

# Test-I: English Language

**Directions (Q. 1-5):** In the given question, the end of the paragraph is given as (F). Rearrange the remaining five sentences (A), (B), (C), (D) and (E) in a proper sequence so as to form a meaningful paragraph and then answer the given questions.

(A) In terms of fiscal deficit of the developing countries a trend similar to that of the developed countries has been observed. However, most of the developing countries have taken measures to reduce the fiscal deficit.

(B) Most of the developed countries are facing these two types of problems leading to fiscal deficit, except for South Korea, which has seen both the deficit and surplus during 2008-2015.

(C) Fiscal deficit is the difference between the government's total expenditure (both the current and capital) and the total revenue receipts of the government. It occurs either due to deficit in revenues or increase in capital expenditure.

(D) Fiscal deficit of India, for instance, in 2008 was around 10 per cent of the total GDP, which reduced to less than 7 per cent in 2014.

(E) On the other hand, unlike South Korea, United States had fiscal deficit of more than 12 per cent of its GDP during 2009. One reason for this huge deficit can be due to the global financial crisis, which started in the US in 2008.

(F) However, despite this reduction in the deficit, the total surplus as a percentage of GDP has declined over time.

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

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

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

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

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

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

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

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

5. Which of the following should be the **FIFTH** sentence after the rearrangement?

1)E

2)C

3)B

4)A

5)D

**Directions (Q. 6-13):** Which of the following phrases given after the sentence can replace the phrase given in bold in the sentence grammatically and contextually? If none of the phrases can replace the word/phrase given in bold in the sentence, select 'None' as your answer.

6. Health experts believe that resistance to antimicrobial drugs could **cause a bigger threat** to mankind than cancer.

(A) be more hazardous for

(B) be more harmful to

(C) are more perilous for

1) Only (A)

2) Only (B) and (C)

3) All (A), (B) and (C)

4) Only (A) and (B)

5) None

7. In order to be successful, an investor needs to **keep his finger on the pulse** of international business.

(A) possesses knowledge regarding

(B) remain informed about

(C) keep himself updated about

1) Only (A)

2) Only (B)

3) All (A), (B) and (C)

4) Only (B) and (C)

5) None

8. The evidence submitted by the suspect **had no bearing on** the inquiry made by the police officer.

(A) was not a representative of

(B) was not pertinent to

(C) was not relevant to

1) Only (A)

2) Only (B) and (C)

3) All (A), (B) and (C)

4) Only (A) and (B)

5) None

9. The officials **took comfort from** the fact that the country did not yield any ground on other issues and kept its defensive interests in various fields intact.

(A) basked of

(B) derived pleasure from

(C) were delighted due to

1) Only (A)

2) All (A), (B) and (C)

3) Only (B) and (C)

4) Only (B)

5) None

10. The rise and increasing popularity of cryptocurrency undoubtedly **reflects the dawn** of a new era.

(A) personify the unfold

(B) indicates the beginning

(C) manifests the advent

- 1) Only (A)                      2) Only (B) and (C)  
 3) All (A), (B) and (C)        4) Only (B)  
 5) None
11. During a fight harsh words are ir retrievable since they may be kept in the person's mind forever.  
 (A) hold onto the fact  
 (B) might be remember  
 (C) badly effect the person  
 1) Only (A)                      2) Only (B) and (C)  
 3) Only (C)                      4) Only (B)  
 5) None
12. Many people look to legislation to hasten the progress of social reforms.  
 (A) consults to  
 (B) rely on  
 (C) resorts on  
 1) Only (B)                      2) Only (B) and (C)  
 3) Only (A)                      4) Only (A) and (C)  
 5) None
13. Heavily polluting power plants across China will now have to choose between paying for their emissions and cleaning up their act.  
 (A) mending their ways  
 (B) resolving up the issues  
 (C) change their way  
 1) Only (A)                      2) Only (B) and (C)  
 3) All (A), (B) and (C)        4) Only (C)  
 5) None

**Directions (Q. 14-20):** Read this sentence to find out whether there is any grammatical mistake/error in it. The error, if any, will be in two parts of the sentence. The combination of those parts is the answer. If no part in the sentence has an error, then mark 'No error' as your answer. (Ignore the errors of punctuation, if any.) Please Note: Both the parts in the answer combination must necessarily have an error.

14. Even though long term macroeconomic (A) / impact of fiscal deficits are subject (B) / to debate, there is far less debate along (C) / certain immediate, short term consequences of the same. (D)  
 1) AC    2) AB    3) BC    4) CD    5) No error
15. When building a website (A) / it is important that the content – pictures, text, etc – (B) / tell story for where you been (C) / where your planning to go and your goals as a business. (D)  
 1) AD    2) AB    3) BC    4) CD    5) No error
16. Recovering from the ongoing economic crisis (A) / FMCG companies and consumer durable firms (B) / are pinning their hopes on the fact that improved market sentiment in 2018 (C) / will bring them back on track. (D)  
 1) AD    2) AB    3) BC    4) CD    5) No error
17. Turning your passion for pie into a profitable business (A) / needs more over just a flaky crust; (B) / success

largely depends your commitment, (C) / planning and ability to market your products. (D)

- 1) AD    2) AB    3) BC    4) CD    5) No error
18. In the face at high-impact, but uncertain, (A) / environmental changes likely to affect (B) / the supply and demand of water sources, (C) / societies is considering the need to adapt to such changes. (D)  
 1) AD    2) AB    3) BC    4) CD    5) No error
19. Keeping up to date with technology (A) / is essential for all business owner, (B) / even those who run businesses and which (C) / are not considered technology companies. (D)  
 1) AD    2) BC    3) AC    4) CD    5) No error
20. As per the human population (A) / continue from growth worldwide, (B) / many environmentalists are 'calling for governments across the globe (C) / to encourage zero or even negative population growth. (D)  
 1) AD    2) AB    3) BC    4) CD    5) No error

**Directions (Q. 21-25):** In the given sentence a blank is given indicating that something is missing. From the given four options, (A), (B), (C) and (D), a combination of words would fit the blank thereby making it grammatically and contextually correct, mark that option as the answer. If all the given combinations fit perfectly, then mark 'All fit' as the answer and if none of the given options fits then mark 'None fits' as your answer. Note: Each word in the correct combination must independently fit in the blank.

21. Of all the social institutions, the family is the most active and successful in \_\_\_\_\_ young people.  
 (A) enrolling  
 (B) appealing  
 (C) guiding  
 (D) motivating  
 1) AD    2) CD    3) BC    4) AC    5) None fits
22. Financial service sector serves as a strong source of growth for the economy as beyond the GDP that it generates, it also \_\_\_\_\_ growth of other businesses in the economy.  
 (A) sustains  
 (B) opens doors for  
 (C) expedites  
 (D) promotes  
 1) AD    2) AB    3) BC    4) CD    5) All fit
23. It is a well-known fact that \_\_\_\_\_ the rise in GDP, the reinvestment of that wealth into societal improvements is not always a norm.  
 (A) without  
 (B) despite  
 (C) even with  
 (D) in spite  
 1) AD    2) AB    3) BC    4) CD    5) All fit
24. The right paperwork goes a \_\_\_\_\_ way in getting your money to those you love.

- (A) high
- (B) further
- (C) big
- (D) heavy

1)AD 2)AB 3)BC 4)CD 5)None fits

25. 'Flourishing' is a multifaceted word, but in short, it means having a lot of mental and emotional

- (A) fulfil
- (B) contentment
- (C) enriched
- (D) wellbeing

1)BD 2)AB 3)BC 4)CD 5)None fits

**Directions (Q. 26-33): Read the following passage and answer the given questions. Certain words/phrases have been given in bold to help you while answering some of the questions.**

The shift to green technology is **extremely** welcome. Climate change is one of the biggest human rights challenges of our time, and cities from London to Delhi are choking on vehicle fumes. The move to electric cars will improve air quality and cut the carbon emissions that have pushed our planet to breaking point. **But some electric cars are not, currently, as "clean" as manufacturers would have us believe.** Amnesty International's research has shown that cobalt mined by children and adults in extremely hazardous conditions could be entering the supply chains of some of the world's largest carmakers. A key component of the rechargeable lithium-ion batteries on which electric cars run is cobalt. More than half of the world's cobalt comes from the Democratic Republic of Congo (DRC). Despite its mineral riches, the DRC is one of the poorest countries in the world, and has suffered from decades of war and corrupt leaders. With so few formal jobs in the country, hundreds of thousands of Congolese men, women and children have been driven to dig their own mines to earn their livelihoods. So, what should these companies be doing? In 2012, the Organisation for Economic Co-operation and Development (OECD) laid out clear guidelines for companies sourcing cobalt and other minerals from high-risk areas like the DRC. According to these guidelines, electric car manufacturers and battery makers should be able to say who their smelters or refiners are, and should make public their own assessment of whether the smelter's due diligence practices are adequate in identifying and addressing human rights risks and abuses. Not a single car manufacturer has actually done this. This could be because cobalt has been developed by narrowly drafted '**conflict minerals rules**' adopted in the United States in 2010 and the European Union earlier this year, meaning it escapes strict regulation. But there is no excuse for some of the richest companies in the world not to undertake proper due diligence. The other response we hear from companies is that they want to stop buying from

artisanal mines in the DRC altogether. But this could have a negative impact on the already impoverished communities that rely on mining. Companies that have benefited from child labour should not just walk away from the problem now that it has been **exposed**. The solution lies in regulating these artisanal mines, ensuring that they are safe places to work, while children attend school instead. Governments around the world should pass laws that require companies to check and publicly disclose information about where they source minerals. A green future built on the backs of exploited children in the DRC is no kind of progress.

26. Which of the following words used in the passage can replace the word 'exposed'?

- (A) revealed
- (B) uncovered
- (C) endangered
- (D) unmasked

1) Only (A) 2) Only (B)  
3) Only (C) 4) Only (A), (B) & (D)  
5) None of these

27. Which of the following is/are the impact(s) of the 'conflict minerals rules' discussed in the passage?

- (A) Artisanal mines in many countries have been closed.
- (B) OECD countries have benefited inordinately.
- (C) These have impoverished many African countries.

1) Only (C) 2) Only (B)  
3) Only (A) & (B) 4) Only (B) & (C)  
5) None of (A), (B) & (C)

28. Which of the following words is the opposite of the word 'extremely' as used in the passage?

- (A) slightly
- (B) marginally
- (C) mildly
- (D) little

1) Only (A) 2) Only (B)  
3) Only (C) 4) Only (B) & (D)  
5) All (A), (B), (C) & (D)

29. Which of the following can be said about DRC?

- (A) It supplies over 50 percent of the world's cobalt.
- (B) Its economy is in good shape thanks to rich natural resources like cobalt.
- (C) Much of the population is engaged in cobalt mining as there are few formal jobs.

1) All (A), (B) & (C) 2) Only (B)  
3) Only (A) & (C) 4) Only (C)  
5) Only (A) & (B)

30. Which of the following steps would the author not likely be in favour of?

- 1) Car companies should stop buying raw materials from artisanal mines.
- 2) Companies scrutinising the child labour practices of the mineral suppliers

- 3) Companies publicly revealing the information about the miners they source cobalt from
- 4) Governments should regulate safety and labour practices in mines.
- 5) The author is in favour of all the given options.
31. Which of the following best describes the author's view?
- 1) Climate change is an issue of human rights.
- 2) OECD guidelines should be scrapped.
- 3) Government laws regarding mining need to be relaxed.
- 4) Green technology is a myth and is unwelcome as the economic cost is exorbitant.
- 5) None of the given options
32. Which of the following is/are true in the context of the passage?
- (A) Cobalt is one of the most polluting minerals.
- (B) Car manufacturers have not followed the OECD 2012 guidelines with regard to cobalt mining.
- (C) Car manufacturers need to take steps to ensure their role in the energy revolution is truly clean and fair.
- 1) Only (A)
- 2) Only (B)
- 3) Only (A) & (B)
- 4) All (A), (B) & (C)
- 5) Only (B) & (C)
33. Which of the following can be concluded from the highlighted sentence in the passage?
- (A) Car companies are fudging their vehicle pollution data and are not as green as they portray.
- (B) Production of some electric cars involves the use of raw materials mined by child labourers.
- (C) Car manufacturers inflate the prices of electric vehicles.
- 1) Only (A) & (C)                      2) Only (B)
- 3) Only (A) & (B)                    4) Only (B) & (C)
- 5) All (A), (B) & (C)

**Directions (Q. 34-40):** Read the following passage carefully and answer the questions given. Certain words/phrases have been given in bold to help you locate them while answering some of the questions.

*Cryptocurrency* is the term used to denote a set of currencies which are a subset of digital currencies using the technique of cryptography and which exist only on the digital platform. Bitcoin is the best known of such currency formats. As of now, hundreds of cryptocurrency specifications exist which are mostly similar to and derived from the first fully implemented decentralised cryptocurrency, bitcoin. The safety, integrity and balance of ledgers within cryptocurrency systems is maintained by a community of parties referred to as miners. Members of the public add these transactions to the ledger in accordance with a particular scheme of time-stamping using

their computers to help validate and time-stamp transactions. The distributed nature of miners trying to maintain ledgers at the cost of a built-in financial incentive forms '**the cornerstone of security**' of the cryptocurrency system. Decentralised cryptocurrency is produced through the entire cryptocurrency ecosystem collectively.

In the centralised banking-based economic systems, governments control the supply of currency by printing units of money or demanding additions to digital banking ledgers. In the case of decentralised cryptocurrency, governments cannot produce new units, and have neither provided any kind of backing so far for other firms, banks or corporate entities which hold asset values measured in it. Inherent and related to the function of the sovereign for control of currency/cryptocurrency are the concerns around control of money supply in the economy and consequently, also interest rate, inflation and employment. Control of money supply remains one of the most potent weapons in the hands of central bankers to influence interest rates and inflation in the system.

While the **underlying** technology for control and flow of cryptocurrencies is technically very sound, control and monopoly of such system by a central bank shall kill the fundamentals of the underlying technological system which is built around random distribution. The governments of the day are aware of the challenges and opportunities offered by the new currency system. The only thing to see is how fast and to what extent they move in to take charge for an orderly growth of cryptocurrencies with enough safeguards to prevent misuse by unscrupulous elements.

34. What does the author mean by the phrase 'the cornerstone of security' in the context of the passage?
- 1) Efforts are being made to improve the current quality of cryptocurrency.
- 2) The initial troubles faced due to implementation of bitcoins have been resolved.
- 3) The developed nature of cryptocurrency is an important basic security feature.
- 4) Retracing transactions are easier and more secure in case of bitcoins.
- 5) Absence of streamlining creates loopholes in the currency.

35. Which of the following can be considered a challenge posed by cryptocurrency to the existing system, as mentioned in the passage?

- (A) It can be corrupted very easily by altering any virtual element.
- (B) Absence of the traditional way of sharing documents with the collaboration of middlemen
- (C) Lack of control on its issue and flow in the economic system

- 1) Only (C)
- 2) Only (B) and (C)
- 3) Only (A) and (C)
- 4) Only (B)
- 5) None of these

36. According to the author,

- 1) opportunities for cryptocurrency are high in developing countries.
- 2) steps and formalities in utilisation of digital currency do not make it user-friendly.
- 3) widespread use of cryptocurrency will disturb the economic balance.
- 4) None of those given as options
- 5) sovereign control might hamper the circulation and format of cryptocurrency.

37. Which of the following is true in the context of the passage?

- 1) Time-stamping is done by miners for all types of digital currencies for the purpose of security.
- 2) Cryptocurrency is a new financial tool that should be handled with caution.
- 3) Digitalisation of currency will not have much effect on the corporate and public sectors.
- 4) Complete control on the currency system is the only effective tool used by the Government.
- 5) None of the given options is true

38. Which of the following is most nearly the **SAME** in meaning as the word **UNDERLYING** as used in the passage?

- 1) adaptive
- 2) deft
- 3) menial
- 4) established
- 5) fundamental

39. Which of the following is/are the theme(s) that has been mentioned in the passage?

- 1) The rise and pitfalls of physical currency
- 2) Impact of digitalisation of currency on the double spending problem
- 3) The loopholes in the centralised banking system
- 4) The conundrum surrounding digital currency and its use
- 5) All the given options are themes that have been mentioned.

40. Which of the following is/are a step(s) of a digital currency transaction, as mentioned in the passage?

- (A) Complete government vigilance on consumer spending to detect fraudulent activity
- (B) Time-stamping is done by miners to prevent any kind of alteration or misuse.

(C) Maintenance of a digital ledger in a decentralised manner

- 1) Only (A)
- 2) Only (A) and (B)
- 3) Only (B) and (C)
- 4) Only (B)
- 5) None of these

**Directions (Q. 41-50):** In the given passage there are sentences which have been numbered at their beginning. In these numbered sentences four words have been highlighted (in bold and underlined). Find out if the words are appropriate both grammatically and meaningfully in the context of the passage. Only one of the words will be inappropriate (grammatically or meaningfully) and that word is your answer. If all the words (bold and underlined) are correct, mark 'All correct' as your answer.

This giant natural gas leak that hit California's Aliso Canyon reserve in late 2015 led to a massive quantity of methane being released into the environment, contributing to man-made climate change and raising health concerns for nearby residents. **(41)** But the leak of more than 100,000 tonnes of methane also **served** as a **critical** test for a demand response, a **practice** in which electric utility companies **make** customers to reduce consumption in times of high demand or limited supply. **(42)** **Faced** with the shutdown of one of the largest natural gas storage **facilities** in the US, utilities needed to find a way to ensure a **steady** electricity supply to more than 10 million people in the Los Angeles region without being able to simply **build** more power plants. **(43)** The **basic concept** of demand response has **exited**—at least in **theory**—since the first days of electricity use. The thinking was simple: why should energy cost the same when no one is using it as its periods of the highest demand? **(44)** In recent decades, utility companies have **responded** by offering financial **incentives** to encourage **primarily** commercial and industrial customers to **increased** their energy consumption. Recent advances in technology have made it easier to practise demand response far more widely. **(45)** No innovation has been more **useless** than smart meters, which **allow** energy **use** to be **tracked** down to a few minutes of time. **(46)** The rise of smart homes has

also allowed utility companies to communicate seamlessly with energy-gobbling home appliances, adding further precision. (47) These programmes help energy providers ensure the available electricity supply meets the demand, and most of this will occur without the average person thinking twice about it – the refrigerator might defrost or the water heater might turn on when there’s access electricity being produced while the washer and dryer might pause when there’s high demand. In exchange, participating homeowners pay lower electricity bills. (48) In an ideal world, using this smart technology that people are unaware of can evolve the system both more financially efficient and also electrically efficient. (49) Changing when a homeowner runs his dryer may not sound like a big deal, but a collective shift could pave the way for utilities to deploy more wind and solar power – energy sources that cannot be turned on and off with a flick of a switch. (50) Solar and wind power tend to be the strongest at times that do not necessarily align with consumers’ need for power. Demand response shifts usage to meet when that supply is the strongest.

- |                    |                |               |
|--------------------|----------------|---------------|
| 41. 1) served      | 2) critical    | 3) practice   |
| 4) make            | 5) All correct |               |
| 42. 1) faced       | 2) facilities  | 3) steady     |
| 4) build           | 5) All correct |               |
| 43. 1) basic       | 2) concept     | 3) exited     |
| 4) theory          | 5) All correct |               |
| 44. 1) responded   | 2) incentives  | 3) primarily  |
| 4) increased       | 5) All correct |               |
| 45. 1) useless     | 2) allow       | 3) use        |
| 4) tracked         | 5) All correct |               |
| 46. 1) communicate | 2) seamlessly  | 3) appliances |
| 4) precision       | 5) All correct |               |
| 47. 1) supply      | 2) occur       | 3) average    |
| 4) access          | 5) All correct |               |
| 48. 1) ideal       | 2) unaware     | 3) evolve     |
| 4) financially     | 5) All correct |               |
| 49. 1) deal        | 2) collective  | 3) pave       |
| 4) deploy          | 5) All correct |               |
| 50. 1) tend        | 2) necessarily | 3) align      |
| 4) power           | 5) All correct |               |

## Test-II: Reasoning Ability

**Directions (Q. 51-53):** Each of the questions given below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read the question and both the statements and 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.
- 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 statement I and II together are not sufficient to answer the question.
  - 5) if the data in both statements I and II together are necessary to answer the question.
51. How many students are there in class 8 in school K?
- I The class teacher of class 8 correctly remembers that the number of students in her class is more than 21 but less than 32. The number of students in her class is exactly divisible by 6.
  - II The Principal of school K correctly remembers that the difference between the number of students in class 7 and in class 8 is less than nine. There are 33 students in class 7.
52. Among A, B, C, D and E, seated around a circular table, facing the centre, who sits second to the right of C?
- I C sits on the immediate right of A. Only two persons sit between B and A (when counted from left or right).
  - II Both D and C are immediate neighbours of B. E sits second to the right of B.
53. Amongst five bags L, M, N, O and P, each having a different weight, which is the lightest?
- I Only two bags are heavier than O. O is heavier than P but lighter than M.
  - II N is lighter than O but heavier than P. L is heavier than O, but not the heaviest.
- Directions (Q. 54-58):** In this question, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer accordingly.
- 1) Only conclusion I is true.
  - 2) Only conclusion II is true.
  - 3) Either conclusion I or II is true.
  - 4) Neither conclusion I nor II is true.
  - 5) Both conclusion I and II are true.
54. **Statement:**  $P \geq R > O = S \leq A = Q$   
**Conclusions:** I.  $P > S$  II.  $O \leq Q$
55. **Statement:**  $R \leq A < C = E \leq D$   
**Conclusions:** I.  $R < D$  II.  $R = D$
56. **Statement:**  $V \geq E = N \geq I \geq C < E$   
**Conclusion:** I.  $C \leq V$  II.  $N > E$
57. **Statements:**  $C \leq D < L \leq F \geq G; K \geq L > M$   
**Conclusions:** I.  $C < M$  II.  $K \geq G$
58. **Statements:**  $J \leq L \leq P \leq E; K \geq P > M$   
**Conclusions:** I.  $M > E$  II.  $J \leq K$
59. Read the following information carefully and answer the question which follows.  
 “A variety of duplicate products have snatched our

market. Our profits are reducing by almost 10% each passing year. Despite much longer durability of our handmade products, people these days are settling for the second copies only because of their prices and easy availability." – Statement by the owner of a handmade products store in City Y

Which of the following can be inferred from the owner's statement? (An inference is something by which you can logically deduce something to be true.)

- 1) The market of handmade products will disappear completely in the coming few years.
- 2) Manufacturing of second copies or duplicate articles is a recent trend in City Y.
- 3) Reducing the price of handmade articles by 10% will attract more customers.
- 4) Making handmade products more widely available at reduced prices will help its market revive at least to some extent.
- 5) Durability is the least important factor that affects the choice of customers while buying such items.

**Directions (Q. 60-64): Study the given information carefully to answer the given questions.**

In a certain code language, 'give me your number' is coded as 'tn ct ar bp', 'highest number in English' is coded as 'bp dg sk mi', 'test your English skills' is coded as 'tm fo ve dg' and 'skills in pencil sketches' is coded as 'nu ve ky sk'. (Note: All codes are two-letter codes only.)

60. What is the code for 'English' in the given code language?
  - 1) ve
  - 2) tm
  - 3) nu
  - 4) ky
  - 5) dg
61. What does the code 'ct' stand for in the given code language?
  - 1) test
  - 2) Either 'give' or 'me'
  - 3) Either 'your' or 'number'
  - 4) number
  - 5) highest
62. What may be the possible code for 'your hidden skills' in the given code language?
  - 1) mi tm fo
  - 2) ve fo tm
  - 3) ve rb sk
  - 4) ve rb tm
  - 5) rb tm ky
63. If in the given code language, 'colour of pencil' is coded as 'nu xg hf', what will be the code for 'number of sketches'?
  - 1) bp xg ve
  - 2) hf fo xg
  - 3) fo tm hf
  - 4) Cannot be determined
  - 5) ky tm nu
64. What does the code 'fo' stand for in the given code language?
  - 1) None of the given options
  - 2) your
  - 3) test
  - 4) skills
  - 5) English

**Directions (Q. 65-68): Study the given information carefully to answer the given questions.**

A certain number of people are sitting in a straight line

facing north. B sits fifth to the right of K. Only two people sit between K and S. M sits seventh to the left of S. R sits at one of the positions to the right of M. The number of people between S and B is one less than that between M and R. Q sits at one of the positions between S and R. Q is not an immediate neighbour of K. L sits seventh to the right of Q. L sits at an extreme end. As many people sit between L and B as to the left of M.

65. Who sits second to the left of B?
  - 1) S
  - 2) R
  - 3) L
  - 4) M
  - 5) Other than those given as options
66. Which of the following represents the position of R in the given line?
  - 1) Exactly between Q and K
  - 2) Second to the right of S
  - 3) Eighth from the right end of the line
  - 4) Sixth to the left of L
  - 5) Seventh from the left end of the line
67. Which of the following statements is true as per the given information?
  - 1) K is an immediate neighbour of L.
  - 2) None of the given statements is true
  - 3) Only six people sit between B and L.
  - 4) Only one person sits to the left of M.
  - 5) More than three people sit between M and R.
68. How many people are sitting in the given line?
  - 1) 17
  - 2) 20
  - 3) 15
  - 4) 22
  - 5) Cannot be determined

**Directions (Q. 69-73): Study the given information carefully to answer the given questions.**

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is equal distance between adjacent persons. In row-1, A, B, C, D, E and F are seated (not necessarily in the same order) and all of them are facing north. In row-2, P, Q, R, S, T and U are seated (not necessarily in the same order) and all of them are facing south. Therefore, in the given seating arrangement, each member seated in a row faces another member of the other row.

B sits third to the right of A. The one who faces A sits second to the right of P. R sits second to the left of P. Only two people sit between C and the one who faces R. As many people sit to the right of E as to the left of C. D faces U. Only one person sits between U and T. The one who faces F sits second to the left of Q.

69. Which of the given statements is/are TRUE with respect to the given information?
  - (i) C faces S.
  - (ii) T sits at an extreme end.
  - (iii) D faces an immediate neighbour of R.
  - 1) Only (iii)
  - 2) All (i), (ii) and (iii)
  - 3) Both (ii) and (iii)
  - 4) Both (i) and (iii)
  - 5) Only (iii)

70. Who amongst the following faces T?  
 1) B      2) D      3) E      4) C      5) A
71. If all the people of row-I are made to sit in alphabetical order from left to right, then who amongst the following will face P as per the new arrangement?  
 1) F      2) A      3) D      4) C      5) B
72. As per the given arrangement, B is related to Q in the same way as P is related to D. Following the same pattern, to whom is E related?  
 1) U  
 2) The one who faces A  
 3) S  
 4) The one who faces D  
 5) T
73. Who among the following does not sit at any of the extreme end of the rows?  
 1) The one who faces A  
 2) The one who sits to the immediate left of C  
 3) U  
 4) R  
 5) D

**Directions (Q. 74-78): Study the given information carefully to answer the given questions.**

Eight people D, E, F, G, R, S, T and U are sitting around a square table facing the centre. Four people are sitting at the corners and four in the middle of the sides of the table. The ages of the ones sitting in the middle of the sides are multiples of 3 and of those sitting at the corners are multiples of 7.

D sits second to the right of the 36-year-old. One of the immediate neighbours of D is 28 years old. Only three people sit between E and the 28-year-old. The age of the one who sits second to the left of E is less than 15 and also a multiple of 2. G is an immediate neighbour of the 51-year-old. G is neither 14 nor 28 year olds. Only one person sits between G and U (when counted from left or right). F is 27 years old. Only three people sit between F and T. The one who sits to the immediate left of S is 49 years old. G's age is less than 10 years. The difference between the ages of G and D is 11 years.

74. How many people sit between T and the 51-year-old, when counted from the left of T?  
 1) One                              2) None  
 3) More than three              4) Two  
 5) Three
75. How many people are younger than D?  
 1) Two                              2) More than four  
 3) Four                              4) Three  
 5) One
76. Which of the following statements is true as per the given arrangement?  
 1) T is 51 years old.  
 2) None of the given statements is true

- 3) F is an immediate neighbour of U.  
 4) The difference of the ages of E and F is 8 years.  
 5) T sits to the immediate right of the 7-year-old.
77. Who amongst the following is 14 years old?  
 1) None of the given options  
 2) E  
 3) T  
 4) U  
 5) R
78. What is the age of D (in years)?  
 1) 48                              2) 15                              3) 18  
 4) 27                              5) 9

79. **Study the given information carefully to answer the given question.**

Bus no. 218 is the only bus which plies on the only route between localities A and G of city Haroya. There are three huge factories between these areas. Though the bus has always been very punctual and well maintained, last week it was decided to discontinue the bus for certain reasons.

*Which of the following cannot be a reason behind discontinuing Bus no. 218?*

- 1) Soon AC buses will start plying between localities A and G, whose fare will be just 2% more than that of Bus no. 218. It is anticipated that Bus 218 will not make much profit thereafter.
- 2) All the given options can be possible reasons for discontinuing the bus
- 3) It has been decided to increase the number of e-rickshaws plying between areas A and G by 40% hence making them more easily and frequently available to the customers as compared to the bus. Also, as a result, the additional pollution caused by buses in these areas can be brought down to a great extent.
- 4) Under the recently completed metro rail project of Haroya, there are more frequent trains between localities A and G as compared to the frequency of Bus no. 218. The metro fare is also lower than that of the bus.
- 5) The number of chain-snatching and pick-pocketing cases near locality G of Haroya has drastically increased. As a result, Bus no. 218 has considerably lesser passengers now.
80. This consists of a decision and two statements numbered I and II given below it. You have to decide which of the given statements weaken/s or strengthen/s the decision and mark the appropriate answer.  
**Decision:** 'Health-Wise' is a chain of stores of healthcare products in country K. It has decided to keep products of only 20 companies in its store from now onwards.  
**I** These 20 companies have been associated with 'Health-Wise' for almost a decade and hence the



time between the supply and demand of products is very less.

- II.** 90% of the 20 listed companies have been awarded as the best healthcare products providing companies of the country.
- 1) Both Statement I and II are neutral statements.
  - 2) Statement I weakens the decision while Statement II strengthens the decision.
  - 3) Both Statement I and II weaken the decision.
  - 4) Statement I strengthens the decision while statement II weakens the decision.
  - 5) Both Statement I and II strengthen the decision.
81. **Study the given information carefully to answer the given question.**

Despite giving repeated warning to the science students of School Z, it has been found in this academic year that students who have not opted for Biology frequently enter the Biology lab without permission. A few of such students were also found to have damaged the microscopes in the laboratory. *Which of the given two options can be a feasible course of action for the given situation?*

- I.** Biology students must be given additional ID cards specifically to enter the laboratory. Any student without the card should strictly not be allowed inside the lab unless specified by the teacher.
- II.** Only the teacher should be allowed to touch or use the microscopes.
- 1) Only II is a feasible course of action.
  - 2) Both I and II are feasible courses of action.
  - 3) Either I or II is a feasible course of action.
  - 4) Neither I nor II is a feasible course of action.
  - 5) Only I is a feasible course of action.

**Directions (Q. 82-85):** In each question below are given two statements followed by two conclusions numbered I and II. You have to take the two given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Give answer

- 1) if only conclusion I follows.
  - 2) if only conclusion II follows.
  - 3) if either conclusion I or II follows.
  - 4) if neither conclusion I nor II follows.
  - 5) if both conclusion I and II follow.
82. **Statements:** Some juices are fruits.  
No fruit is a potato.  
Some potatoes are cakes.
- Conclusions:** **I.** Some cakes are fruits.  
**II.** No fruit is a cake.
83. **Statements:** Some juices are fruits.  
No fruit is a potato.  
Some potatoes are cakes.

**Conclusions:** **I.** All cakes being juices is a possibility.

- II.** All juices can never be potatoes.
84. **Statements:** All sketches are paintings.  
Some paintings are drawings.  
All drawings are letters.

**Conclusions:** **I.** All paintings can never be letters.  
**II.** At least some sketches are drawings.

85. **Statements:** All cubs are kittens.  
No kitten is a zebra.  
All zebras are bears.

**Conclusions:** **I.** All zebras being cubs is a possibility.  
**II.** No kitten is a bear.

86. What will come in place of the question mark (?) in the given series?

AZ-4 BY-6 DW-10 GT-16 (?)  
1) KP-20                      2) JO-20                      3) KN-24  
4) KP-24                      5) JO-22

87. In a straight line of six people (all facing north), Q sits at an extreme end of the line. Only two people sit between Q and G. R sits second to the right of G. L sits third to the right of A. Only one person sits between Q and B. Who sits to the immediate right of B?

- 1) No one as B sits at the extreme right end
- 2) L
- 3) G
- 4) A
- 5) Cannot be determined

88. Five boxes A, B, C, D and E are stacked above one another but not necessarily in the same order. Only one box is kept between A and B. C is kept at one of the positions above B but not at the top of the stack. Only two boxes are kept between C and D. Which of the following box is kept second from the bottom of the stack?

- 1) D                                      2) B                                      3) A
- 4) C                                      5) Can't be determined

89. In the word **PATRONISE**, the letter immediately before each vowel is replaced with the next alphabet (as per the English alphabetical order) and all others remain unchanged. Which of the following letters will appear twice in the word thus formed?

- 1) Only T                      2) Both T and O                      3) Both S and O
- 4) Only Q                      5) Only E

90. If it is possible to make only one meaningful English word with the fourth, the eighth, the ninth and the eleventh letters from the letters of the word **EXAMINATION**, using all the letters, but each letter only once, which would be the second letter of the word from the left end? If more than one such word can be formed, give 'Z' as your answer. If no such word can be formed, given 'Y' as your answer.

- 1)Z      2)T      3)Y      4)M      5)I

**Direction (Q. 91-95):** Study the given information carefully to answer the given questions.

Seven people A, B, F, G, L, M and X were born on seven different days of the same week starting from Monday and ending on Sunday. Each one of them works in a different company – Dell, Capgemini, Convergys and IBM. At least one person works in each of the given companies.

A was born on Thursday. Only two people were born between F and A. F works for Capgemini. One of the persons who works for IBM was born on Tuesday. Only two people were born between L and the one born on Tuesday. X works for Dell and was born on one of the days after L. The person born immediately after X works for Capgemini. One of the persons who work for Convergys was born immediately before M. Only two people were born between B and one of the persons who work for Convergys. G and M work for the same company. One of the persons born after G works for IBM.

91. Who amongst the following was born on Monday?
- 1)L
  - 2)F
  - 3) None of the given options
  - 4) One of the persons who work for Capgemini
  - 5) One of the persons who work for IBM
92. In which of the given companies does only one person work?
- 1) None
  - 2) Only Convergys
  - 3) Both Capgemini and Convergys
  - 4) Both Dell and Capgemini
  - 5) Only Dell
93. X was born on which of the following days?
- 1) Friday
  - 2) Wednesday
  - 3) Tuesday
  - 4) Other than those given as options
  - 5) Saturday

94. Which of the following represents the people who work for IBM?

- 1) L, B, A      2) G, M      3) A, M  
4) G, L, M      5) L, G

95. How many people were born between M and the one who works for Capgemini?

- 1) Two      2) Three      3) One  
4) More than three      5) None

96. Study the given information to answer the given question.

A very famous play 'Jhankaar' was set to be staged in one of the biggest theatres of city X on 27th of December. The theatre usually closes booking of its tickets two days before the play. Despite all promotions and large-scale advertisements, the theatre sold only 70% of his tickets for the play by the 25th of December.

*Which of the following can be an effect of the given situation?*

- I. The theatre will not give its premises to the director of 'Jhankaar' to stage any of his future plays.
  - II. The theatre can decide to remain open for booking tickets till a few hours before the play.
- 1) Either I or II can be an effect.
  - 2) Only II can be an effect.
  - 3) Neither I nor II can be an effect.
  - 4) Both I and II can be effects.
  - 5) Only I can be an effect.

**Directions (Q. 97-99):** Study the given information carefully to answer the given questions.

Point A is 12m to the north of Point B. Point C is 8m to the east of Point B. Point D is 4m south of Point C. Madhav, who is standing at Point A, walks 10m towards west, takes a left turn and walks for 14m to reach Point S. He takes a left turn again, walks for 5m and stops at Point Q. Aditya, who is standing at Point D, walks 6m towards west, takes a right turn, walks for 2m and stops at Point Y. Point Z is 7m away from Point S.

97. In which direction is Point S with respect to Point D?  
 1) North-West    2) West    3) South-West  
 4) North-East    5) East
98. If point L is to the north of Point B such that Point Z and Point L form a horizontal straight line, then which of the following will be true?  
 1) Distance between points A and L is 7m  
 2) Point L is to the north west of Point D.  
 3) Point Y is to the south east of Point Z  
 4) Point Z is to the north of Point S  
 5) All the given statements are true
99. What is the distance between Point Q and Point Y?  
 1) 5m    2) 13m    3) 7m  
 4) Cannot be determined    5) 9m
100. If 2 is added to all odd digits of the number 4738261 and 1 is subtracted from all the even digits, then how many digits will be greater than 5 in the new number thus formed?  
 1) Five    2) Two    3) Four  
 4) Three    5) One

## Test-III: Quantitative Aptitude

Directions (Q. 101-105): Refer to the table and answer the given questions.

Name of the Printing Company	Number of books printed	% of printed books distributed among distributors	Number of books received by each distributor
A	5600	80%	128
B	3200	60%	80
C	3800	75%	190
D	3000	68%	170
E	4500	70%	150

Note: Books were equally distributed among the distributors of respective printing companies.

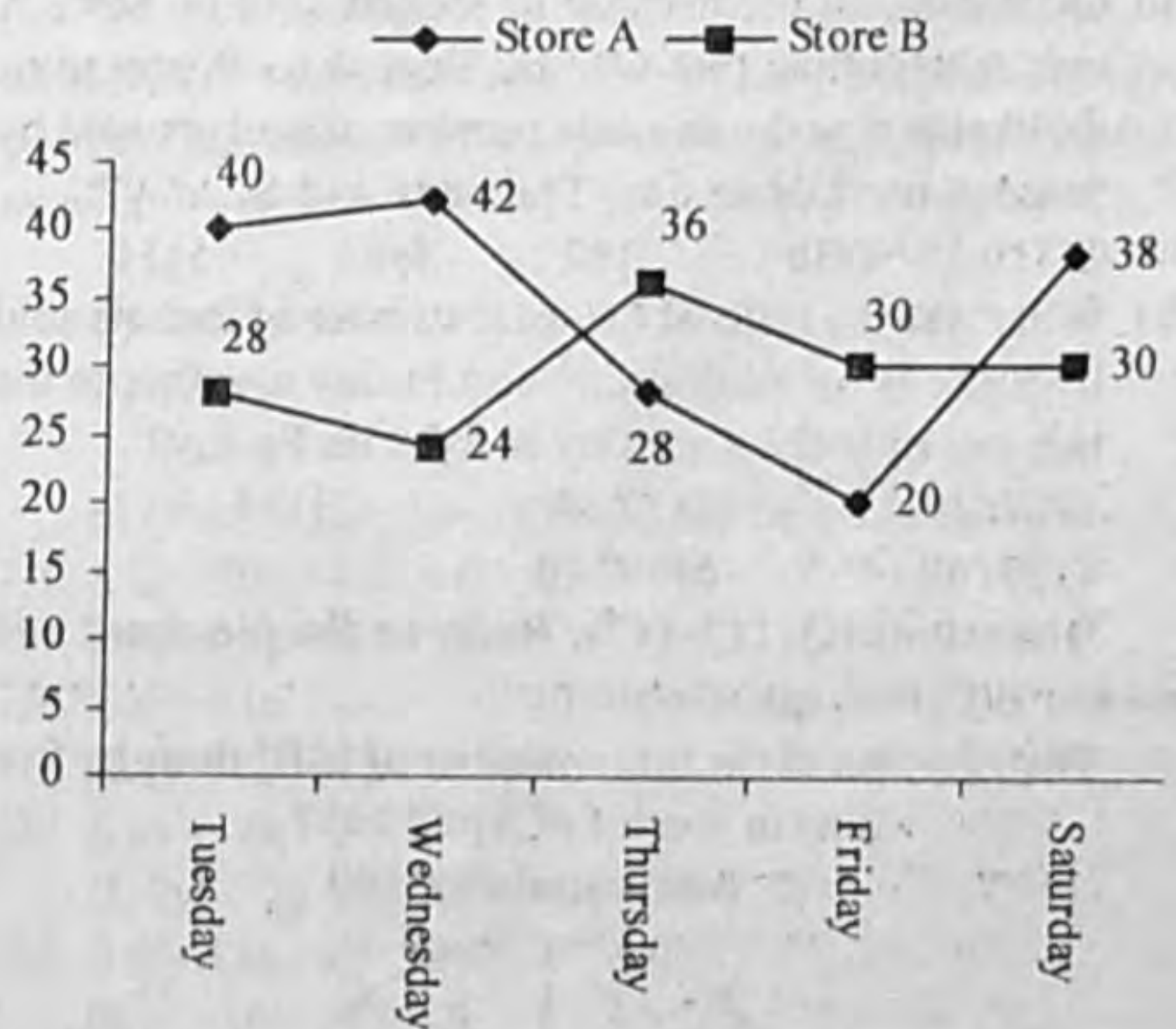
101. What is the average number of books distributed by companies C, D and E among their respective distributors?  
 1) 2720    2) 2940    3) 2700  
 4) 2640    5) 2680
102. Company A prints books either in Hindi or English language. The ratio of Hindi books distributed to English books distributed is 11: 5. What is the number of English books received by each distributor of Company A?  
 1) 40    2) 55    3) 60    4) 45    5) 50
103. 6% of the books printed by Company B had minor printing mistakes. If the ratio of the number of books with minor printing mistakes printed by Company B to

that by Company A is 3 : 7 then what per cent of books printed by Company A had minor printing mistakes?

- 1) 12    2) 6    3) 7    4) 10    5) 8
104. The number of distributors of Company E is what per cent more than that of Company C?  
 1) 45    2) 35    3) 30    4) 40    5) 50
105. What is the difference between the total number of books received by 7 distributors together of Company D and that by 11 distributors together of Company B?  
 1) 330    2) 350    3) 270  
 4) 310    5) 290

Directions (Q. 106-111): Refer to the graph and answer the given questions.

Data regarding number of lockets sold by two stores A and B on 5 different days



106. On Monday, the total number of lockets sold by Store A and Store B together was 6 more than that sold by the same stores together on Saturday and Store A sold 38 lockets. How many lockets did Store B sell on Monday?  
 1) 34    2) 42    3) 38    4) 32    5) 36
107. What was the difference between the total number of lockets sold by Store B on Thursday and Saturday

together and the number of lockets sold by Store A on Saturday?

- 1) 36    2) 18    3) 32    4) 28    5) 38

108. The total number of lockets sold by stores A and B together on Tuesday was what per cent of that sold by the same stores together on Friday?

- 1) 120    2) 136    3) 128

- 4)  $133\frac{1}{3}$     5) 132

109. On Thursday, if the ratio of the number of lockets sold by Store B to that sold by Store C was 6 : 7 then how many lockets were sold by Store C?

- 1) 49    2) 56    3) 35

- 4) 63    5) 42

110. On Sunday, if the number of lockets sold by Store A was 16 less than that sold by Store A on Wednesday, then what was the average number of lockets sold by Store A on Wednesday, Thursday and Sunday?

- 1) 31    2) 30    3) 32    4) 33    5) 34

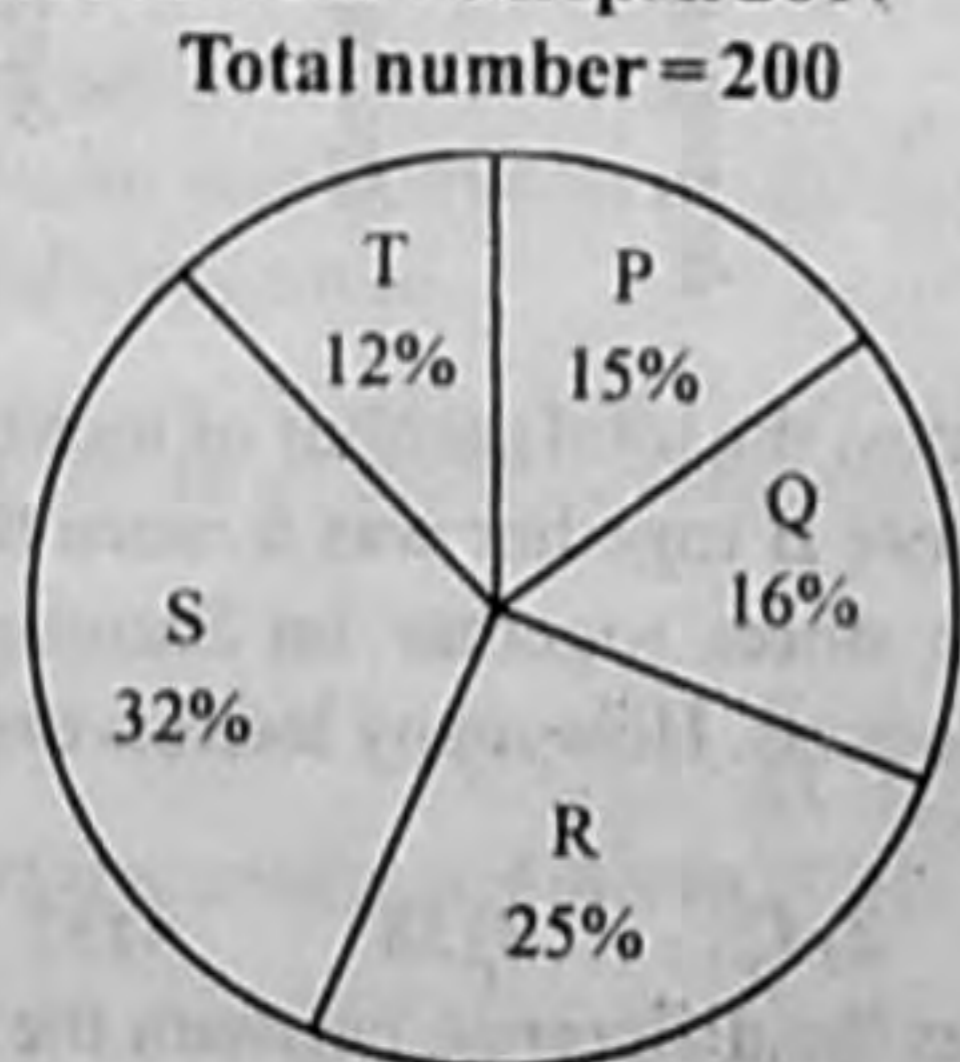
111. What was the ratio of the total number of lockets sold by Store B on Wednesday and Friday together to the number of lockets sold by Store A on Friday?

- 1) 27 : 10    2) 17 : 8    3) 14 : 5

- 4) 19 : 4    5) 19 : 10

**Directions (Q. 112-117):** Refer to the pie chart and answer the given questions.

**Distribution of the total number of MRI done by five labs in week I of April 2017**



112. Out of the total number of MRIs done by Lab R, two-fifths were done for males and out of the total number of MRIs done by Lab S, three-eighths were done for males. What is the ratio of the MRIs done for males by Lab R to that done for males by Lab S?

- 1) 1 : 6    2) 7 : 9    3) 5 : 6

- 4) 4 : 9    5) 5 : 8

113. In Lab T, the ratio of the number of females who came for MRI to that of males who came for MRI was 7 : 5. What was the number of females who came for MRI in Lab T?

- 1) 14    2) 15    3) 21    4) 7    5) 10

114. As compared to week I, in week II the number of MRIs done by Labs P and R decreased by 10% each

respectively. What is the total number of MRIs done by Lab P and R together in Week II?

- 1) 64    2) 76    3) 84    4) 80    5) 72

115. What is the difference between the total number of MRIs done by Lab P and Q together and that done by Lab S and T together?

- 1) 20    2) 26    3) 28    4) 22    5) 24

116. The total number of MRIs done by all the given labs together in week II of April 2017 was 25% more than that in week I of March 2017. What is the total number of MRIs done by all the given labs together in week I of March 2017?

- 1) 150    2) 120    3) 180

- 4) 140    5) Data inadequate

117. What is the central angle corresponding to the number of MRIs done by Lab S?

- 1)  $118.6^\circ$     2)  $115.2^\circ$     3)  $112.8^\circ$

- 4)  $114.9^\circ$     5)  $119.2^\circ$

**Directions (Q. 118-122):** Study the following information carefully and answer the given questions.

Data regarding distribution of a certain number of employees (male + female) in four departments – HR, Marketing, Finance and IT – in 2015. The number of males (in all departments) is 80.

**HR and Marketing:** The ratio of the number of employees (male + female) in HR, Marketing and Finance is 3 : 4 : 5. There are total 21 females in HR and Marketing together, which is 35% of the number of females (in all four departments). The number of females in Marketing is 3 more than that in HR.

**IT:** There are 44 employees (male + female) in this department. 35% of males (in all four departments) are in this department.

118. What is the difference between the number of employees (male + female) in IT and the number of employees (male + female) in HR?

- 1) 16    2) 24    3) 22    4) 18    5) 20

119. If the total monthly salary of employees (male + female) in Marketing is ₹1216000 then what is the average monthly salary of the employees (male + female) in Marketing? (in ₹)

- 1) 34000    2) 32000    3) 38000

- 4) 35000    5) 36000

120. The total number of males in IT and in Marketing together is what per cent more than the number of females in Marketing?

- 1) 250    2) 400    3) 350    4) 300    5) 500

121. In 2016 in Finance, if 3 males joined and 8 females left, then what was the new ratio of the number of males to that of females? (No male left and no new female joined in Finance in 2016.)

- 1) 3 : 1    2) 3 : 2    3) 4 : 3

- 4) 5 : 3    5) 5 : 4

122. The number of employees (male + female) in Finance is what per cent of the total number of employees (male + female) in all four departments?

- 1)  $22\frac{2}{7}$       2)  $25\frac{5}{7}$       3)  $26\frac{6}{7}$   
 4)  $29\frac{1}{7}$       5)  $28\frac{4}{7}$

123. A boat takes T hours less to travel upstream from A to B than the time it takes to travel upstream from B to C. The distance between B and C is 15 km more than the distance between A and B. If the speed of the boat upstream is 15 km/h, then how much distance upstream will the boat cover in 'T + 3' hours? (in km)

- 1) 45      2) 80      3) 60      4) 105      5) 75

**Directions (Q. 124-129):** What approximate value will come in place of the question mark(?) in the given questions? (You are not expected to calculate exact value).

124.  $4.01 \times (18.03 - 11.98) \times 14.86 = ?$

- 1) 350      2) 360      3) 370      4) 340      5) 330

125.  $15.08 \times 18.02 - ? = 14^2$

- 1) 82      2) 58      3) 88      4) 65      5) 74

126.  $179.92 - \sqrt{218.08} - ? = 19.97$

- 1) 129      2) 137      3) 144  
 4) 121      5) 152

127.  $640.93 - ? + 874.95 = 590.92$

- 1) 885      2) 905      3) 915      4) 925      5) 895

128.  $\sqrt{1224} - \sqrt{?} = 16.03 - 8.97$

- 1) 576      2) 676      3) 784      4) 841      5) 900

129. ?% of  $259.96 - 28.02 = 153.96$

- 1) 50      2) 55      3) 80      4) 60      5) 70

130. Every month, Sunaina invests 30% of her monthly income in a gold scheme, and pays 15% as house rent. Out of the remaining monthly incomes, she spends on groceries and paying bills in the ratio of 5 : 6. If the amount spent on groceries in a year is ₹96,000, then what is the amount that she invests in gold scheme every month?

- 1) ₹7,500      2) ₹8,400      3) ₹7,200  
 4) ₹10,800      5) ₹9,600

131. The ratio of the present age of A to B is 4 : 5 and that of the present age of C to D is 7 : 5. The average of the present ages of A, B, C and D is 27 years and D's age 3 years hence will be 14 years less than A's present age. What is B's present age? (in years)

- 1) 30      2) 25      3) 40      4) 50      5) 20

132. In a bag there are 4 red balls, 2 green balls and 3 yellow balls. If two balls are drawn at random, what is the probability that at least one of the balls is green in colour?

- 1)  $\frac{7}{12}$       2)  $\frac{1}{4}$       3)  $\frac{5}{12}$       4)  $\frac{1}{6}$       5)  $\frac{1}{12}$

133. A trader marks up his good such that he can gain 5% profit after giving 20% discount to his customers. One particular customer availed a discount of 10% only. If the profit earned by the trader from this customer is ₹58, then, what is the cost price of the good?

- 1) ₹480      2) ₹400      3) ₹240  
 4) ₹160      5) ₹320

134. The average number of pages typed by a typist on Monday, Tuesday and Wednesday is 39. The average number of pages typed by a typist on Tuesday, Wednesday and Thursday is 26. If the typist typed 36 pages on Thursday, the number of pages typed by him on Thursday is what percent less than that on Monday?

- 1) 48      2) 54      3) 52      4) 44      5) 60

**Directions (Q. 135-140):** In this question two equations numbered I and II are given. You have to solve both the equations and mark the appropriate option. Give answer

- 1) if  $x > y$   
 2) if  $x < y$   
 3) if  $x \leq y$   
 4) if  $x \geq y$   
 5) if  $x = y$  no relationship can't be established.

135. I.  $x^2 - 22x + 117 = 0$

II.  $y^2 + 4y - 96 = 0$

136. I.  $x^2 = 144$

II.  $(y + 12)^2 = 0$

137. I.  $6x^2 - 7x + 2 = 0$

II.  $2y^2 - 5y + 3 = 0$

138. I.  $x^2 - 14x + 48 = 0$

II.  $y^2 - 16y + 63 = 0$

139. I.  $3x^2 - 7x + 2 = 0$

II.  $y^2 - 7y + 10 = 0$

140. I.  $x^2 + 8x + 15 = 0$

II.  $y^2 + 13y + 40 = 0$

**Directions (Q. 141-146):** What will come in place of question mark (?) in the given number series questions?

141. 14    30    66    130    230    ?

- 1) 374      2) 378      3) 382      4) 364      5) 368

142. 65 74 56 92 ? 164  
 1) 25      2) 18      3) 24      4) 20      5) 15
143. 7 14 40 103 ? 442  
 1) 225      2) 235      3) 218      4) 227      5) 221
144. 8 18 57 232 ? 6996  
 1) 1085      2) 1165      3) 1195      4) 1125      5) 1215
145. 7 2.5 1.5 2 7 ?  
 1) 55      2) 21      3) 57      4) 31      5) 65
146. 8 11 18 33 64 ?  
 1) 127      2) 113      3) 123      4) 119      5) 131
147. ₹X was invested in scheme A, which offers simple interest at 10 pcpa for 2 years. The amount received from scheme A was invested into scheme B, which offers compound interest (compounded annually) at 20 pcpa for 2 years. If the amount received from scheme B is ₹5356.80, what is the value of X?  
 1) ₹3100      2) ₹2700      3) ₹2800  
 4) ₹3700      5) ₹3900
148. A solid right circular metal cylinder with radius 12m and height 15m is melted down and all the metal is

used to recast a new solid cylinder with radius 10m. What is the curved surface area of the new cylinder? (in m<sup>2</sup>)

- 1) 442      2) 416      3) 454      4) 448      5) None of these
149. 24 girls work for 4 days on a project and complete one-ninth of it. 30 boys work for the next X days and complete one-third of it. If after 'X + 4' days, 24 girls and 30 boys work together and complete the remaining work in  $6\frac{2}{3}$  days, how many days will 30 boys take to complete the whole work?  
 1) 21      2) 20      3) 18      4) 27      5) 24
150. Vessel A contains X litres of milk and vessel B contains Y litres of water. From vessels A and B, 60% milk and 12% water was taken and mixed in Vessel C. The ratio of the quantity of milk to water in Vessel C was 25 : 4. If X was 20 litres more than Y then what is the quantity of milk in vessel C? (in litres)  
 1) 60      2) 80      3) 90      4) 50      5) 75