https://www.mbacorner.com/

Directions for questions 1 and 2: Answer the questions on the basis of the information given below.
The table given below shows some data for fifteen companies for the year 2010.

Company	Number of branches across the country	Average Number of employees/branch	Average Revenue generated/branch (in Rs. Crores)	Total Expenses across the country (in Rs. Crores)
Roca Cola	12	178	760	5,100
Critannia	15	134	345	2,990
Kestle	6	546	456	1,880
Chepsi	8	277	510	2,315
Trimul	24	160	225	2,400
Gold Diary	18	112	650	9,056
Superb Diary	22	150	360	3,500
Fresh & First	27	106	410	7,126
Gopal Jee	16	216	585	5,810
Shudh	9	360	744	4,138
Evertasty	10	245	660	4,284
Natural & Fresh	32	80	208	3,100
Jusico	25	140	376	5,430
Trifolla	15	230	500	4,800
Real Fruits	8	325	752	2,800

1. How many of the given companies had more than 3,000 employees and generated more than Rs. 7,500 Crores as the total Revenue in the year 2010?

(a) 2 (b) 3

(c) 4 (d) 5

2. For how many of the given companies are the Total Expenses less than half the total Revenue generated in the year 2010?

(a) 3 (b) 4

(c) 5 (d) 6

Directions for questions 3 to 5: Answer the questions on the basis of the information given below.
In Sun-Moon bakery, four different types of cakes – Mango Cake, Pineapple Cake, Banana Cake and Fresh Fruitcake – are sold. Each type of cake consists of five fixed

ingredients – Wheat Flour, Milk, Sugar Free, Eggs and Baking Powder – and some variable ingredients. The variable ingredients used in different types of cakes are as follows :
Mango cake – Mango Cream and Mango pieces.
Pineapple cake – Pineapple Cream and Pineapple pieces.
Banana cake – Banana Cream and Banana pieces.
Fresh fruitcake – Milk Cream and equal quantities of Mango, Pineapple and Banana pieces.
The Cost Price of Eggs is Rs. 48/dozen and the Cost Price of Milk is Rs. 30/litre. The table given below shows the Cost Price/100 g of the rest of the ingredients.

Ingredient	**Cost (in Rs.)/100 g**
Wheat Flour	50
Sugar Free	200
Baking Powder	350
Mango pieces	30
Pineapple pieces	20
Banana pieces	40
Mango Cream	60
Pineapple Cream	90
Banana Cream	50
Milk Cream	70

The table given below shows the Selling Price of the different types of cakes.

Cake	**Selling Price(in Rs.)**
Mango Cake	515
Pineapple Cake	500
Banana Cake	600
Fresh Fruitcake	690

The statements given below are true for a cake of any of the four types made in Sun-Moon bakery.
(i) The ratio of the quantity of Sugar Free used to the quantity of Wheat Flour used is same as the ratio
of the quantity of Cream used to the quantity of Fruit pieces used.
(ii) The quantity of Cream used is three times the quantity of Sugar Free used.
(iii) The total cost of the fixed ingredients is equal to the total cost of the variable ingredients.

(iv) In each cake, 10 g Baking Powder, 3 Eggs (equivalent to 120 g) and 100 ml Milk (equivalent to 70 g)
are used.
(v) The net weight of each cake is 1 kg.

3. For which type of cake is the profit percentage made by the bakery the highest?

(a) Mango Cake
(b) Pineapple Cake
(c) Banana Cake
(d) Fresh Fruitcake

4. What are the two types of cake that require the same quantity of Sugar Free in their preparation?

(a) Mango Cake and Pineapple Cake
(b) Banana Cake and Pineapple Cake
(c) Banana Cake and Fresh Fruitcake
(d) Mango Cake and Fresh Fruitcake

5. How much Wheat Flour is used in preparing four cakes – one of each type?

(a) 475 g
(b) 500 g
(c) 525 g
(d) 550 g

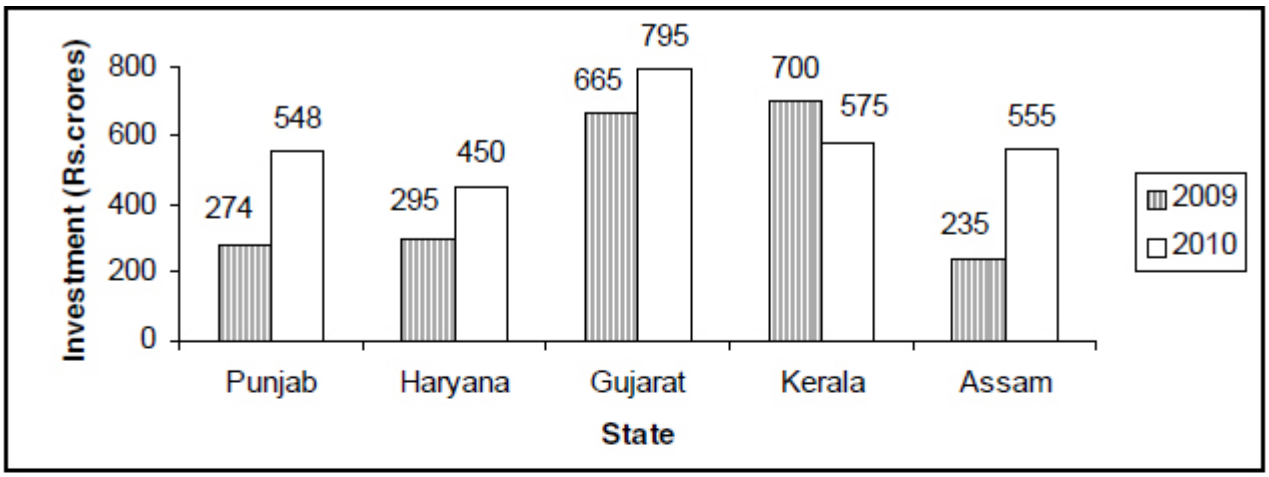
6. The question given below is followed by two statements, A and B. Mark the answer using the following instructions:
Mark (a) if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone.
Mark (b) if the question can be answered by using either statement alone.
Mark (c) if the question can be answered by using both the statements together, but cannot be answered by using either statement alone.
Mark (d) if the question cannot be answered even by using both the statements together.

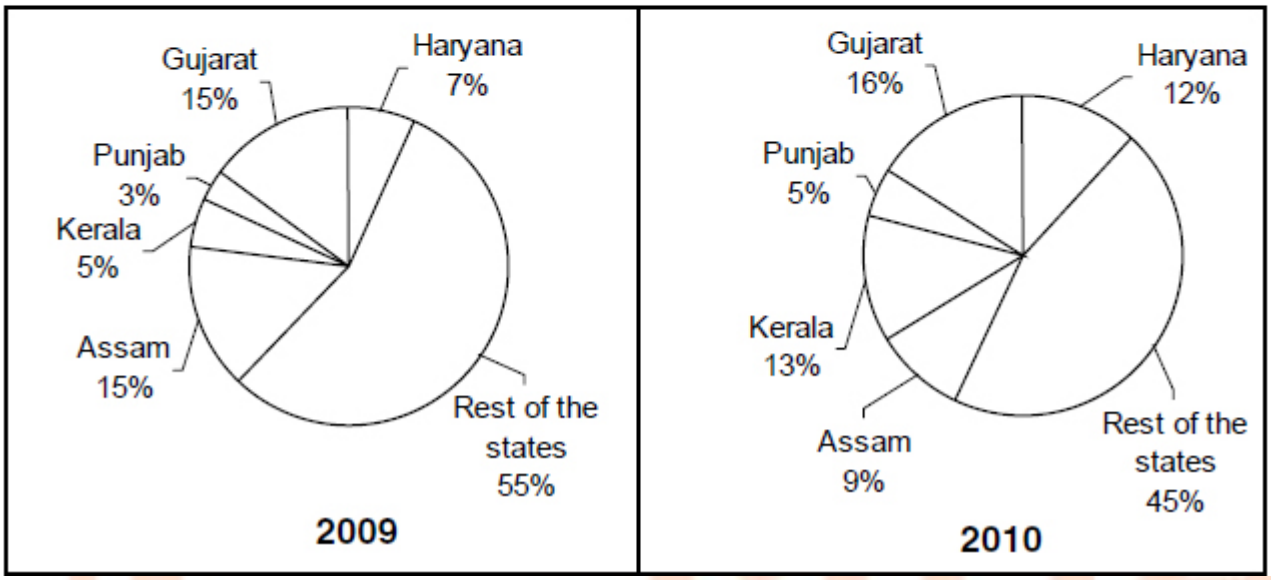
Q. N is a natural number that has exactly 24 factors. What is the number of factors of N3?

A. When N is multiplied by 3, the resultant number has 32 factors.
B. When N is multiplied by 5, the resultant number has 30 factors.

Directions for questions 7 to 9: Answer the questions on the basis of the information given below.

The bar graph given below shows the total amount (in Rs. Crores) invested by five states of India – Punjab, Haryana, Gujarat, Kerala and Assam – in three fields – R&D, Education and Sports – in 2009 and 2010. The pie charts given below show the percentage break-up of the total investment (which also includes the three fields mentioned earlier) made by different states of India in 2009 and 2010.





7. In 2009, Kerala's investment in R&D, Education and Sports was 56% of its total investments. In 2010, Haryana's investment in R&D, Education and Sports was 15% of its total investments. What was the percentage change in the total investment made by the "Rest of the states" from 2009 to 2010?

(a) 9.09%
(b) 11.11%
(c) 18.18%
(d) 22.22%

8. In both 2009 and 2010, one-third of the total amount invested by Gujarat and Assam together in R&D, Education and Sports was done in R&D. The investment in R&D by Gujarat and Assam together as a fraction of the total investment made by Gujarat and Assam together increases by 20% from 2009 to 2010. Find the ratio of the total investment made by all the states across the country in 2009 to that in 2010?

(a) 2 : 3
(b) 3 : 4
(c) 4 : 5
(d) None of these

9. The investment made by Punjab in fields other than R&D, Education and Sports in 2010 was double of that made in 2009. What was the percentage change in the total investment made by all the states across the country from 2009 to 2010?

(a) 20%
(b) 33.33%
(c) 45%
(d) 66.67%

10. The question given below is followed by two statements, A and B. Mark the answer using the following instructions :
Mark (a) if the question can be answered by using one of the statements alone, but cannot be answered by using the other statement alone.
Mark (b) if the question can be answered by using either statement alone.
Mark (c) if the question can be answered by using both the statements together, but cannot be answered by using either statement alone.
Mark (d) if the question cannot be answered even by using both the statements together.
Q. Five girls − Komal, Dhara, Jyoti, Sarla and Neha − are of different ages. Sarla is younger than both Jyoti and Komal. Jyoti is younger than Dhara but older than Neha. Who among the five is the oldest?
A. The average age of Komal and Dhara is less than the average age of Jyoti and Neha.
B. The average age of Dhara and Jyoti is less than the average age of Komal and Neha.

11. In how many ways can 1000 be written as a sum of 'n' consecutive natural numbers, where 'n' is greater than 1?

(a) 0
(b) 1
(c) 2
(d) 3

12. The exterior angles of a quadrilateral are in the ratio 1 : 3 : 4 : 7. What is the sum of the largest and the smallest interior angles of the quadrilateral?

(a) 72°
(b) 144°
(c) 168°
(d) 192°

13. x + y = 8 and P = 5x2 + 11y2, where x, y > 0. What is the minimum possible value of P?

(a) 110
(b) 220
(c) 300
(d) None of these

14. A circle is drawn inside a trapezium such that it touches all the four sides of the trapezium. The line joining the midpoints of the non-parallel sides divides the trapezium in two parts with areas in the ratio 3 : 5. If the lengths of the non-parallel sides are 6 cm and 10 cm, then what is the length (in cm) of the longer parallel side of the trapezium?

(a) 8 (b) 10

(c) 12° (d) Cannot be determined

15. A and B are the two opposite ends of a swimming pool and the distance between them is 420 metres. Ankur and Manu start swimming towards each other at the same time from A and B, with speeds in the ratio 5 : 9 respectively. As soon as any of them reaches an end, he turns back and starts swimming towards the other end. At what distance (in metres) from A will they meet when Manu is in his 13^{th} round? Note: A to B is considered one round and B to A another round.

(a) 405 (b) 330

(c) 240 (d) 280

16. x and y are real numbers such that $2\log(x - 2y) = \log x + \log y$. What is the value of x/y ?

(a) 1 (b) 4

(c) Either (a) or (b) (d) None of these

17. There are 140 students in a school. The number of students who play Cricket, Football and Hockey are 50, 80 and 70 respectively. The ratio of the number of students who play more than one of the three sports to the number of students who play all the three sports is 3 : 2. If each student of the school plays at least one of the three sports, then how many students play exactly two of the three sports?

(a) 12 (b) 14

(c) 16 (d) 20

18. There are three equal containers that are completely filled with different water-alcohol mixtures with water and alcohol in the ratio 2 : 3, 3 : 4 and 4 : 5 respectively. They are emptied into a bigger container. What fraction of the mixture in the bigger container should be replaced by water so that the resulting mixture has equal quantities of water and alcohol?

(a) 43/945 (b) 143/945

(c) 43/544 (d) 143/1088

19. In an increasing Arithmetic Progression, the product of the 5th term and the 6th term is 300. When the 9th term of this A.P. is divided by the 5th term, the quotient is 5 and the remainder is 4. What is the first term of the A.P.?

(a) 12 (b) –40

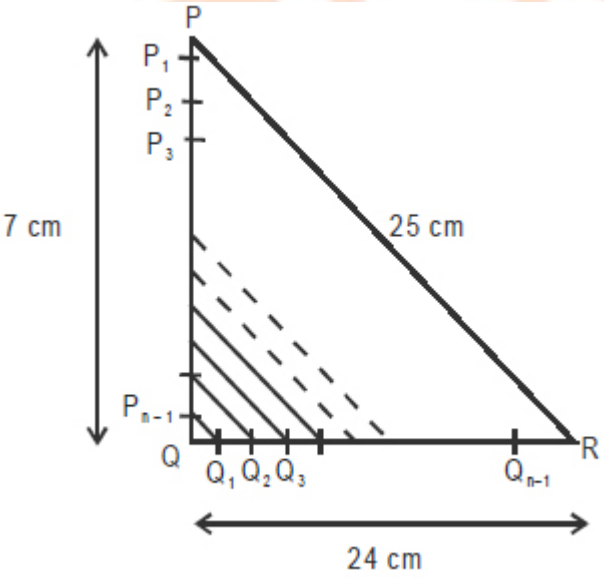
(c) –16 (d) –5

20. The work done by 4 men in 12 days is equal to the work done by 6 women in 10 days and is also equal to the work done by 8 children in 9 days. A man, a woman and a child working together take 10 days to complete a particular job. In how many days will the same job be completed by 2 women and 5 children working together?

(a) 5 (b) 6

(c) 4 (d) 7

21. In the figure given below, PQR is a triangle where PQ = 7 cm, QR = 24 cm and PR = 25 cm. The sides PQ and QR are divided into 'n' equal parts by taking 'n − 1' equally spaced points on them as shown in the figure. P^{n-1} is joined with Q_1, P_{n-2} is joined with Q_2, and so on. For what value of 'n' will the sum of the lengths of the resulting line segments be 200 cm?



(a) 15 (b) 16

(c) 17 (d) 18

22. If $(x^3 - 5x^2 + 7x - 3)(x^3 - 5x^2 + 8x - 4) / (x - 2x^2)(x^2 - 3x + 2)(x^2 + 3x + 4) \geq 0$, where x is a real number, then which of the following is correct?

(a) $x \in [-\infty, 1] \cup [2, 3]$ (b) $x \in [1, 2] \cup [3, \infty)$

(c) $x \in [2, 3]$ (d) None of these

23. Ten books are arranged in a row on a bookshelf. A student has to select three out of these ten books in such a way that no two books selected by him must have been lying adjacently. In how many ways can he make the selection?

(a) 56 (b) 64

(c) 72 (d) None of these

24. If xΔ(y +1) = yΔ(x +1),xΔ x = 1 and (x − y)Δ(x + y) = xΔ y, then what is the value of 1001Δ1?

(a) 1000 (b) 100

(c) 10 (d) 1

25. Rohan is asked to figure out the marks scored by Sunil in three different subjects with the help of certain clues. He is told that the product of the marks obtained by Sunil is 72 and the sum of the marks obtained by Sunil is equal to the Rohan's current age (in completed years). Rohan could not answer the question with this information. When he was also told that Sunil got the highest marks in Physics among the three subjects, he immediately answered the question correctly. What is the sum of the marks scored by Sunil in the two subjects other than Physics?

(a) 6 (b) 8

(c) 10 (d) 1

26. Which of the following could be a possible value of 'x' for which each of the fractions ([x] + 2)/10 , ([x] +13)/11 , ([x] + 26)/12 , ([x] + 41)/13 , ...,([x] + 1913)/49 and ([x] + 2002)/50 is in its simplest form, where [x] stands for the greatest integer less than or equal to 'x'?

(a) 45.45 (b) 49.49

(c) 51.51 (d) 53.53

27. The sequence 1, 2, 4, 5, 7, 9, 10, 12, 14, 16, 17,…. has one odd number followed by the next two even numbers, then the next three odd numbers followed by the next four even numbers and so on. What is the 2003rd term of the sequence?

(a) 3953 (b) 3943

(c) 3940 (d) 3950

28. Given that A > B > C and $A^{60} = B^t = C^{120}$. If logA, logB and logC are in Arithmetic Progression, then what is the value of 't'?

(a) 40 (b) 60

(c) 80 (d) 120

29. A circle with center 'O' circumscribes a quadrilateral PQRS, such that the side RS of the quadrilateral is also the diameter of the circumcircle. The diagonals of the quadrilateral intersect at point M. PO and QO are joined. Which of the following is equal to ∠QMR?

(a) ∠QOR + ∠POS (b) 3943

(c) ∠QOR + ∠POS – 90° (d) None of these

30. In a Table Tennis tournament, the number of male participants was twice the number of female participants. Each player played a match with each of the rest of the players exactly once. Each match involved exactly two players. No match ended in a draw. The number of matches won by the female players was equal to the number of matches won by the male players. Which of the following can be the total number of matches in which a male player defeated a female player?

(a) 20 (b) 24

(c) 39 (d) 30

Directions for questions 51 to 53: Answer the questions on the basis of the information given below.

Twelve people – Aman, Bharti, Charu, Dishank, Eric, Farhan, Gaurav, Hitesh, Inder, Jatin, Kamal and Lalit – work in three different cities – Delhi, Mumbai and Kolkata, with exactly four of them working in each city. Four of the twelve are Accountants, four are Managers and four are Professors. At least one Accountant, one Manager and one Professor work in each of the three cities. It is also known that :

(i) Aman is not an Accountant and does not work in Delhi.

(ii) Bharti is a Manager and Farhan is a Professor.

(iii) Either Charu or Gaurav works in the same city as Farhan.

(iv) Kamal is a Manager who works in the same city as Dishank. This city is not Kolkata.

(v) Hitesh is an Accountant who works in Delhi.

(vi) Jatin is a Manager and Inder is an Accountant and both of them work in Kolkata.

(vii) Lalit is a Professor who works in Mumbai.

(viii) Gaurav works in Delhi and Farhan works in Mumbai.

(ix) The number of Managers working in Delhi is two.

31. Who among the following is an Accountant working in Mumbai?

(a) Eric (b) Aman

(c) Charu (d) Gaurav

32. Who are the two Managers working in Delhi?

(a) 20 (b) 24

(c) 39 (d) 30

33. What is the correct Profession, City combination for Eric?

(a) Accountant, Mumbai (b) Professor, Delhi

(c) Professor, Kolkata (d) Accountant, Kolkata

34. Ten cars – Santro, Wagon R, Zen, Ritz, Yuva, Innova, Corolla, Matiz, Xylo and Scorpio – are parked in two parallel rows such that five cars are parked in each row. Each car parked in a row faces a car parked in the other row head-on. It is also known that :

(i) Matiz is parked opposite Yuva.

(ii) Ritz is parked to the immediate right of Xylo and opposite Wagon R.

(iii) No car is parked to the left of both Zen and Scorpio.

(iv) The number of cars parked between Innova and Matiz is the same as the number of cars parked

between Xylo and Santro.

Which of the following statements cannot be true?

(a) Innova is parked opposite Zen.

(b) Scorpio is parked opposite Santro.

(c) The number of cars parked between Corolla and Matiz is the same as the number of cars parked

between Scorpio and Xylo.

(d) The number of cars parked to the left of Corolla is the same as the number of cars parked to the

left of Yuva.

Directions for questions 35 and 36: Answer the questions on the basis of the information given below.

Each of the five players – Saurabh, Yubraj, Vajendar, Gombzi and Ambata – was picked by one of the two teams – Delhi Devils and Kolkata Riders – in the auction of players for Timbaktu Premier League. Two among the five players were batsmen and the rest three were bowlers. Each of the two teams picked at least one batsman and at least one bowler. Also, these five were the only players available for auction and they were offered for bidding in a particular order. It is also known that :

(i) Kolkata Riders picked exactly two players successively.
(ii) The two batsmen were picked successively. Exactly two out of the three bowlers were picked successively.
(iii) The number of players picked between Yubraj and Vajendar is the same as the number of players picked between Saurabh and Gombzi.
(iv) Exactly two players were picked between Ambata and Yubraj.

35. If Vajendar was a batsman picked by Delhi Devils, then which of the following cannot be true?

(a) Yubraj was a batsman picked by Delhi Devils.
(b) Yubraj was a bowler picked by Kolkata Riders.
(c) Saurabh was a batsman picked by Kolkata Riders.
(d) Saurabh was a bowler picked by Delhi Devils.

36. If Saurabh was a bowler, then who among the following players was definitely a batsman?

(a) Vajendar
(b) Gombzi
(c) Yubraj
(d) None of these

37. Ashu, Banu and Charu are three students from Science stream and Diya, Ellie and Fana are three students from Commerce stream. Diya is shorter than Ellie but taller than the Science student who is shorter than Banu. The same Science student is taller than Fana but shorter than Charu. Who is the shortest among the six?

(a) Fana
(b) Charu
(c) Banu
(d) Cannot be determined

Directions for questions 38 to 40 : Answer the questions on the basis of the information given below.
Eight players – Sonu, Monu, Karan, Arjun, Ram, Lakhan, Gopi and Kishan – participated in an interschool Chess tournament. There were three rounds in the tournament.
In Round-I, two groups of four players each were made. In each group, each player played with the rest three exactly once. In one group, two players won two matches each and the remaining two players won one match each. In the other group, each player won a different number of matches. In this round, Lakhan and Gopi were in the same group and Lakhan won more matches than Gopi. Similarly, Kishan and Ram were in the same group and Kishan won more matches than Ram.
Top two players from each group in Round-I, in terms of the number of matches won by them, moved to Round-II. Just two matched were played in Round-II and each of

the four players played exactly one match. The winners of these matches moved to Round-III. The two finalists played a match in this round and the winner of this match was declared the winner of the tournament.

At the end of the tournament it was found that:

(i) None of the players won all the matches played by him.

(ii) Sonu was one of the players in Round-III. He lost exactly two matches in the tournament.

(iii) The two finalists were from different groups of Round-I.

(iv) The number of matches won by Kishan, Karan and Arjun in Round-I was the same.

38. Who won the tournament?

(a) Lakhan (b) Gopi

(c) Monu (d) Cannot be determined

39. For which of the following pairs of players was the difference between the numbers of matches won by them respectively in the tournament more than one?

(a) Monu and Kishan (b) Lakhan and Gopi

(c) Gopi and Sonu (d) Gopi and Monu

40. What was the total number of matches won by Lakhan in the tournament?

(a) 2 (b) 3

(c) 4 (d) 5

41. There are two gaps in the sentence given below. From the pairs of words given, choose the one that fills the gaps most appropriately.

An atmosphere that _____ the value and growth of individuals as well as the organization is important, and _____between individuals and the organization must be a team effort.

(a) exudes, discussion (b) encompasses, agglomerate

(c) promotes, collaboration (d) assesses, links

42. There are two gaps in the sentence given below. From the pairs of words given, choose the one that fills the gaps most appropriately.

A/an _____professional can help you establish a budget for your children's extracurricular activities based on your _____income and savings goals.

(a) knowledgeable, current (b) qualified, retirement

(c) experienced, desired (d) recommended, projected

43. The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is incorrect or inappropriate.

AGREE

(a) Do you agree to the conditions?

(b) The food did not agree with me.

(c) Our views on religion agree

(d) I agree to her analysis of the situation.

44. The word given below has been used in sentences in four different ways. Choose the option corresponding to the sentence in which the usage of the word is incorrect or inappropriate.

BY

(a) Can I pay by credit card?

(b) Do you prefer to travel by air or by train?

(c) They traveled by the 6.45 train.

(d) Come and sit by me.

45. Given below are a few sentences. Identify the sentence(s)/ part(s) of the sentence(s) that is/are correct in terms of grammar and usage (including spelling, punctuation and logical consistency). Then choose the most appropriate option.

1. Imagine you are in a train carriage waiting at station.

2. Out of the window you see a second train standing alongside your's.

3. The whistle blows, and at last you are on your way.

4. You glide smoothly past the other train.

(a) 1 and 3

(b) 2 and 4

(c) 3 and 4

(d) 1 and 4

46. Given below are a few sentences. Identify the sentence(s)/ part(s) of the sentence(s) that is/are correct in terms of grammar and usage (including spelling, punctuation and logical consistency). Then choose the most appropriate option.

1. He'll give you a call as soon as he arrive.

2. A museum is a good place to look for ancient Greece and Rome.

3. Do you think he knows what does he want?

4. Religion in the context of philosophy is particularly significant.

(a) 1 and 4

(b) 1 and 2

(c) 2 and 4

(d) 1 and 3

47. Given below are a few sentences. Each sentence has a pair of words that are italicized. From the italicized words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the

words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.

I hope they don't ask me anything about politics. I haven't the slightest (A) / smallest (B) idea about it.

I knew David could always be trusted (A) / relied (B) on in times of crisis.

I would like to make a request (A) / demand (B) to the hotel management that they allow people to choose the TV program they want to watch.

The business has lost a lot of orders recently and is going through a thin (A) / poor (B) time.

It was not the ideal (A) / idyll (B) solution to the problem.

(a) ABAAA (b) ABABB

(c) ABBAA (d) BBAAB

48. Given below are a few sentences. Each sentence has a pair of words that are italicized. From the italicized words, select the most appropriate words (A or B) to form correct sentences. The sentences are followed by options that indicate the words, which may be selected to correctly complete the set of sentences. From the options given, choose the most appropriate one.

In his position as (A) / of (B) managing director, he is responsible for more than 300 employees.

He planned the event so meticulously that the outcome was entirely causal (A) / casual (B).

They created a custom (A) / costume (B) design for a diwali card.

I suspect (A) / expect (B) his motives are not entirely good.

The economics (A) / economic (B) of the project are very encouraging.

(a) ABAAB (b) AAAAA

(c) BAAAB (d) BBAAA

49. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

I was a man who stood in symbolic relations to the art and culture of my age. I had realised this for myself at the very dawn of my manhood, and had forced my age to realise it afterwards. Few men hold such a position in their own lifetime, and have it so acknowledged. It is usually discerned, if discerned at all, by the historian, or the critic, long after both the man and his age have passed away. With me it was different.

I felt it myself, and made others feel it. Byron was a symbolic figure, but his relations were to the passion of his age and its weariness of passion.

(a) I ceased to be lord over myself.

(b) Mine were to something more noble, more permanent, of more vital issue, of larger scope.

(c) I was no longer the captain of my soul, and did not know it.

(d) He had discerned it himself.

50. A paragraph is given below from which the last sentence has been deleted. From the given options, choose the one that completes the paragraph in the most appropriate way.

In an age of hurry like ours the appearance of an epic poem that is more than five thousand lines in length cannot but be regarded as remarkable. Whether such a form of art is the one most suited to our century is a question. Edgar Allan Poe insisted that no poem should take more than an hour to read, the essence of a work of art being its unity of impression and of effect. Still, it would be difficult to accept absolutely a canon of art, which would place the Divine Comedy on the shelf and deprive us of the Bothwell of Mr. Swinburne.

(a) For even on ortolans who could endure oratory?

(b) The subject of a work of art has, of course, nothing to do with its size.

(c) A work of art is to be estimated by its beauty, not by its size.

(d) We cannot help this.

Directions for questions 51 to 54: The passage given below is followed by a set of four questions. Choose the most appropriate answer to each question.

Microfinance in India started in the early 1980s with small efforts at forming informal self-help groups (SHG) to provide access to much-needed savings and credit services. From this small beginning, the microfinance sector has grown significantly in the past decades. National bodies like the Small Industries Development Bank of India (SIDBI) and the National Bank for Agriculture and Rural Development (NABARD) are devoting significant time and financial resources to microfinance.

The strength of the microfinance organizations (MFOs) in India is in the diversity of approaches and forms that have evolved over time. In addition to the home-grown models of SHGs and mutually aided cooperative societies (MACS), the country has learned from other microfinance experiments across the world, particularly those in Bangladesh, Indonesia, Thailand, and Bolivia, in terms of delivery of microfinancial services. Indian organizations could also learn from the transformation experiences of these microfinance initiatives.

Robinson (2001) defines microfinance as "small-scale financial services—primarily credit and savings— provided to people who farm, fish or herd" and adds that it "refers to all types of financial services provided to low-income households and enterprises." In India, microfinance is generally understood but not clearly defined. For instance, if a SHG (Self-Help Group) gives a loan for an economic activity, it is seen as microfinance. But if a commercial bank gives a similar loan, it is unlikely that it would be treated as microfinance.

In India, microfinance is done by organizations having diverse orientations. NGOs in India perform a range of developmental activities; microfinance usually is a sub-component. Some of these NGOs organize groups and link them to an existing provider of financial services. In some cases NGOs have a "revolving fund" that is used for lending. But in either of these cases, microfinance is not a core activity for these NGOs. An example is the Aga Khan Rural Support Programme India (AKRSP-I). For AKRSP-I, the microfinance component is incidental to its work in natural resource management. Examples like MYRADA and the Self-Employed Women's Association (SEWA) fall in the same category. However, as their microfinance portfolios grew, both organizations decided to form separate entities for microfinance. MYRADA set up an MFO called Sanghamitra Rural Financial Services (SRFS), while SEWA set up the SEWA Cooperative Bank.

At the next level, we find NGOs helping the poor in economic activities. Their purpose is developmental. They see microfinance as an activity that feeds into economic activities. For instance, the South Indian Federation of Fishermen's Societies (SIFFS) started as a support organization for fishermen, providing technical and marketing support. It then arranged for loans to its members through banks. When the arrangement was not effective, it started providing loans itself. At the third level, we have organizations with microfinance at the core. They have developmental roots, but are diverse in their operational details, orientation, and form of incorporation.

51. The style used by the author in this passage is

(a) descriptive
(b) instructional
(c) critical
(d) analytical

52. Which one of the following is the strength of the microfinance organizations in India?

(a) In India, microfinance is provided by NGOs that help the poor in economic activities.

(b) In India, microfinance is done by organizations having diverse orientations.

(c) In India, diverse approaches have been used and there is learning from other microfinance experiments across the world.

(d) In India, microfinance is generally understood but not clearly defined.

53. "If an SHG gives a loan for an economic activity, it is seen as microfinance. But if a commercial bank gives a similar loan, it is unlikely that it would be treated as microfinance." Which of the following options would help understand the above statement?

(a) In India, microfinance is defined by 'who gives the loan' and not by 'why it is given'.

(b) In India, microfinance is defined by 'why the loan is given' and not by 'who gives the loan'.

(c) Microfinance is generally understood but not clearly defined.

(d) None of the above

54. According to the passage, the South Indian Federation of Fishermen's Societies (SIFFS) independent microfinance activity provides

(a) support to farmers when loan arrangements through banks were not effective.

(b) support to fishermen when loan arrangements through banks were not effective.

(c) supplementary support to the banks that were unable to effect loan arrangements..

(d) support to organizations with microfinance at the core.

Directions for questions 55 and 56: The passage given below is followed by a set of two questions. Choose the most appropriate answer to each question.

Civilization cannot exist without spoken language, but it can without written communication. The Greek poetry of Homer was at first transmitted orally, stored in the memory, as were the Vedas, the Sanskrit hymns of the ancient Hindus, which were unwritten for centuries. The South American Empire of the Incas managed its administration without writing. Yet eventually, almost every complex society – ancient and modern – has required a script or scripts. Writing, though not obligatory, is a defining marker of civilization. Without writing, there can be no accumulation of knowledge, no historical record, no science (though simple technology may exist), and of course no books, newspapers, emails, or World Wide Web.

The creation of writing in Mesopotamia (present-day Iraq) and Egypt in the late 4th millennium BC permitted the command and seal of a ruler like the Babylonian Hammurabi, the Roman Julius Caesar, or the Mongol Kublai Khan, to extend far beyond his sight and voice and even to survive his death. If the Rosetta Stone had never been inscribed, for example, the world would be virtually unaware of the nondescript Greco- Egyptian king Ptolemy V Epiphanes, whose priests promulgated his decree upon the Rosetta Stone in 196 BC written in three scripts: sacred hieroglyphic, administrative demotic, and Greek alphabetic.

Writing and literacy are generally seen as forces for good. All modern parents want their children to be able to read and write. But there is a negative side to the spread of writing that is present throughout its more than 5,000-year history, if somewhat less obvious. In the 5th century BC, the Greek philosopher Socrates (who famously never published a word) pinpointed our ambivalence towards 'visible speech' in his story of the Egyptian god Thoth, the mythical inventor of writing.

Thoth came to see the king seeking royal blessing on his enlightening invention. But instead of praising it, the king told Thoth: *"You have invented an elixir not of memory, but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant."*

In a 21st-century world saturated with written information and surrounded by information technologies of astonishing speed, convenience, and power, these words of Socrates recorded by his disciple Plato have a distinctly contemporary ring.

55. Author has used the examples of Homer and The South American Empire of the Incas to illustrate which of the following?

1. The inevitability of resorting to written communication.

2. The importance of spoken language.

3. The possibility of civilization without the tool of written form of language.

(a) Only 1 (b) Both 1 and 2

(c) Only 3 (d) Only 2

56. According to the passage, which of the following is true?

(a) Writing is a tool not of knowledge but of reminding. (b) Socrates was against the written mode of communication.

(c) The teachings of Socrates are timeless and are still relevant. (d) Writing has an important place in modern world.

Directions for questions 57 to 59: The passage given below is followed by a set of three questions. Choose the most appropriate answer to each question.

Tom O'Riordan for example, in his 1976 book, Environmentalism, distinguished four ideologically diverse propositions for tackling the current environmental crisis by means of institutional reform. For the sake of clarity, these four propositions can be ordered as follows. In the first place, a distinction can be made between statist and anti-statist propositions. The anti-statist propositions can then be divided into proposals for global or for local (communal or regional) policies. Finally, the proposals for local policies can be divided into authoritarian and anti-authoritarian solutions.

But O'Riordan considers only one position, one centred on the nation-state, centralised authoritarianism. This is the position represented in particular by William Ophuls who, together with Paul Ehrlich and Garret Hardin, ranks as a prominent advocate of so-called 'lifeboat ethics' according to which rich countries should not be too ready to help poor countries lest the world population continue to grow and put even greater pressure on already scarce food supplies and strategic resources. In the light of ecological scarcity, frugality is a must, says Ophuls; we should be aiming for a 'steady-state society' in which the population and the means of subsistence are in balance. Liberal democracy is not equipped to achieve this aim, however; what is needed is a Hobbesian sovereign, a 'green Leviathan'. Ophuls leaves us in no doubt as to who shall be in charge of this future state.

"The ecological complex steady-state society may… require, if not a class of ecological guardians, then at least a class of ecological mandarins who possess the esoteric knowledge needed to run it well…. The steady-state society will not only be more authoritarian and less democratic than the industrial societies of today…but it will also in all likelihood be much more oligarchic as well, with only those possessing the ecological and other competences to make prudent decisions allowed full participation in the political process."

In view of the authority enjoyed by ecologists in Ophuls' steady-state society, his position could also be described as 'eco-cratic.'

57. What is the primary purpose of the author in this passage?

(a) To advocate O'Riordan's approach to address the environmental crisis through institutional reforms.

(b) Discuss at length an approach to institutional reform that addresses environmental concerns.

(b) Discuss at length an approach to institutional reform that addresses environmental concerns.

(d) Identify the steps needed for institutional reform with an eye to the environmental crisis.

58. Which of the following statements is true in light of the passage?

(a) According to Ophuls, judicious decisions cannot be taken in a democratic society.

(b) Ophul's ideology is described as a "green Leviathan" since it proposes a sovereign state with no democratic leanings.

(c) In a steady-state society, individual accountability will be proportional to individual capability.

(d) Riordan's book largely deals with a single authoritarian approach to institutional reform.

59. Which of the following is an assumption in Ophuls' formulation of a steady-state society?

(a) In a steady-state society, resources will not be limited.

(b) There won't be any resistance to the shift from a democratic to an eco-cratic society.

(c) In general, humans are not ecologically aware by nature.

(d) Ecological knowledge is all it takes to run a steady-state society.

60. Five sentences are given below, labeled A, B, C, D and E. They need to be arranged in a logical order to form a coherent paragraph. From the given options, choose the most appropriate one.

A. Was it evidence that science and religion are inevitably locked in ideological and institutional combat?

B. Unsurprisingly, there was more to it than that.

C. On all sides of the case there was agreement that it was proper and rational both to seek accurate knowledge of the world through observation of nature and also to base one's beliefs on the Bible.

D. When Galileo recanted his Copernicanism in 1633, what did that signify?

E. Was it a victory for religious obscurantism and a defeat for free scientific inquiry?

(a) DEABC

(b) CDEBA

(c) CBDAE

(d) DEACB

SOLUTION

1. b

Three companies – Superb Diary, Gopal Jee and Jusico.

2. b

Four companies – Trimul, Superb Diary, Natural & Fresh and Real Fruits.

For questions 3 to 5 :

From statement (iv), the total weight of Baking Powder, Eggs and Milk used in a cake is 200 g. Therefore, the total quantity of the remaining ingredients used is 800 g.

Let the quantity (in g) of Wheat Flour and Sugar Free used in a cake be x and y respectively. Therefore, from statements (i) and (ii), quantity (in g) of Fruit pieces and Cream used is 3x and 3y respectively.

=> x + y + 3x + 3y = 800 and x + y = 200

The total cost (in Rs.) of Baking Powder, Eggs and Milk used in a cake is 35 + 12 + 3 i.e. 50.

Cost (in Rs.) of Wheat flour used is 50/100 x i.e. x/2 .

Cost (in Rs.) of Sugar Free used is 200/100 y i.e. 2y.

The total cost (in Rs.) of the fixed ingredients used is 50 + x/2 + 2y.

As x + y = 200, the values of x and y in different types of cake can be calculated as given below :

I. Mango Cake :

30/100 X3x + 60/100 X 3y = 50 +x/2 + 2y

On solving, x = 150 and y = 50.

II. Pineapple Cake :

20/100 X3x + 90/100 x3y = 50 + x/2 + 2y

On solving, x = 150 and y = 50.

II. Banana Cake :

40/100 X3x + 50/100X3y = 50 +x/2 +2y

On solving, x = 125 and y = 75.

II. Fresh Fruitcake :

30/100X + 20/100X + 40/100X + 70/100 X3y = 50 + x/2 + 2y

On solving, x = 100 and y = 100.

The table given below shows the cost incurred on preparing the different types of cakes.

Cake	Cost Price(in Rs.)
Mango Cake	450
Pineapple Cake	450
Banana Cake	525
Fresh Fruitcake	600

3. d

Fresh Fruitcake

4. a

Mango Cake and Pineapple Cake

5. c

525 g

6. c

As N has exactly 24 factors, N can be of the form p^{23}, pq^{11}, p^2q^7, p^3q^5, pqr5, pq^2r^3 or $pqrs^2$, where p, q, r and s represent different prime numbers.

From Statement A :

As the number of factors of the resultant number is less than twice the number of factors of N, 3 must be a factor of N. Thus N can be of the form p^2q7, pq2r3 or $pqrs^2$, where the prime factor raised to the power 2 represents 3. But we cannot determine the number of factors of N^3 with certainty and hence this statement alone is not sufficient

From Statement B :

As the number of factors of the resultant number is less than twice the number of factors of N, 5 must be a factor of N. Thus N can be of the form p^3q^5 or pq^2r^3, where the prime factor raised to the power 3 represents 5. But we cannot determine the number of factors of N^3 with certainty and hence this statement alone is not sufficient.

From Statements A and B :

The only possibility is that N is of the form pq^2r^3.

∴ $N^3 = p^3q^6r^9$ and the number of factors of $N^3 = 4 \times 7 \times 10 = 280$.

7. c

Let the total investment (in Rs. Crores) across the country in 2009 and 2010 be 100x and 100y respectively.

=> 56/100 X 5x = 700 => x = 250

=> 15/100 X 12y = 450 => y = 250

The total investment made across the country in 2009 and 2010 is the same i.e. Rs. 25,000 crores. Required percentage change

= (55% - 45%)/ 55% X100% = 18.18%

8. a

Investments (in Rs. Crores) made by Gujarat and Assam together in R&D in :

2009 = 900/3 = 300

2010 = 1,350/3 = 450

Let the total investments (in Rs. Crores) of the two states together in 2009 and 2010 be x and y respectively.

∴ 300/x X 1.2 = 450/y and x/y = 4/5

∴ Required ratio = 4/0.3 : 5/0.25 = 2 : 3.

9. a

Let the total investment (in Rs. crores) made across the country in 2009 and 2010 be 100x and 100y respectively.

∴ (3x - 274)/(5y - 548) = 1/2 and x/y = 5/6

∴ Required percentage change

= (600 - 500)/500 x 100 =20%

10. b

Let the ages of Komal, Dhara, Jyoti, Sarla and Neha be represented by K, D, J, S and N respectively. It is given that S < J, K and N < J < D.

From Statement A :
We have (K + D)/2 < (J + N)/2

As we already know that N < J < D, the only possible case is that K is less than N. From this it can be concluded that S < K < N < J < D. Hence, this statement alone is sufficient to answer the question.

From Statement B :
We have (D+J)/2 < (K + N)/2

As we already know that N < J < D, the only possible case is that K is more than D. We can conclude that either S < N < J < D < K or N < S < J < D < K. Hence, this statement alone is sufficient to answer the question.

11. d
Case I: The number of terms 'n' is odd.
The middle term will be the average of all the terms.

Let the average be k.

∴ k ×n = 1000

(Both k and n are natural numbers.)

Odd factors of 1000 are 1, 5, 25 and 125.

(i) When n = 5, k = 200, the consecutive numbers are from 198 to 202.

(ii) When n = 25, k = 40, the consecutive numbers are 28 to 52.

(iii) When n = 125, k = 8, the consecutive numbers will not be natural numbers.

Case II: The number of terms 'n' is even.
The average of the middle two terms will be the average of all the terms. Let the average be k.

∴ k × n = 1000

(n is a natural number and k is a positive rational number whose decimal part is 0.5.)

(i) When n = 16, k = 62.5, the consecutive numbers are from 55 to 70.

(ii) When n = 80, k = 12.5, the consecutive numbers will not be natural numbers.

(iii) When n = 400, k = 2.5, the consecutive numbers will not be natural numbers.

So the total number of possible ways is 3.

12. c

Let the exterior angles of the quadrilateral be x, 3x, 4x and 7x.

So x + 3x + 4x + 7x = 15x = 360° (The sum of the exterior angles of a polygon is 360°.)

So x = 24°

The largest interior angle = 180° – 24° = 156°

The smallest interior angle = 180° – (7 × 24)° = 12°

The required sum = 156° + 12° = 168°

13.b

$x + y = 8 \Rightarrow x = 8 - y$

$\therefore P = 5(8 - y)^2 + 11y^2$

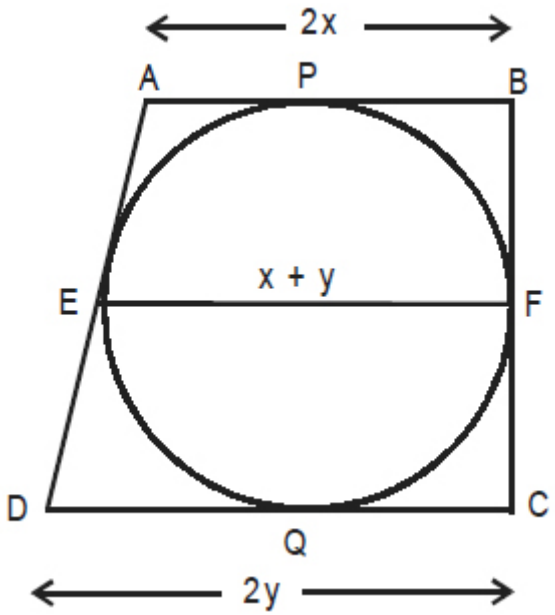
$\Rightarrow P = 320 + 5y^2 - 80y + 11y^2$

$\Rightarrow P = (4y - 10)^2 + 220$

P will be minimum when $(4y – 10)^2$ is equal to 0.

$\therefore$ P (min) = 220

14. c



Let the trapezium be ABCD (see the figure given above) and the longer parallel side be CD.

Let the length of the side AB be '2x' cm and the length of the side CD be '2y' cm.

Let '2h' cm be the shortest distance between AB and CD.

E and F are the midpoints of AD and BC respectively (which may not be the points of contact of the trapezium and the circle).

∴ the length of EF = (AB + CD)/2 = (2x + 2y)/2 = x +y cm

The area of trapezium ABFE = 1/2 x h x (3x + y) cm^2
The area of trapezium EFCD = 1/2 x h x (x + 3y) cm^2
Area(ABFE)/Area(EFCD) = (3x + y)/(x + 3y) = 3/5 => x/y = AB/CD =1/3 ...(i)

Also, AB + CD = BC + AD

(Since, ABCD is a tangential quadrilateral.)

15. b

By the time Manu completes 12 rounds, Ankur will complete 5/9 X 12 = 62/3 rounds. At this point in time Ankur is moving towards B and is 280 metres away from A whereas Manu is at B.

They will meet at a distance of 9 X (420 - 280/5 + 9) = 90 metres from B. This point will be at a distance of 420 – 90 = 330 metres from A.

16. b

$2\log(x - 2y) = \log x + \log y$

$\Rightarrow (x - 2y)^2 = xy$

$\Rightarrow (x/y - 2)^2 = x/y$

Putting $x/y = t$ in the above equation,

$t^2 - 5t + 4 = 0$

$\Rightarrow (t - 1)(t - 4) = 0$

$\Rightarrow t = 1$ or 4

But x cannot be equal to y as log is not defined for negative numbers.

Hence, $x/y = 4$ is the only possible solution.

17. a

Let the number of students who play exactly three, exactly two and exactly one sport be x, y and z respectively.

Hence, $x + y + z = 140$ and $3x + 2y + z = 200$.

Solving the two equations, we get $2x + y = 60$.

It is given that $(x + y) : x = 3 : 2$.

Solving, we get $x = 24$ and $y = 12$.

Hence, 12 students play exactly two of the three sports.

18. d

Let the volume of each container be 315 units.

The total volume of the three containers is 945 units. Hence, the volume of water in three containers is 126, 135 and 140 units respectively and that of alcohol is 189, 180 and 175 units respectively.

The ratio of water and alcohol in the bigger container = 401 : 544

Let the volume of the mixture that needs to be replaced by water be x units. Hence,

$401 - 401 \times X/945 + x = 544 - 544 \times X/945$

$\Rightarrow x = (143 \times 945)/1088$

So the fraction of the mixture that needs to be replaced $= 143/1088$

19. b

Let the 5th term of the A.P. be ‘a’ and the common difference be ‘d’. The 6th term will be (a + d) and the 9th term will be (a + 4d).

Therefore, $a \times (a + d) = 300$ ...(i)

and $5a + 4 = (a + 4d)$

$\Rightarrow d = a + 1$ ...(ii)

Solving (i) and (ii), we get a = 12 or - 25/2.

If a = -25/2, then the value of ‘d’ will also be

negative, which is not possible in an increasing A.P.

Therefore, a = 12 and d = 13.

The first term will be = (a – 4d) = 12 – 52 = –40.

20. a

Let the amount of work (in units) completed by a man, a woman and a child in a day be M, W and C respectively.

The amount of work (in units) completed by 4 men in 12 days = 4 × 12 × M = 48M.

The amount of work (in units) completed by 6 women in 10 days = 6 × 10 × W = 60W.

The amount of work (in units) completed by 8 children in 9 days = 8 × 9 × C = 72C.

So 48M = 60W = 72C or 4M = 5W = 6C = 60K (say)

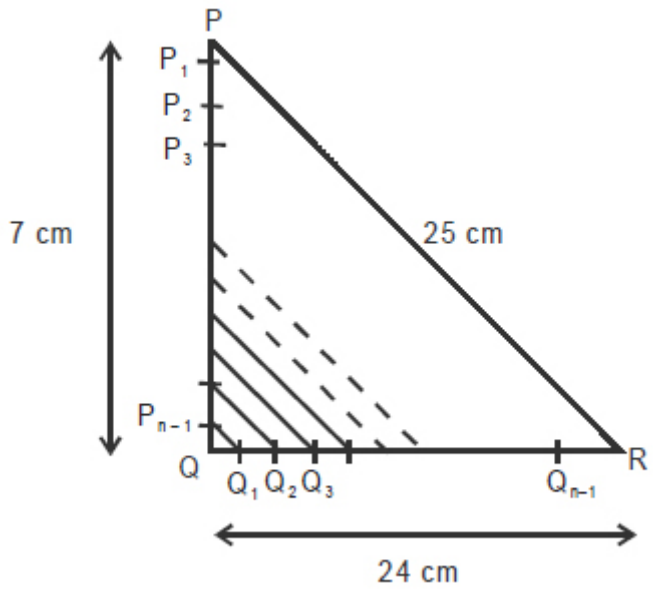
Hence, M = 15K, W = 12K and C = 10K.

The amount of work (in units) completed by a man, a woman and a child together in 10 days = (15 + 12 + 10)K × 10 = 370K.

The amount of work (in units) completed by 2 women and 5 children together in a day = (2 × 12 + 5 × 10)K = 74K.

Hence, the answer = 370/74 = 5 days.

21. c



$\Delta P_{n-1}QQ_1 \sim \Delta PQR$

$\therefore \frac{P_{n-1}Q}{PQ} = \frac{QQ_1}{QR} = \frac{P_{n-1}Q_1}{PR} = \frac{1}{n}$

$\Rightarrow P_{n-1}Q_1 = \frac{25}{n}$

Similarly, $P_{n-2}Q_2 = \frac{25\times 2}{n}$ and so on...

$\Rightarrow \frac{25}{n} + \frac{25\times 2}{n} + \frac{25\times 3}{n} + ... + \frac{25(n-1)}{n} = 200$

$\Rightarrow \frac{25}{n}(1+2+3+...+n-1) = 200$

$\Rightarrow \frac{(n-1)(n)}{2n} = 8 \Rightarrow n = 17.$

22. d

$$\frac{\left(x^3-5x^2+7x-3\right)\left(x^3-5x^2+8x-4\right)}{\left(x-2-x^2\right)\left(x^2-3x+2\right)\left(x^2+3x+4\right)} \geq 0$$

$$\Rightarrow \frac{\left\{(x-1)^2(x-3)\right\}\left\{(x-2)^2(x-1)\right\}}{\left(x-2-x^2\right)(x-1)(x-2)\left(x^2+3x+4\right)} \geq 0$$

$$\Rightarrow \frac{(x-1)^3(x-2)^2(x-3)}{\left(x-2-x^2\right)(x-1)(x-2)\left(x^2+3x+4\right)} \geq 0$$

$$\Rightarrow \frac{(x-1)^2(x-2)(x-3)}{\left(x^2+2-x\right)\left(x^2+3x+4\right)} \leq 0$$

As the Discriminant of both x2 + 2 – x and x2 + 3x + 4 is negative, it can be concluded that the denominator of the above inequality is greater than zero for all real values of x.

So the inequality reduces to

$\Rightarrow (x - 2)(x - 3) \leq 0$, where x cannot be equal to 2.

$\Rightarrow x \in (2, 3]$

23. a

The number of ways of selecting three books = $^{10}c_3 = 120$

The number of ways of selecting two books lying adjacently = 9

The number of ways of selecting the third book such that exactly two books are lying adjacently = 7 × 2 + 6 × 7 = 56

The number of ways of selecting three books lying adjacently = 8

So the required number of ways = 120 – 56 – 8 = 56

24. d

Three operations have been given :

i)$x\Delta(y + 1) = y\Delta(x + 1)$

(ii)$x \Delta x = 1$

(iii)$(x - y)\Delta(x + y) = x \Delta y$

Putting x = 1000 and y = 1001 in operation (i), we get $1000\Delta1002=1001\Delta1001$

From operation (ii), $1001\Delta1001= 1$

$\therefore 1000\Delta1002=1$

Putting x = 1001 and y = 1 in operation (iii), we get

$\therefore 1000\Delta1002=1001\Delta1$

$\therefore 1001\Delta1= 1$

25.a

The product of the marks obtained = 72

As Rohan was not able to figure out the marks obtained by Sunil initially, there must be at least two possible ways of getting that same sum. The two possible cases are 2, 6, 6 and 3, 3, 8 (Sum = 14).

When Rohan got to know that Sunil got the highest in Physics among the three subjects, he could answer correctly as this is possible only with 3, 3 and 8.

Therefore, the sum of the marks obtained by Sunil in the other two subjects is 3 + 3 i.e. 6.

26. c

A fraction is said to be in its simplest form when the numerator and the denominator are co-prime.

If we observe the fractions carefully, we find that in each term a remainder of 2 is left when the integer part of the numerator is divided by the denominator. E.g. 2 by 10, 13 by 11, 26 by 12, 41 by 13, and so on. The fractions can be written as :

([x] + 2)/10 , 1 + ([x] + 2)/11 , 2 + ([x] + 2)/12 , 3 + ([x] + 2)/13 and so on...

Thus ‘x’ needs to be such that [x] + 2 is co-prime with 10, 11, 12, …49 and 50.

Among the options, the only such value is 51.51.

27. b

We have the following alternate sequences of odd and even terms :

Number of Terms	Terms
1	1
2	2,4
3	5,7,9
4	10,12,14,16
5	17,19,21,23,25
6	26,28,30,32,34,36
7	37,39,41,43,45,47,49
8	50,52,54,56,58,60,62,64

If we observe the sequences carefully the last term in any sequence is the square of the number of terms, i.e. when n = 3, last term = 9; when n = 4, last term = 16; when n = 8, last term = 64 and so on…

Also, the total number of terms in the sequence is the sum of the number of terms in the alternate sequences of even and odd terms.

Since (62 × 63)/2 = 1953, we can say that the 2003rd
term will lie in a sequence of odd terms and will be the 50th term in that sequence. The last term in the sequence of even terms with n = 62 will be 622 = 3844. Hence, the next odd sequence begins at 3845. The 50th term in this sequence will be 3845 + 49 × 2 = 3943.

28. c

logA, logB and logC are in Arithmetic Progession.

$\Rightarrow 2\log B = \log A + \log C$

$\Rightarrow B^2 = A \times C$ ..(i)

Also, $C = B^{t/120}$ and $A = B^{t/60}$

Putting these values in equation (i), we get

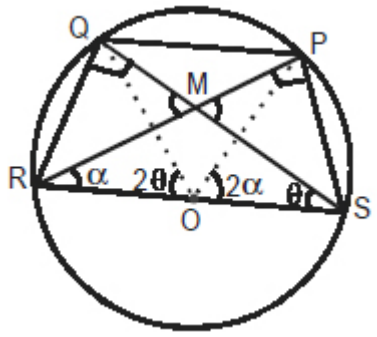
$B^2 = B^{t/60} \times B^{t/120}$

$\Rightarrow t/60 + t/120 = 2$

$\Rightarrow 3t/120 = t/40 = 2$

$\Rightarrow t = 80$

29. b



Let ∠QSR = θ

∴ ∠QOR = 2θ

(The angle subtended by a chord at the center is twice the angle subtended by the same chord at the circumference.)

Let ∠PRS = α

∴ ∠POS = 2α

∴ ∠QOR + ∠POS =2α + 2θ

Also,∠PMS = ∠QMR = α + θ

(The exterior angle of a triangle is equal to the sum of the interior opposite angles.)

30. c

Let the number of male players be 2x; therefore, the number of female players will be x.

The number of matches among male players

$= {}^{2x}C_2 = 2x(2x\ 1)/2$

The number of matches among female players

$= {}^{x}C_2 = x(x\ 1)/2$

The number of matches between a male and a female player = $2x^2$

Let's assume that a male player defeated a female player 'n' times. Therefore, a female palyer must have defeated a male player ($2x^2 - n$) times.

$\Rightarrow 2x(2x\ 1)/2 + n = x(x\ 1)/2 + 2x^2 - n$

$\Rightarrow x(x + 1) = 4n$

Among the options, n = 39 is the only possible value.

For questions 31 to 33:

The given information can be tabulated as shown below.

Name	**Profession**	**City**
Aman	-	-
Bharti	Manager	-
Charu	-	Mumbai
Dishank	-	-
Eric	-	-
Farhan	Professor	Mumbai
Gaurav	-	Delhi
Hitesh	Accountant	Delhi
Inder	Accountant	Kolkata
Jatin	Manager	Kolkata
Kamal	Manager	-
Lalit	Professor	Mumbai

It can be easily deduced that the number of different professionals working in each of the three cities is as given below.

	Kolkata	**Mumbai**	**Delhi**

Accountant	2	1	1
Manager	1	1	2
Professor	1	2	1

As three people who work in Mumbai are already known, Kamal and Dishank must be working in Delhi. As Jatin is a Manager working in Kolkata, Bharti must be working in Mumbai and Aman and Eric must be working in Kolkata. As Aman is not an Accountant, he must be a Professor and Eric must be an Accountant. Therefore, Charu also must be an Accountant. Hence, one of Gaurav and Dishank is a Manager and the other is a Professor. The final table can be shown as given below.

Name	**Profession**	**City**
Aman	Professor	Kolkata
Bharti	Manager	Mumbai
Charu	Accountant	Mumbai
Dishank	Manager/Professor	Delhi
Eric	Accountant	Kolkata
Farhan	Professor	Mumbai
Gaurav	Professor/Manager	Delhi
Hitesh	Accountant	Delhi
Inder	Accountant	Kolkata
Jatin	Manager	Kolkata
Kamal	Manager	Delhi
Lalit	Professor	Mumbai

31. c

Charu is an Accountant working in Mumbai.

32. d

Apart from Kamal, either Dishank or Gaurav could be the other Manager working in Delhi.

33. d

Eric is an Accountant working in Kolkata.

34. c

Let Santro, Wagon R, Zen, Ritz, Yuva, Innova, Corolla, Matiz, Xylo and Scorpio be represented by S, W, Z, R, Y, I, C, M, X and Sc respectively. The arrangement can be started by fixing the positions of Z and Sc at the
extreme left of the two rows. X can be parked either to the immediate right of Z/Sc or in the middle of the row. If X is parked in the middle of the row, statement (iv) is violated. Further analysis leads to the following table :

Row I	Innova	Corolla	Wagon R	Matiz	Scorpio/Zen
Row II	Zen/Scorpio	Xylo	Ritz	Yuva	Santro

Therefore, the number of cars parked between Corolla and Matiz cannot be the same as the number of cars parked between Scorpio and Xylo.

For questions 35 and 36 :

Let Saurabh, Yubraj, Vajendar, Gombzi and Ambata be represented by S, Y, V, G and A respectively. Let Delhi Devils and Kolkata Riders be represented by DD and KR respectively. From statement (ii), either 2nd-3rd players or 3rd-4th players were the two batsmen. Therefore, the player picked 3rd was definitely a batsman and the players picked 1st and 5th were bowlers. From statement (iv), A and Y could be either 1st and 4th players or 2nd and 5th players, in no particular order. From statement (iii), Y could not be the player picked 1st or 5th.

35. a

Order of Selection	1 Bowl	2 Bat	3 Bat	4 Bowl	5 Bowl
Player	A	V	S/G	Y	G/S
Team	-	DD	KR	KR	DD

Or

Order of Selection	1 Bowl	2 Bowl	3 Bat	4 Bat	5 Bowl
Player	S/G	Y	G/S	V	A
Team	DD	KR	KR	DD	-

Hence, Yubraj was definitely not a batsman picked by Delhi Devils.

36. b

If Saurabh was a bowler, then Gombzi was definitely a batsman picked 3rd.

37. a

Let heights of Ashu, Banu, Charu, Diya, Ellie and Fana be represented by A, B, C, D, E and F respectively.

The Science student mentioned should be Ashu only.

From the first statement, E > D > A and B > A.

From the second statement, C > A > F.

Therefore, Fana is the shortest among the six students

For questions 38 to 40 :

In one group the number of matches won by different players were 3, 2, 1 and 0. In the other group the number of matches won by different players were 2, 2, 1 and 1. For the two players who played the final, the number of matches won by them in Round-I could be either 3 or 2 and they must have won their respective matches in Round-II.

As Sonu lost exactly two matches in the tournament, he must have lost a match in Round-I and the final match. Thus it can be concluded that the number of matches won by Kishan, Karan and Arjun in Round-I was one each. As Ram and Kishan were in the same group in Round-I, Ram must have lost all his matches in Round-I and hence it can be concluded that Karan and Arjun were in the same group in Round-I. As Lakhan won more matches than Gopi, both of them were in the same group as Ram and Kishan. The conclusions can be tabulated as shown below :

Round-I:

Group I	Lakhan (3), Gopi (2), Kishan (1), Ram (0)
Group II	Sonu (2), Monu (2), Karan (1), Arjun (1)

Round-II:

Group I	Lakhan (3), Gopi (2), Kishan (1), Ram (0)

Round-III :

Sonu - Gopi

38. b

Gopi won the tournament.

39. d

The difference between the numbers of matches won by Gopi and Monu respectively in the tournament was two.

40. b

The total number of matches won by Lakhan in the tournament was 3.4

41. c

For the first blank both encompass which means to include a large number or range of things and promote which means to help something to happen or develop are appropriate. But for the second blank, collaboration which means the act of working with another person or group of people to create or produce something is more appropriate. Agglomerate means a mass or collection of things is logically incorrect in the context of individuals and organization. Moreover the preposition 'between' works well with collaboration and 'of' is fit with agglomerate. Hence, option (c) is the correct option.

42. a

Since the sentence indicates that the budget will be planned based on income and savings goals – these have to be of a current nature and not planned or estimated. Logic has to be used in this context to establish the answer as option a.

43. d

Agree with is correct in the given context. It means something is suitable/pleasing/ appropriate. It is used as: agree with a person, opinion or policy. e.g. The copy agrees with the original. I don't agree with some of the issues they have raised in the rating rationale. "Our views on religion agree" means that our views are in accord and therefore the sentence is correct. Agree to her analysis is incorrect. The correct sentence is "I agree with her analysis of the situation."

44. c

By is incorrect in this sentence. The correct sentence should be 'They traveled on the 6.45 train'. 'by' can be used when we are describing the mode of transport in general (I traveled by train .). On is used when we are talking about a particular transport (train etc) like the 6.45 train. Therefore (c) is incorrect. 'Sit by me' means sit beside me

45. c

Station is a countable noun and should be preceded by an article (a/the). So (1) is incorrect.

Your's is incorrect. The correct possessive form is yours. Sentences(3) and (4) are correct.

46. c

Sentence (1) is incorrect.

The correct expression is as soon as he arrives. Sentence (3) is incorrect. The correct expression is what he wants. Sentence (2) and (4) are correct.

47. a

ABAAA

Slightest means very small in degree . As we are talking about idea, small or large size does not make sense. Slightest is a better choice for the first sentence. Rely on somebody means to depend on somebody; or to have faith in somebody. Relied is the correct choice for sentence (2) because of the preposition on. Request is used when one asks for something politely and formally whereas demand carries a hint of authority. I would like suggests that request is more appropriate than demand in the given

48. b

AAAAA

As is used to describe the fact that somebody/ something has a particular job or function *. Of means belonging to something; being part of something; relating to something < a member of the team>. So, as is appropriate in the given context. Causal means expressing or indicating cause . Casual means not showing much care or thought; seeming not to be worried; not wanting to show that something is important to you. So causal is the apt word for the given sentence. Custom which means an accepted way of behaving or of doing things in a society or a community is the apt word for the third sentence. Suspect means to have an idea that something is probably true or likely to happen, especially something bad, but without having definite proof. So suspect is correct for the fourth sentence. Economics (noun), as used here, means the way in which money influences, or is organized within an area of business or society. Economic (adjective) means profitable < Small local shops stop being economic when a supermarket opens up nearby>. Because we need a noun in the given sentence, therefore economics is the apt word.*

49. b

The paragraph is a first person narrative and ends with a description of Byron and his relations. The author has used Byron to show contrast between him and Byron. It should be followed by the sentence that continues the talk about relations to the art and culture and provides the comparison by presenting the author's relations. Hence, option b is the correct option.

50. c

The paragraph talks about the lengthy poems losing their charm in the current age. Author does not really appear to endorse this idea while talking of Bothwell. He says we would not

like being deprived of the Bothwell of Mr. Swineburne despite its large size. He is inclined to say that size should not be a criterion for judging a poem. A sentence that expresses the same is required to complete the paragraph. Hence, option (c) fits the bill. Option (b) is incorrect as it talks about the subject of a work of art rather than the beauty of a work of art.

51. d

The author follows an analytical style by discussing the components of microfinance in India -initiation, strength, definition and types of organizations that partake in this activity. The author avoids personal opinion and stays with an analysis that comes across as unbiased. Option (a) is incorrect as the passage does not conjure up an image of microfinance nor does it describe the characteristics of microfinance. Option (b) is also incorrect because the author does not instruct the reader on how to obtain microfinance or on the steps required for entering into this sector. Option (c) is incorrect because the author does not provide facts, data, and statistics. The author's aim is to understand microfinance in India .

52. c

In the second paragraph the author clearly states option (c). Option (d) is incorrect as this is a criticism and not a strength. Option (a) and (b) have been mentioned in the passage but they have not been given as strengths of the microfinance organizations in India.

53. a

The author brings a distinction between an SHG and a commercial bank in these statements. According to the passage, in India the definition changes with the change in loan giving entity. Option (b) is the exact opposite of the correct answer. Option (c) does not provide a reason, It only repeats a statement from the passage.

54. b

The last paragraph helps understand the reason why SIFFS started independent microfinance activity. Refer to the lines "For instance... it started providing loans itself". Options (a),(c) and (d) are all factually incorrect.

55. c

Author has given the example of Homer and The South American Empire of the Incas to explain how even without written communication poetry survived and everyday administrative works could be carried out. Through these examples he wants to illustrate that written communication, although important, is not necessary for survival of a text or of a civilization. Hence, option (c) is the correct answer.

56. d

Refer to the first paragraph “Writing, though not obligatory, is a defining marker of civilization. Without writing there can be no accumulation of knowledge, no historical record, no science (though simple technology may exist), and of course no books, newspapers, emails, or World Wide Web”. Therefore, option (d) is correct in the light of the information given in the passage.

57. b

The passage deals with some approaches to institutional reform that Tom O’Riordan identifies in his book Environmentalism. O’Riordan describes one of these strategies in detail. He does not “suggest” any particular strategy. So option (a) is incorrect. The author does not identify the steps necessary for institutional reform, but describes Ophuls’ strategy in detail. Hence, option (d) is also ruled out. The passage does not describe various approaches to creating an eco-cratic society but concentrates on Ophuls’ version of the same. Hence option (c) is also eliminated.

58. d

Although Ophuls stresses on the need for “ecological guardians” instead of a democratic setup to ensure an eco-cratic society, it does not follow that no judicial decisions can be taken in a democratic society. Option (a) is incorrect. Ophul’s ideology is described as a “green Leviathan” because it talks about a political state where ecology is cared for but democracy is missing. The statement in option (b) fails to provide a justified reason for the idealogy being called as green leviathan (as it misses the environment friendly aspect) and is thus incorrect. While Ophuls stresses on the need for “a class of ecological guardians”, he dos not mention whether individual accountability will be proportional to individual capability in such a society. Option (d) follows from the passage. O’Riordan “considers only one position, one centered on the nation-state, centralized authoritarianism.”

59. c

Ophuls stresses the need for ecological guardians. He also mentions that in the steady state society “only those possessing the ecological and other competences to make prudent decisions” will be allowed full participation in the political process. He also says “….possess the esoteric knowledge needed to run it well.”. This means that Ophuls assumes that ecological awareness does not come naturally to humans. Option (a) is incorrect. In a steady-state society, “population and the means of subsistence are in balance.” This does not assume that resources will not be limited. Option (b) cannot be inferred from the

passage. Option (d) is incorrect since “ecological
and other competences to make prudent decisions” is mentioned.

60. a

DEABC

Sentence D introduces the subject of the paragraph and is thus the apt opening sentence. As can be seen in the options that E follows D (the ‘it’ in E refers to the significance of recantation). The ‘it’ in A also refers to the significance of recantation. Thus, DEA is a sequence. B follows A as sentence B states that apart from these questions (raised in E and A) there was something else too. C answers the questions and provides a complete picture. Thus it is best suited as an ending sentence.