



(12-13)

- Statements:** All boards are classes.  
Some classes are keys.  
No key is a pen.
- 12. Conclusions:** I. Some classes are not pens.  
II. At least some boards are keys.
- 13. Conclusions:** I. All keys being boards is a possibility.  
II. All pens are not keys.
- 14. Statements:** No paper is a book.  
All pencils are books.
- Conclusions:** I. Some pencils are not papers.  
II. Some books are not pencils.
- 15. Statements:** Some potatoes are tomatoes.  
No tomato is an onion.
- Conclusions:** I. Some onions are not tomatoes.  
II. All onions are potatoes.

**Directions (Q. 16-20): Study the following information and answer the given questions:**

In a certain code language 'now order for profit' is written as 'pa ka ni ha', 'for him right now' is written as 'hi li ha ni', 'place order in market' is written as 'si je ka na', and 'order now right place' is written as 'ka li si ha'.

16. What is the code for 'profit' in the given code language?

1. ni                      2. hi                      3. ha                      4. pa                      5. None of these

17. What is the code for 'market' in the given code language?

1. je                      2. ka                      3. si                      4. na                      5. Either je or na

18. What is the code for 'right in place'?

1. li, je, si                      2. si, na, ka                      3. na, li, si                      4. Can't be determined                      5. Either 1 or 3

19. 'ha' is the code for

1. now                      2. order                      3. Place                      4. market                      5. None of these

20. What is the code for 'him'?

1. ka                      2. hi                      3. li                      4. si                      5. None of these

**Directions (Q. 21-25): Study the following information carefully and answer the given questions:**

Eight teachers A, B, C, D, E, F, G and H are sitting around a circular table for lunch. Each of them teaches a different subject, viz Hindi, Maths, English, Civics, Geography, GK, Sanskrit and Computer, but not necessarily in the same order.

E sits third to the left of G. The Hindi teacher sits on the immediate right of E, who is not a Maths teacher. B is fourth to the right of H. Neither B nor H is an immediate neighbour of E. F teaches Civics and sits third to the right of Hindi teacher. The GK teacher sits second to the left of Civics teacher. The Sanskrit teacher sits second to the left of E. A, who is an English teacher, is sitting exactly between F and H. The Geography teacher is sitting second to the right of the English teacher. C sits third to the left of F.

21. What is the position of A with respect to B?

1. Third to the right                      2. Third to the left                      3. Second to the left                      4. Can't be determined                      5. None of these

22. Who among the following is a Maths teacher?

1. C                      2. B                      3. G                      4. H                      5. None of these

23. How many persons sit between C and H (if counted from H (if counted from H in ACW direction)?

1. One                      2. Two                      3. Three                      4. None                      5. None of these

24. E is the teacher of which of the following subjects?

1. Geography                      2. Hindi                      3. Sanskrit                      4. Computer                      5. None of these

25. Which of the following combinations is true?

1. G-Computer      2. D-Hindi      3. H-GK      4. C-Hindi      5. None of these

**Directions (Q. 26-28):** Study the following information carefully to answer the given questions.

Twelve people named A, B, C, D, E, F, G, H, I, J, K and L are sitting in a row facing north, not necessarily in the same order. Three persons are sitting between H and J. F and G are immediate neighbours of each other. Two persons are sitting between L and K. A is sitting between D and K. J is sitting at one end of the row. C is sitting sixth from the right end of row. K is sitting between A and C. E is sitting third to the right of H. B is sitting third to the left of J. F is sitting fourth to the left of A.

26. Who is sitting between B and E?

1. H      2. L      3. G      4. I      5. None of these

27. How many people are sitting between G and H?

1. Five      2. Six      3. Four      4. Seven      5. Three

28. If all persons are arranged in alphabetical order from left to right, which person's position will not be changed?

1. I      2. J      3. H      4. L      5. G

**Directions (Q. 29-30):** Study the following information carefully to answer the questions given below:

'P x Q' means 'P is brother of Q'

'P @ Q' means 'P is sister of Q'

'P + Q' means 'P is father of Q'

'P ÷ Q' means 'P is mother of Q'

29. Which of the following represents 'A is paternal aunt of M'?

1.  $A @ B \times R @ M$       2.  $A @ N + M \times B$       3.  $A \div D @ M$       4.  $A \div N \times D @ M$       5. None of these

30. How is M related to D in the following expression?

$H + M \div N @ D$

1. Niece      2. Nephew      3. Nephew or Niece      4. Mother      5. Data inadequate

**Directions (Q. 31-35):** Each question consists of a question and two statements numbered I and II given below it. You have to decide whether the data given in the statements are sufficient to answer the question. Read both the statements and choose the most appropriate option.

**Give answer (1):** If the data in Statement **I alone** are sufficient to answer the question, while the data in Statement **II alone** are not sufficient to answer the question.

**Give answer (2):** If the data in Statement **II alone** are sufficient to answer the question, while data in Statement **I alone** are not sufficient to answer the question.

**Give answer (3):** If the data **either** in Statement **I** alone or in the statement **II** alone are sufficient to answer the question.

**Give answer (4):** If the data in **both** statement **I and II** are **not sufficient** to answer the question.

**Give answer (5):** If the data in the Statements **I and II together** are necessary to answer the question.

31. Is E greater than P?

I. P is equal to G, who is either smaller than or equal to F. E is greater than F.

II. F is either greater than or equal to P, who is equal to G. E is neither smaller than nor equal to F.

32. How many brothers does D have?

I. D is brother of E, who is the youngest son in the family.

II. D has two siblings. One of them is H.

33. Five friends A, B, C, D and E are sitting around a circular table, facing the centre. Who sits exactly between C and D?

I. B sits second to the left of A, who faces the centre. D sits on the immediate right of A.

II. C sits third to the right of B. A sits on the immediate left of C, who is not the neighbour of D.

34. How is 'there' written in a code language?

I. 'please go there' is written as '5 8 4' and 'he is there' is written as '9 4 3'

II. 'there is tree' is written as '9 4 6' and 'its mango tree' is written as '6 7 5'.

35. Is Q granddaughter of N?

I. N is mother of A and has two grandchildren.

II. The brother of A has two children Q and P.

## GENERAL ENGLISH

**Directions (Q. 1-10):** Read the following passage carefully and answer the given questions. Certain words/phrases have been given in bold to help you locate them while answering some of the questions.

From a technical and economic perspective, many assessments have highlighted the presence of cost-effective opportunities to reduce energy use in buildings. However, several bodies note the significance of multiple barriers that prevent the take-up of energy efficiency measures in buildings. These include lack of awareness and concern, limited access to reliable information from trusted sources, fears about risk, disruption and other ‘transaction costs’, concerns about up-front costs and inadequate access to suitably priced finance, a lack of confidence in suppliers and technologies and the presence of split incentives between landlords and tenants. The widespread presence of these barriers led experts to predict that without a **concerted** push from policy, two-thirds of the economically viable potential to improve energy efficiency will remain **unexploited** by 2035. These barriers are **albatross around the neck** that represent a classic market failure and a basis for governmental intervention.

While these measurements focus on the technical, financial or economic barriers preventing the take-up of energy efficiency options in buildings, others emphasise the significance of the often deeply embedded social practices that shape energy use in buildings. These analyses focus not on the preferences and rationalities that might shape individual behaviours, but on the ‘entangled’ cultural practices, norms, values and routines that **underpin** domestic energy use. Focusing on the practice-related aspects of consumption generates very different conceptual framings and policy prescriptions than those that emerge from more traditional or mainstream perspectives. But the underlying case for government intervention to help promote retrofit and the diffusion of more energy-efficient particles is still apparent, even though the forms of intervention advocated are often very different to those that emerge from a more technical or economic perspective.

Based on the recognition of the multiple barriers to change and the social, economic and environmental benefits that could be realised if they were overcome, government support for retrofit (renovating existing infrastructure to make it more energy-efficient) has been widespread. Retrofit programmes have been supported and adopted in diverse forms in many settings and their ability to recruit householders and then to impact their energy use has been discussed quite extensively. Frequently, these discussions have criticised the extent to which retrofit schemes rely on incentives and the provision of new technologies to change behaviour whilst ignoring the many other factors that might limit either participation in the schemes or their impact on the behaviours and practices that shape domestic energy use. These factors are obviously central to the success of retrofit schemes, but evaluations of different schemes have found that despite these they can still have significant impacts. New experts suggest that the best estimate of the gap between the technical potential and the actual *in situ* performance of energy efficiency measures is 50%, with 35% coming from performance gaps and 15% coming from comfort taking or direct rebound effects. They further suggest that the direct rebound effect of energy efficiency measures related to household heating is likely to be less than 30% while rebound effects for various domestic energy efficiency measures vary from 5 to 15% and arise mostly from indirect rebound effects (ie where savings from energy efficiency lead to increased demand for other goods and services). Other analyses also note that the gap between technical potential and actual performance is likely to vary by measure, with the range extending from 0% for measures such as solar water heating to 50% for measures such as improved heating controls. And others note that levels of comfort taking are likely to vary according to the levels of consumption and fuel poverty in the sample of homes where insulation is installed, with the range extending from 30% when considering homes across all income groups to around 60% when considering only lower income homes. The scale of these gaps is significant because it materially affects the impacts of retrofit schemes and expectations and perceptions of these impacts go on to influence levels of political, financial and public support for these schemes.

The literature on retrofit highlights the presence of multiple barriers to change and the need for government support, if these are to be overcome. Although much has been written on the extent to which different forms of support enable the wider take-up of domestic energy efficiency measures, behaviours and practices, various areas of contestation remain and there is still an absence of **robust** ex-post evidence on the extent to which these schemes actually do lead to the social, economic and environmental benefits that are widely claimed.

1. Which of the following is most nearly the **OPPOSITE** in meaning of the word ‘**CONCERTED**’ as used in the passage?

1. collaborative      2. piled      3. subtracting      4. necessary      5. weak

2. Which of the following is most nearly the **OPPOSITE** in meaning of the word '**ROBUST**' as used in the passage?

1. manual                      2. loose                      3. vogue                      4. flimsy                      5. flexible

3. Which of the following is most nearly the **SAME** in meaning as the word '**UNEXPLOITED**' as used in the passage?

1. untapped                      2. unanswered                      3. explored                      4. developed                      5. vacant

4. The title for the given passage could be

1. How to measure the impact of retrofit programmes on energy conservation,  
2. Barriers to effective usage of energy                      3. Views of stalwarts on disadvantages of retrofit programmes  
4. Existing practices of conserving energy                      5. How much energy is to be consumed

5. According to the author, to make programmes for conserving energy more successful

(A) Only latest technology must be employed.

(B) The author's country must adhere to norms followed in countries where such programmes have been successful.

(C) Change must be brought in the attitudes of people with respect to efficient usage of energy.

1. Only A                      2. Only B                      3. Only C                      4. Both A and B                      5. Both B and C

6. Which of the following is most nearly the **SAME** in meaning as the word '**UNDERPIN**' as used in the passage?

1. undermine                      2. determine                      3. criticise                      4. abandon                      5. dispose

7. Which of the following is/are **TRUE** in the context of the passage?

1. Employing retrofit programmes is relatively a new concept and is yet to become popular.  
2. The Government so far has been least supportive of retrofit programmes.  
3. Lack of trust on landlords has been cited as one of the major barriers to employing energy efficiency schemes.  
4. Retrofit schemes are dependent on incentives to bring about attitudinal change towards energy efficiency schemes.  
5. All the given statements are true

8. What is the author trying to convey through the phrase 'albatross around the neck' as used in the passage?

1. As light as a bird                      2. Prevent from achieving success                      3. Are worthless  
4. Act as controllers                      5. Always provide adequate guidance

9. The author in the given passage is

(A) of the view that no amount of efforts can bring about changes in employing energy efficiency schemes in his country.

(B) positive that more evidence on retrofit schemes is essential to make people more aware and sensitive towards them.

(C) cynical about the present state of energy efficiency measures taken in his country.

1. Only (A)                      2. Only (B)                      3. Only (C)                      4. Both (A) and (B)                      5. Both (B) and (C)

10. As mentioned in this passage and according to the experts, in order to exploit existing potential to better energy efficiency measures

1. Availability of sufficient funding is a must.  
2. Availability of reliable information from dependable source must be ensured.  
3. Adequate and trustworthy suppliers of energy must be made available.  
4. Governmental support by implementing adequate policies is essential.                      5. All those given as options

**Directions (Q. 11-15):** Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph, and then answer the given questions.

(A) When these millennium development goals were first formulated in 1990, 53.5 per cent of all Indian children were malnourished.

(B) This would still be below the target of reducing malnourishment to 28.6 per cent.

(C) India has been moderately successful in reducing poverty.

(D) Since then, progress has been slow.

(E) Today, it is estimated that malnourishment could decline to 40 per cent by the end of 2015.

(F) However, eradicating hunger along with malnourishment still remains a key challenge, according to the Millenium Development Goals.

11. Which of the following should be the **FOURTH** sentence after rearrangement?

1. A                      2. B                      3. C                      4. E                      5. D

12. Which of the following should be the **THIRD** sentence after rearrangement?

1. A                      2. B                      3. F                      4. D                      5. E

13. Which of the following should be the **SECOND** sentence after rearrangement?

1. A                      2. B                      3. C                      4. D                      5. F

14. Which of the following should be the **FIRST** sentence after rearrangement?

1. A                      2. B                      3. C                      4. D                      5. E

15. Which of the following should be the **LAST (SIXTH)** sentence after rearrangement?

1. A                      2. F                      3. D                      4. C                      5. B

**Directions (Q. 16-20):** The question has two blanks, each blank indicating that something has been omitted. Choose the set of words for each blank that best fits the meaning of the sentence as a whole.

16. Owners of private hostels located in residential areas are not only \_\_\_\_\_ taxes but are also functioning whimsically in the \_\_\_\_\_ of any regulatory body.

1. avoiding, front      2. paying, presence      3. checking, dearth      4. evading, absence      5. destroying, life

17. Contractors across the state have \_\_\_\_\_ to stop work on the scheme after the minister failed to give them concrete \_\_\_\_\_ of timely payment.

1. thought, prove      2. decided, assurance      3. wished, demand      4. started, guarantee      5. determined, promise

18. Every third person visiting a doctor happens to \_\_\_\_\_ from a clinical or psychological disorder \_\_\_\_\_ with temblors.

1. ail, regarding      2. sick, related      3. suffer, associated      4. agonise, respect      5. experience, connected

19. \_\_\_\_\_ makes the actress trip to the country different this year in that she is \_\_\_\_\_ to raise funds for the biopic of a literary icon.

1. it, aiming      2. Which, trying      3. This, attempting      4. What, looking      5. How, waiting

20. \_\_\_\_\_ it out in vehicles while remaining stuck in a traffic snarl for hours, has become a \_\_\_\_\_ matter for commuters.

1. Sweating, routine      2. Waiting, everyday      3. Thinking, regular      4. Harrowing, habitual      5. Fretting, practice

**Directions (Q. 21-25):** Read each sentence to find out whether there is any grammatical mistake/error in it. The error, if any, will be in one part of the sentence. Mark the part with the error as your answer, if there is no error, mark 'No error' as your answer. (Ignore the errors of punctuation, if any.)

21. He identified the most important machines required / for modern life and worked in making a prototype / 'do it yourself' version of each because he believed that if people / could build these themselves, it would improve their way of life.

1. He identified the most important machines required  
2. for modern life and worked in making a prototype  
3. 'do it yourself' version of each because he believed that if people  
4. could build these themselves, it would improve their way of life.                      5. No error

22. Natural disasters will not turn into a catastrophe / if we invest in building infrastructure that / can withstand the devastating impacts of storms / which have become more severe.

1. Natural disasters will not turn into a catastrophe      2. if we invest in building infrastructure that  
3. can withstand the devastating impacts of storms      4. which have become more severe      5. No error

23. Many goods are being manufactured quickly without / any regard for quality and as consumers we must be / aware of our rights and the government / should penalise them who indulge in unscrupulous business practices.

1. Many goods are being manufactured quickly without
2. any regard for quality and as consumers we must
3. aware of our rights and the government
4. should penalise them who indulge in unscrupulous business practices.
5. No error

24. The European Central Bank has said that if all / Euro-zone nation continue to carry out / economic reforms as Portugal and Ireland have / then the Central Bank will guarantee future bailouts.

1. economic reforms as Portugal and Ireland have
2. then the Central Bank will guarantee future bailouts
3. The European Central Bank has said that if all
4. Euro-zone nation continue to carry out
5. No error

25. While farmers are struggling / to cope with severe be drought / crop companies are researched / ways to breed crops that thrive in drought.

1. While farmers are struggling
2. to cope with severe drought
3. crop companies are researched
4. ways to breed crops that thrive in drought.
5. No error

**Directions (Q. 26-30):** In the given passage there are blanks, each of which has been numbered. Against each five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

One World Trade Center is viewed as a statement of hope, a marvel of persistence and a miracle of logistics. As years passed after the tragedy at the site at which it was constructed and the delays kept mounting, Americans began to (26) - What's taking so long? Have we lost the capacity to rebuild? The answer in part was the sheer (27) of the project 10,000 workers attempting one of the most difficult construction projects ever in one of the most densely populated cities on Earth. (28), the funds allotted for the project were estimated at \$1 .5 billion when the design was unveiled but the price tag just kept going up. Other (29) included the weather - in the harsh sun of summer the steel beams could reach temperatures that were hot enough to singe skin, added to which a hurricane (30) the construction site. The monument may not be all things to all people, but its completion signifies that ambition coupled with determination of people in the face of odds is intact and will always win the day.

- |                  |                |               |              |              |
|------------------|----------------|---------------|--------------|--------------|
| 26.1. understand | 2. anger       | 3. wonder     | 4. sense     | 5. questions |
| 27.1. complexity | 2. delight     | 3. knowing    | 4. drop      | 5. obsession |
| 28.1. when       | 2. despite     | 3. instead    | 4. exclusive | 5. moreover  |
| 29.1. advantages | 2. information | 3. challenges | 4. attempts  | 5. crisis    |
| 30.1. formed     | 2. affected    | 3. predicted  | 4. hazard    | 5. flooded   |

## QUANTITATIVE APTITUDE

1. Mr.X invested certain amounts in two different banks A and B. Bank A offers simple interest at 14% per annum and Bank B offers compound interest at 5% per annum. The interest accrued on the amount invested in Bank A in 2 years was ₹ 4200 and the total amount invested was ₹ 38000. What was the interest accrued on the amount invested in Bank B?

1. ₹ 4375.5                      2. ₹ 2857.5                      3. ₹ 2357.5                      4. ₹ 2537.5                      5. Can't be determined

2. In how many different ways can the letters of the meaningless word **DAYNAMIC** be arranged so that the vowels never come together?

1. 48860                      2. 40860                      3. 5040                      4. 2160                      5. 18000

3. Deepak scored 84 marks in Subject X. He scored 72% marks in Subject Y and P marks in Subject Z. The maximum marks in each subject was 150. The overall percentage marks obtained by Deepak in all the three subjects together was 62%. How many marks did he score in Subject Z?

1. 67                      2. 87                      3. 77                      4. 76                      5. 83

4. A train covers a distance of 36 km at a uniform speed. Had the speed been 6 kmph less, it would have taken one hour more for the journey. The original speed of the train was

1. 16 kmph                      2. 19 kmph                      3. 17 kmph                      4. 18 kmph                      5. 27 kmph

5. The length of a rectangle is two-thirds of the side of a square, the radius of a circle is equal to the side of the square. The circumference of the circle is 264 cm. What is the area of the rectangle if the breadth of the rectangle is 16 cm?

1. 442 cm<sup>2</sup>                      2. 436 cm<sup>2</sup>                      3. 448 cm<sup>2</sup>                      4. 440 cm<sup>2</sup>                      5. 450 cm<sup>2</sup>

**Directions (Q. 6 – 10):** Each of these questions consists of a question and two statements I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and choose the appropriate option.

1. If the data in statement I alone are sufficient to answer the question while the data in statement II are not sufficient to answer the question.
2. If the data in statement II alone are sufficient to answer the question while the data in statement I alone are not sufficient to answer the question.
3. If the data either in statement I alone or in statement II alone are sufficient to answer the question.
4. If the data in both the statements I & II together are not sufficient to answer the question.
5. If the data in both the statements I & II together are necessary to answer the question.
6. What is the speed of the train? (in kmph)
  - I. The car takes 2 hours more than the train to cover a distance of 264 km.
  - II. The train moves 22 kmph faster than the car.

7. How many students are there in the class?

- I. The average weight of the class is 52 kg.
- II. If two students weighing 44 kg and 52 kg leave the class and are replaced by two students weighing 64 kg and 56 kg, the average weight of the class increases by 1.2 kg.

8. Cedric mixed two types of rice for selling the mixture in his shop. What is the quantity (in kg) of the first type of rice in the mixture?

- I. The price of the first type of rice is Rs.36 per kg. Cedric earned a profit of 20% by selling the mixture @ Rs.57.60 per kg.
- II. The price of the second type of rice is Rs.50 per kg. The difference between the quantity of the first type of rice and the second type of rice in the mixture is 3 kg.

9. What was the percentage of discount given on the marked price of the table?

- I. 15% profit was earned by selling the table for Rs.14490. If there was no discount, the profit percentage would have been 20%.
- II. The cost price of the table is Rs.12600.



10. What is area of the circle? (in sq cm)

I. The diameter of the circle is 90 cm less than its circumference.

II. The radius of the circle is equal to the length of a rectangle whose perimeter is 78 cm.

11. P can complete a piece of work in 8 days. Q in 10 days and R in 12 days. Q and R together worked for 3 days, then R left the work and P replaced him. En how many days will the remaining work be completed?

1. 2 days                      2. 4 days                      3. 3 days                      4. 1 day                      5. 5 days

12. A sells an item to B at 20% profit. B sells it to C at 10% profit and C sells it to D at Rs.116 profit. The difference between the cost price of D and the cost price of A is ₹ 500. How much did B pay to A for the item?

1. ₹ 1240                      2. ₹ 1250                      3. ₹ 1440                      4. ₹ 1450                      5. ₹ 1400

13. ₹ 16000 was invested for three years, partly in scheme A at the rate of 5% simple interest per annum and partly in scheme B at the rate of 8% simple interest per annum. The total interest received at the end was ₹ 3480. What amount of money was invested in scheme A?

1. ₹ 6000                      2. ₹ 6500                      3. ₹ 4500                      4. ₹ 4000                      5. ₹ 8000

14. In a 140-litre mixture of milk and water, the percentage of water is only 30%. The milkman gave 20 litres of this mixture to a customer. Then he added equal quantities of pure milk and water to the remaining mixture. As a result the ratio of milk to water in the mixture became 2 : 1. What was the quantity of milk added? (in litres)

1. 12                      2. 15                      3. 18                      4. 8                      5. 10

15. A boat can travel 4.2 km upstream in 14 minutes. If the ratio of the speed of the boat in still water to the speed of the stream is 7 : 1, how much time will the boat take to cover 17.6 km downstream? (in minutes)

1. 52                      2. 44                      3. 48                      4. 36                      5. 54

**Directions (Q. 16 – 20):** In these questions, two equations numbered I and II have been given. You have to solve both the equations and mark the correct answer.

1. If  $x > y$       2. If  $x \geq y$       3. If  $x < y$       4. If  $x \leq y$       5. Relation between  $x$  and  $y$  cannot be established

16. I.  $2x^2 + 23x + 63 = 0$       II.  $4y^2 + 19y + 21 = 0$

17. I.  $3x^2 + 29x + 56 = 0$       II.  $2y^2 + 15y + 25 = 0$

18. I.  $3x^2 + 23x + 44 = 0$       II.  $3y^2 + 20y + 33 = 0$

19. I.  $4x^2 - 29x + 45 = 0$       II.  $3y^2 - 19y + 28 = 0$

20. I.  $2x^2 - 13x + 21 = 0$       II.  $5y^2 - 22y + 21 = 0$

**Directions (Q. 21- 25):** What will come in place of question mark (?) in the given number series?

21. 17    19    25    37    ?    87

1. 63                      2. 52                      3. 55                      4. 67                      5. 57

22. 61    82    124    187    ?    376

1. 271                      2. 263                      3. 257                      4. 287                      5. 249

23. 23    30    46    80    141    ?

1. 244                      2. 212                      3. 226                      4. 220                      5. 238

24. 179    180    172    199    135    ?

1. 236                      2. 272                      3. 240                      4. 256                      5. 260

25. 14    6    5    6.5    12    ?

1. 29                      2. 27                      3. 23                      4. 33                      5. 35

**Directions (Q. 26- 30):** What approximate value will come in place of question mark (?) in the given question. (You are not expected to calculate the exact value)

26.  $1439 \div 16 \times 14.99 + \sqrt{228} = ?$

1. 1315                      2. 1365                      3. 1215                      4. 1465                      5. 1265

27.  $(11.92)^2 + (16.01)^2 = ?^2 \times (3.85)^2$

1. 15                      2. 2                      3. 4                      4. 12                      5. 5

28.  $(19.97\% \text{ of } 781) + ? + (30\% \text{ of } 87) = 252$

1. 40                      2. 50                      3. 25                      4. 70                      5. 80

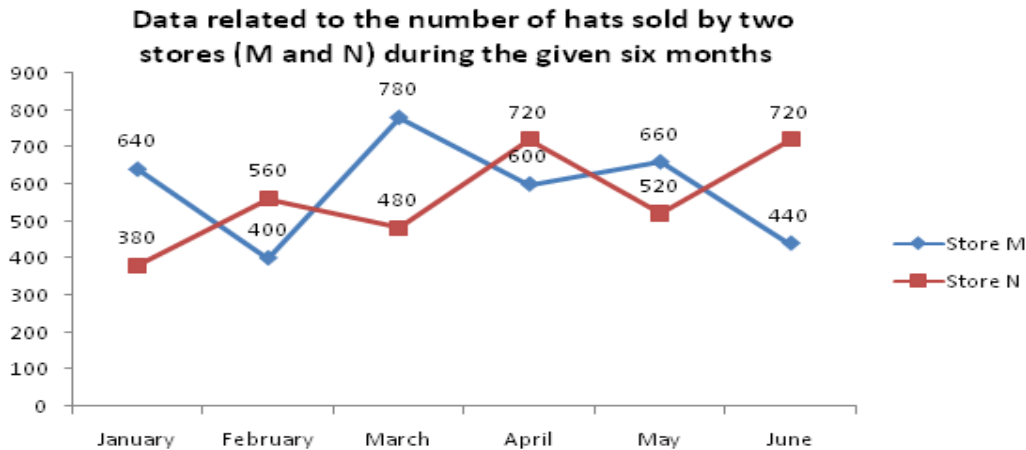
29.  $820.01 \div 21 \times 2.99 + ? = 240$

1. 105                      2. 173                      3. 123                      4. 234                      5. 143

30.  $299 \div 12 \times 13.95 + ? = (24.02)^2$

1. 285                      2. 225                      3. 325                      4. 150                      5. 185

**Directions (Q. 31 – 35):** Refer to the graph and answer the given questions.



31. The number of hats sold by Store M during January is what per cent of the total number of hats sold by Store N during March and April together?

1.  $51 \frac{1}{3}$                       2.  $55 \frac{2}{3}$                       3.  $47 \frac{1}{3}$                       4.  $53 \frac{1}{3}$                       5.  $57 \frac{2}{3}$

32. What is the average number of hats sold by store N during January, March, May and June?

1. 535                      2. 525                      3. 515                      4. 500                      5. 530

33. Stores M and N sell only two types of hats: Fedora Hats and Trilby Hats. If the ratio of the total number of Fedora hats to the total number of Trilby hats sold by stores M and N together during March is 9 : 5, what is the total number of Fedora hats sold by stores M and N together during March?

1. 990                      2. 900                      3. 720                      4. 630                      5. 810

34. If the total number of hats sold by stores M and N together in July is 15% more than the total number of hats sold by the same stores together during June, what is the total number of hats sold by the same stores together during July?

1. 1298                      2. 1316                      3. 1356                      4. 1284                      5. 1334

35. The number of hats sold by Store M increased by what per cent from February to May?

1. 75                      2. 55                      3. 65                      4. 70                      5. 60

**1.Reasoning**

1.4 2.4 3.2 4.2 5.2 6.5 7.2 8.4 9.4 10.5 11.2 12.1 13.5 14.1  
15.1 16.4 17.5 18.5 19.1 20.2 21.1 22.3 23.2 24.4 25.4 26.4 27.1 28.3  
29.2 30.4 31.3 32.4 33.2 34.1 35.4

**2.English**

1.5 2.4 3.1 4.2 5.3 6.2 7.4 8.2 9.3 10.5 11.5 12.1 13.5 14.3  
15.5 16.4 17.2 18.3 19.4 20.1 21.2 22.4 23.4 24.4 25.3 26.3 27.1 28.5  
29.3 30.2

**3.Q.A**

1.3 2.5 3.2 4.4 5.3 6.5 7.5 8.5 9.1 10.1 11.1 12.3 13.4 14.1  
15.2 16.3 17.5 18.4 19.5 20.1 21.5 22.1 23.5 24.5 25.1 26.2 27.5 28.4  
29.3 30.2 31.4 32.2 33.5 34.5 35.3

MSB