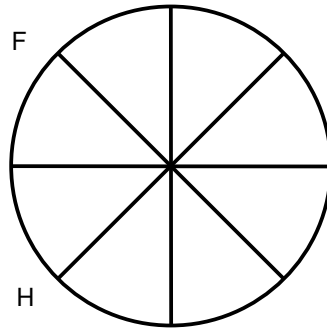
Option c) is incorrect because 32 is G and not C.

Option d) is incorrect because 67 is Q and not H.

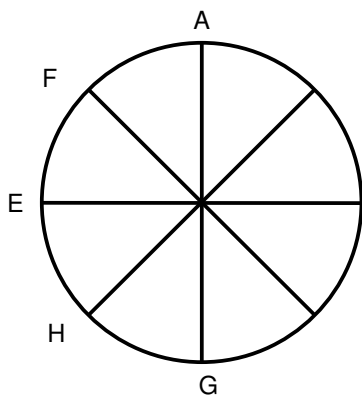**92. c)** Almond ,raisins and walnuts have an intersection.

93. a) I is the cause and II is the effect.
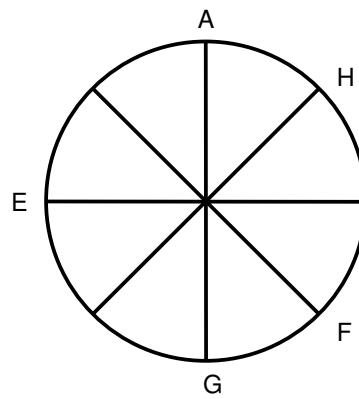
Explanation for questions 94 to 97:

i) F is vertically above H in the left half of the wheel in a particular position.
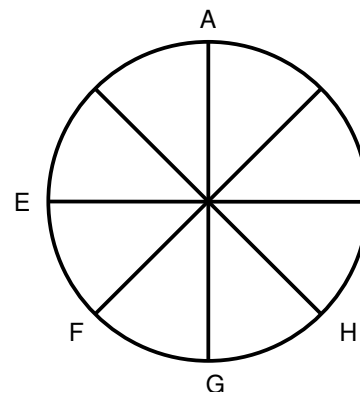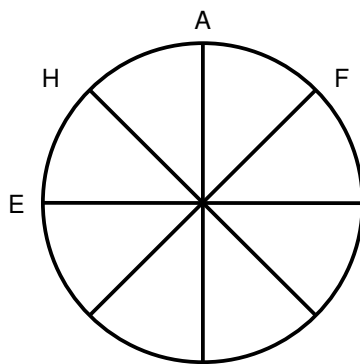

iii) In the initial position, when E is on the left half of the wheel, A is the top most capsule and G is the bottom most capsule.
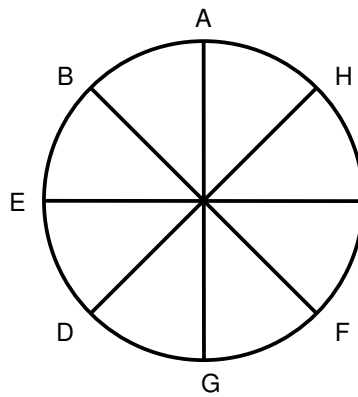

Arrangement 1   **Arrangement 2**

Arrangement 3   **Arrangement 4**

ii) D immediately follows E and E immediately follows B at a particular point on the circumference. This means, E must be between B and D, which is only possible in arrangement 2.

Thus, as mentioned in point no (iii), the initial position would be:
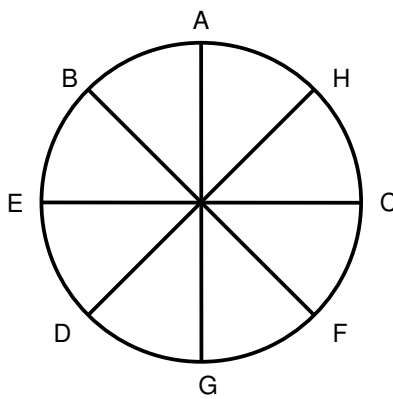
94. c)   **95.d)**   **96. d)**   **97. b)**

98. a) If an issue has been brought to the Assembly, then there must have been recent incidents giving rise to citizen concern.

99. d) Since both the premises start with 'some' no conclusion possible.

100. d) EI, NO, TU, TX, UX

101. c) Here is the manner in which the word is coded.

1. The word is split into two halves i.e. DESIR and EABLE

2. In the first half, every letter is replaced by the previous letter in the alphabetical sequence. Thus DESIR becomes CDRHQ. This is then written in the reverse order i.e. QHRDC.

3. In the second half, every letter is replaced by the next letter in the alphabetical sequence. Thus EABLE becomes FBCMF. This is then written in the reverse order i.e. FMCBF.

4. The two halves of the code are then joined. Hence the final code is: QHRDCFMCBF

Applying the same logic to the word CREATIVE, we get:

1. The word is split into two halves i.e. CREA and TIVE

2. In the first half, every letter is replaced by the previous letter in the alphabetical sequence. Thus CREA becomes BQDZ. This is then written in the reverse order i.e. ZDQB.

3. In the second half, every letter is replaced by the next letter in the alphabetical sequence. Thus TIVE becomesUJWF. This is then written in the reverse order i.e. FWJU.

4. The two halves of the code are then joined. Hence the final code is: ZDQBFWJU

102. a) If all the digits are dropped, the new arrangement will be: D I H ∞ $ K E L B @ A R M F % J £ C G

Now, fourth to the left of the seventh character from the right end will actually be the eleventh character from the right end, which is B.

103. c) In the normal arrangement, the fifth to the right of the thirteenth character from the right end would be the eighth character from the right end.

However, since the positions of the ten elements from the right end is reversed, this character would actually be the third character from the right end in the current arrangement i.e. C.

104. d) Neither I or II follows.

105. b) "unfold" (open out, disclose) is a fact. "people still enter…"is a fact.

Explanation for Questions 106 to 109:

There are 4 parameters you have to work with :

State, Cubicle name, Favourite dress and Cubicle position.

Arranging given information :

Cubicle	1	2	3	4
State	Bengali (Clue 3)	Tamilian (Clue 2)		
Dress		Pyjama (Clue 7)	Lungi (Clue 4)	
Cubicle		A (Clue 5)		

From clue 8, you know that the D Cubicle is to the right of the B Cubicle. So the B Cubicle must be # 3 and the D Cubicle #4. Let us call this statement 9.

Arranging information :

Cubicle	1	2	3	4
State	Bengali (Clue 3)	Tamilian (Clue 2)	Punjabi (Clue 1)	Gujrati
Dress		Pyjama (Clue 7)	Lungi (Clue 4)	Dhoti (Clue 6)
Cubicle		A (Clue 5)	B (Clue 9)	D (Clue 9)

106. b)   107. b)   108. a)   109. d)

110. a) For T to be the brother of H, he must be a male.

The only relationships amongst the ones given that represents a male is son and father.

For both of these, T must either be followed by a '#' or a '%'.

Hence, the answer can only be a).

111. c) Option a) is incorrect because 43 is K and not E.

Option b) is incorrect because 79 is O and not N.

Option d) is incorrect because 77 is Z and not L.

112. d) The main purpose of Jug, Pitcher, Tumbler and Bottle is to store liquid, while the main purpose of a saucer is to cool a hot liquid.

113. d) The first letter is replaced by a letter that is 3 letters ahead in alphabetical sequence i.e. M by P and F by I. Thus, S must be replaced by V.

Thesecond letter is replaced by a letter that is 4 letters ahead in alphabetical sequence i.e. Q by U and I by M. Thus, V must be replaced by Z.

Hence the answer must be VZ.

114. d) The sample is very important for any technical survey.

115. b) I is not a required course of action as it is the responsibility of the social organization such as an NGO

Explanation For questions 116 to 118:

Label : Name

N   : Nagabhushanam

P   : Phaneesh

R   : Ramaswamy

S   : Swaminathan

T   : Tirthankar

V   : Visheshwar

Trained	**Not**	**Trained**
Experienced	R	P, N
Not Experienced	T, N	S

R and S are always together

For the others, the possible combinations are as follows:

T, P   V, N

& V, P   T, N

116. b) The only possibilities are:

Trained	Not	Trained
Experienced	N, P	R
Not Experienced	S	T, V

So Swaminathan is assigned to sector Tritiya.

CPLC Alternate Method

P is in sector Dwitiya.

P and N are never together.

So, N is always in sector Pratham.

$\Rightarrow$ R and S are both in sector Tritiya

117. a) Look at option a).

If P is assigned to sector Pratham.

Then N will always be in sector Dwitiya and R, S will always be in sector Tritiya.

So V does not fit into sector Tritiya in any arrangement.

The other options are possible.

118. d) Pratham   Dwitiya   Tritiya

N cannot be T's partner because he has to be at either sector Pratham or sector Dwitiya.

$\Rightarrow$ T and P are partners while R and S are permanent partners.

So the remaining technicians N and V have to be together.

119. b) II is clearly to the cause and I is the affect.

120. d) community schemes might get influenced by Solar subsidy but are not totally dependent on them.

Answer Key

Q	A	Q	A	Q	A	Q	A	Q	A
1.	d)	25.	a)	49.	a)	73.	a)	97.	b)
2.	a)	26.	a)	50.	e)	74.	c)	98.	a)
3.	a)	27.	d)	51.	d)	75.	b)	99.	d)
4.	d)	28.	d)	52.	b)	76.	b)	100.	d)
5.	c)	29.	c)	53.	b)	77.	e)	101.	c)
6.	b)	30.	b)	54.	e)	78.	d)	102.	a)
7.	b)	31.	c)	55.	b)	79.	b)	103.	c)
8.	c)	32.	c)	56.	b)	80.	c)	104.	d)
9.	c)	33.	d)	57.	c)	81.	c)	105.	b)
10.	b)	34.	a)	58.	d)	82.	b)	106.	b)
11.	c)	35.	d)	59.	e)	83.	e)	107.	b)
12.	a)	36.	e)	60.	b)	84.	b)	108.	a)
13.	c)	37.	d)	61.	c)	85.	b)	109.	d)
14.	d)	38.	a)	62.	c)	86.	a)	110.	a)
15.	a)	39.	a)	63.	a)	87.	c)	111.	c)
16.	b)	40.	e)	64.	a)	88.	b)	112.	d)
17.	c)	41.	e)	65.	a)	89.	d)	113.	d)
18.	a)	42.	c)	66.	e)	90.	c)	114.	d)
19.	c)	43.	b)	67.	d)	91.	b)	115.	b)
20.	b)	44.	a)	68.	b)	92.	c)	116.	b)
21.	b)	45.	c)	69.	d)	93.	a)	117.	a)
22.	b)	46.	e)	70.	c)	94.	c)	118.	d)
23.	b)	47.	a)	71.	b)	95.	d)	119.	b)
24.	b)	48.	b)	72.	e)	96.	d)	120.	d)