IBPS CLERK (PRE) CWE-2020
PREVIOUS YEAR PAPER

WRITTEN EXAMINATION STRUCTURE

Sr. No.	Name of Tests (Objective)	No. of Questions	Maximum Marks	Allotted Time By IBPS
1.	English Language	30	30	20 minutes
2.	Numerical Ability	35	35	20 minutes
3.	Reasoning Ability	35	35	20 minutes
	Total	**100**	**100**	**60** minutes

INSTRUCTIONS

(1) All the sections are available in English only, and the time suggested above for each test is not for guidance, you have to follow the above mentioned time.

(2) Do not use calculators, or any electronic medium for calculations. You may take a clean sheet of paper for rough work and all calculations must be performed manually by the candidate.

(3) There will be penalty for wrong answer marked by you in the objective tests. There are five alternatives in every question of a test.

(4) For each question for which a wrong answer has been given by you, 1/4 or 0.25 of the marks assigned to that question will be deducted as penalty. If a question is left blank, i.e. no answer is given by you, there will be no penalty for that question.

(5) There will be a cut off for each section and an overall cut off as well. Hence, your aim should be to answer maximum number of attempts in all three sections.

TEST-I: ENGLISH LANGUAGE

Direction (Qs.1- 5): In the following passage, some of the words have been left out and replaced by a blank represented by a letter. Read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

In many countries, non-prescription items like aspirin and eye drops sit behind the counter alongside antibiotics. Regulations **...(A)...** prices, operating hours and even the number of pharmacies. Oversight bodies in some countries trace their roots to medieval guilds. Belgian entrepreneur Yuvan Verougstraete saw in that a business ripe for **...(B)...** Mr. Verougstraete is the founder of Medi-Market Group which has sparked lawsuits and complaints from traditional Belgian pharmacies since its first drugstore opened in 2014. It now has more than 25 locations and has shaken the staid sector by **...(C)...** prices of non-prescription products up to 30%, advertising them and hawking them on open shelves. The Belgian Pharmacists Association has accused Medi-Market of **...(D)...** Profits over customer care, and the country's Order of Pharmacists, an oversight body run by industry officials, has ruled against Medi-Market's commercial practices. But in a twist that portends change, Belgian courts and the country's competition authority have repeatedly **...(E)...** with Medi-Market against traditional pharmacists.

1. Which word/phrase should come at (A)?
(1) Violates   (2) Protective   (3) Govern   (4) Decides   (5) None of the above

2. Which word/phrase should come at (B)?
(1) Stop   (2) upending   (3) Experienced   (4) Favourable   (5) None of the above

3. Which word/phrase should come at (C)?
(1) Share   (2) Spend   (3) Latest   (4) Slashing   (5) None of the above

4. Which word/phrase should come at (D)?
(1) Suspend   (2) Prioritize   (3) Boast   (4) Prioritizing   (5) None of the above

5. Which word/phrase should come at (E)?
(1) Ignored   (2) Sided   (3) Repeated   (4) Happy   (5) None of the above

Direction (Qs.6-10): In each of the questions below, four sentences are given which may or may not contain an error. Choose the one that is grammatically correct and meaningful. If all the sentences are correct, choose 'All are correct' as your answer.

6.
(1) Widening the tax base and collecting more taxes is always been a priority for the government at the centre
(2) The Economic Survey released upon the finance ministry earlier this year had lauded GST for widening the indirect tax base
(3) Prior to the GST rollout, the center's indirect taxes mainly consists of customs duties, excise duties and service tax, almost in equal proportion
(4) The rate of increase in direct tax collections post demonetisation has not been entirely unprecedented
(5) All are correct

7. (1) The good news is that the death of the internal combustion engine is nearing and electric-vehicle sales are on a tear

(2) Countries that together account for more than 10% of global auto sales have detail plans to phase out conventional gasoline-powered cars

(3) These days, electric cars can drive farther and be changed faster then before

(4) Automakers are beginning to churn out at least one electrically variant of their popular models, with more than 100 battery-powered models to be available by next year

(5) All are correct

8. (1) Listening to music has been found to improve our cognition abilities

(2) Now, using electroencephalography (EEG) studies, researchers from Indian Institute to Technology (IIT) Kanpur have deciphered different mechanisms and alternations in the neural networks that lead to enhanced cognitive effects

(3) Special analyses at the brain found increased power in the occipital and prefrontal cortex

(4) Spatial mapping showed that there was a reduction information flow predominantly between the frontal and parietal cortex

(5) All are correct

9. (1) An artificial intelligence (AI) programme used to recognize faces on Facebook can also identify galaxies on deep space, scientists said on Wednesday

(2) Its job is to spotted radio galaxies – galaxies that emit powerful radio jets from supermassive black holes at their centres

(3) Traditional computer algorithms are also to correctly identify 90 percent of the radiation sources

(4) A highly accurate catalogued produced by Radio Galaxy Zoo volunteers was used to train the software on how to spot where the jets originate

(5) All are correct

10. (1) After a long gap, a flock of five Greater flamingoes has been spotted on the Coast of Hope Island, a part of the Coringa Wildlife Sanctuary

(2) The long-leg and long-necked birds were last seen in a group about two and a half decades ago

(3) Spread of 235 sq. km, The sanctuary is an abode for about 35 species of mangrove plants and another 120 species of rare birds

(4) 236 species of migratory birds are spotted on an around the sanctuary with over 60,000 water birds visiting the sanctuary every year

(5) All are correct

Direction (Qs.11-15): In each of the following questions, some parts of the sentence have been highlighted. You need to identify which of the given pair of options can both grammatically and contextually replace the highlighted part. In case the highlighted part is correct, choose option (5) as your answer.

11. There are two primary mental shifts **that occur in** the lives of all highly successful people.
(1) That occurs in   (2) That occurred in   (3) That happens in
(3) That happened in   (5) No correction required

12. As part of the "strategic collaboration", the three companies will work on developing unique fleet and mobility solutions, **besides built** India-specific electric vehicles and infrastructure.
(1) Building besides   (2) Be sides building   (3) Besides building
(4) Besides buildings   (5) No correction required

13. This level of investment provides a **window of opportunity** to ensure that all new infrastructure is made resilient to withstand future shocks, including those brought by a changing climate.
    (1) Opportunity of window
    (2) Windows of opportunity
    (3) Opportunity in window
    (4) Windowed opportunity
    (5) No correction required

14. The National Aviators Guild, **which came into be** almost a decade ago, represents around 1,000 domestic pilots of the major airlines.
    (1) Who came into being
    (2) Which came into being
    (3) Which come into being
    (4) When come into being
    (5) No correction required

15. Education transformation programmes by States run the risk of falling flat, as they are often unaccompanied by a single transformation change road map that all key actors **agree upon and work towards**
    (1) Agreed upon and worked towards
    (2) Agreeing upon and working and towards
    (3) Agrees upon and works towards
    (4) Agreed into and worked for
    (5) No correction required

Direction (Qn.16): In the given sentences, a blank is given indicating that something is missing. From the given four options, choose the one that provides the correct word to be filled in the blank, thereby making the sentence grammatically and contextually correct. In case none of the options fit, choose "none of the above" as the answer.

16. London's attractiveness as a financial hub owes less to its ____ climate than to its position as a gateway to the rest of Europe.
    (1) information (2) utilise   (3) perfectly   (4) soggy   (5) None of the above

Direction (Qs.17-21): Read the following passage carefully and answer the questions that follows.

Long ago in a town, there lived an old man who had three daughters. All the daughters were very beautiful, and many men were desirous of having them as their wife. Many of them waited outside the house of the old man. If any of them managed to catch a glimpse of any of the daughters, it made their day. Now, the eldest daughter had an admirer. One day, the old man saw this young man standing for long outside his home. He immediately understood that the youth was waiting there to look at one of his daughters. He went out and treated the youth very harshly, saying many bad words to him.

When the young man said that he wanted to marry his eldest daughter, he became very angry on him and chased him away without hearing to any of his entreaties. He also sent his daughter away to a distant place. This in turn made the young man angry, and he became determined to have revenge upon the old man. That night, when everyone in the town went to sleep, the young man crept out from his home taking a strong rope alone with him. He walked hurriedly until he reached the house of the three daughters.

He fastened one end of his rope to one of the upright posts at the corner of the house and taking the other end in his hand hid behind a tree. Then he started to pull the rope violently, pausing at times and again pulling it with all his might. The house began to shake furiously, and its residents woke up in great fear. "Oh!" said one of the girls, "there is an earthquake". The old man jumped up and, clasping his crucifix tightly, began to recite the prayers against earthquakes. But the trembling showed no signs of easing. For more than an hour the house shook like a dry leaf, while the old man continued to pray to all the saints in the calendar. Then the earthquake stopped suddenly.

As the old man and his daughters began to relax a little, they heard a powerful voice calling him by him name and asking him to come outside. The old man was **determined** to go and find out for they feared he would fall down and die in such a terrible earthquake. But the man would have none of it. "You wait here. Do not fear". assured the father, "I will soon be back after I see for myself who it is that dares call me out at this hour." He took his saw in one hand, carried his axe in another and stepped out of his home only to find everything quiet outside.

"It does not seem to be earthquake. The ground is intact, and the house has not suffered any cracks. What was the cause of this disturbance then?" thought the old man. As he moved further to explore the surroundings of the house, he tripped over the rope and fell down. At once a volley of abuses went out from his mouth. "Many thousand thunders scorch the son of the demon who has shaken my house, frightened my family and broken my bones" he roared. and many a curse did he utter while the young man who caused all this ran back to his home, unseen, laughing to himself that he had his revenge on his abuser.

17. Which of the following is true as per the passage?
    (I) When the earthquake happened, the old man started reciting his prayers against it.
    (II) The young man was able to shake the house as he was very powerful.
    (III)The old man was not afraid when a powerful voice asked him to come out of his house.
    (1) Both (I) & (II)   (2) Both (I) & (III)   (3) Only (II)
    (4) Both (II) & (III)   (5) All of the above

18. What happened when the old man saw the young man standing for long outside his home?
    (I) The old man abused the young man
    (II) The old man chased away the young man
    (III) The old man sent his youngest daughter away to a distant place
    (1) Both (I) & (II)   (2) Both (II) & (III)   (3) Both (I) & (III)
    (4) Only (I)   (5) All of the above

19. Why didn't the daughters want the old man to go outside?
    (1) Because he was very angry and might hurt someone
    (2) Because he was very weak to put up a fight
    (3) Because they feared that he would fall down and die in the earthquake
    (4) Because he was not well
    (5) Not specified in the passage

20. Which of the following made the old man believe there was no earthquake?
    (I) No trees were uprooted
    (II) The ground is intact
    (III) The house did not suffer any cracks
    (1) Only (I)   (2) Only (II)   (3) Only (III)
    (4) Both (II) & (III)   (5) All of the above

21. Which of the following will be the **antonym** of "**determined**", as per the passage?
    (1) Absolute   (2) Doubtful   (3) Decisive   (4) Firm   (5) Resolute

Direction (Qs.22-25): In the given sentences, a blank is given indicating that something is missing. From the given four options, choose the one that provides the correct word to be filled in the blank, thereby making the sentence grammatically and contextually correct. In case none of the options fit, choose option (5) i.e., "None of the above" as the answer.

22. India is a 'mobile first' market far more than any other _____ in terms of accessing news.
    (1) automatically   (2) placed   (3) region
    (4) emotions   (5) None of the above

23. Bad trading decisions caused the average U.S. investor to lose _____ twice as much as the S & P 500's decline in 2018.
    (1) general   (2) roughly   (3) exact   (4) angry   (5) None of the above

24. The Earth has _____ many changes in its 4-5 billion-year history, with some tumultuous twists and turns along the way.
    (1) endured   (2) suffer   (3) suffering   (4) protected   (5) None of the above

25. Scientists think that ice _____ the entire planet, from the poles to the equator 700 million years ago.
    (1) smothered   (2) covers   (3) covering   (4) remain   (5) None of the above

Direction (Qs.26-30): In each of the question given below, a sentence is given which is divided into four parts, (A), (B), (C) and (D). Rearrange the four parts to make a coherent sentence to make the sentence meaningful and grammatically correct then choose option (5) – No rearrangement required.

26. Not only is PAN mandatory for filling (A)/ income tax returns but also it is mandatory for (B) /applying for an Aadhar card, which means that (C)/going ahead, all new PAN cards issued will automatically be lined to Aadhaar (D).
    (1) DCAB   (2) BCDA   (3) ACBD
    (4) ACDB   (5) No rearrangement required

27. It's going to need a map that's far more accurate (A)/ Google Maps might be detailed enough to (B)/ help you find a new restaurant, but if you want (C)/ your car to autonomously drive you to dinner, (D)
    (1) DACB   (2) BADC   (3) BCDA
    (4) CADB   (5) No rearrangement required

28. dragging economic growth with it (A)/ could worsen in the interim, further (B)/ with the Lok Sabha elections drawing (C)/ close, consumption spending and investment (D)
    (1) BADC   (2) DCBA   (3) CADB
    (4) CDBA   (5) No rearrangement required

29. each year indicates that the number of (A) /the trend of the addition of five to six lakh vehicles (B)/ will cross one crore in about three years (C)/ vehicles with the Bengaluru metropolitan area (D)
    (1) DCBA   (2) BADC   (3) CABD
    (4) DABC   (5) No rearrangement required

30. launched a scheme called UDAN and said his dream (A)/ also flew on the 'hawl jahaz' or airplane (B)/ Prime Minister Narendra Modi had recently (C)/ was to see a person who wore a 'hawai chappa" (D)
    (1) DABC   (2) ADCB   (3) BDCA
    (4) CADB   (5) No rearrangement required

TEST-II: NUMERICAL ABILITY

31. A container contains 10 litres of water. 4 litres are removed from the container, and replaced with acid. 4 litres are then removed from the solution of acid and water and replaced with acid again. What is the percentage of acid in the container now?
(1) 28%   (2) 36%   (3) 44%   (4) 56%   (5) None of these

Direction (Qs.32 to 36): The following bar graph represents number of employees working in two different departments of an organisation in five years.
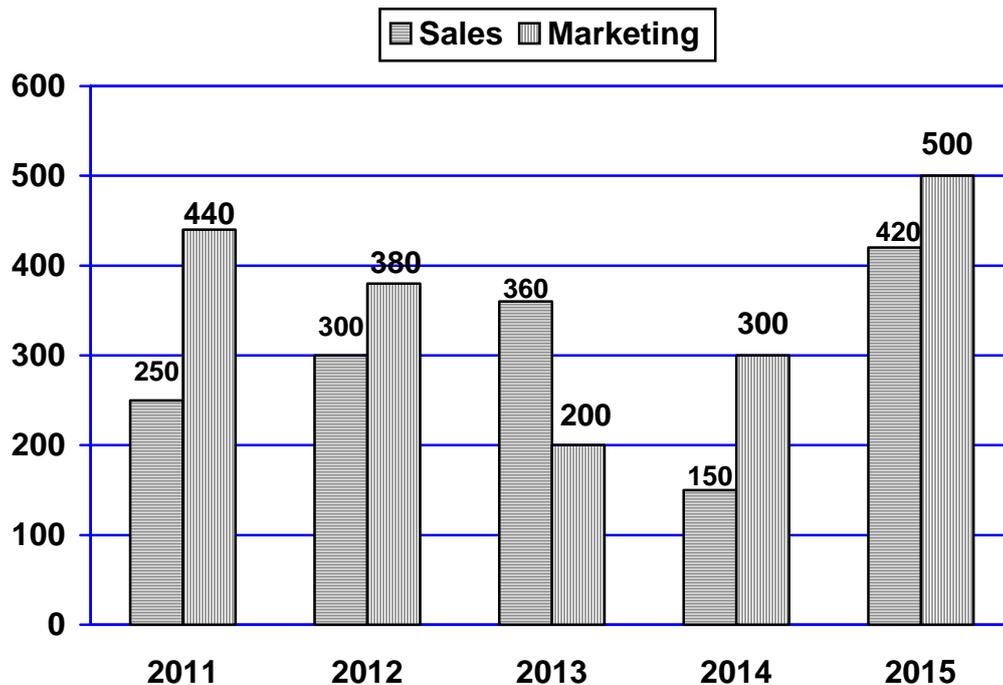
■ Sales ■ Marketing

32. Find the respective ratio of number of employees working in Sales department in 2011 and number of employees working in Marketing department in 2013.
(1) 2 : 1   (2) 4 : 3   (3) 3 : 2   (4) 5 : 4   (5) None of these

33. Number of employees working in Sales department in 2013 is what percent of number of employees working in Marketing department in 2015.
(1) 72%   (2) 64%   (3) 58%   (4) 60%   (5) None of these

34. Find the number of employees working in both the departments in 2012.
(1) 720   (2) 620   (3) 560   (4) 680   (5) None of these

35. Find the difference between number of employees working in Marketing department in 2011 and number of employees working in sales department in 2015
(1) 30   (2) 40   (3) 20   (4) 50   (5) None of these

36. Find the respective ratio of number of employees working in Sales and Marketing department in 2014.
(1) 4 : 3   (2) 1 : 2   (3) 2 : 1   (4) 3 : 4   (5) None of these

Direction (Qs.37-41): This question contains two quantities I and II. Go through both quantities and choose the appropriate option as your answer.

37. **Quantity I:** What is the perimeter of a square field having an area of $576\,\text{m}^2$?

    Quantity II: What is the perimeter of a rectangle field having an area of $500\,\text{m}^2$?
    (1) Quantity I > Quantity II
    (2) Quantity I < Quantity II
    (3) Quantity I ≥ Quantity II
    (4) Quantity I ≤ Quantity II
    (5) Quantity I = Quantity II or the relationship cannot be determined

38. **Quantity I:** Simple interest on Rs.1250 at 8% per annum for 3 years
    Quantity II: Compound interest on Rs.1200 at 10% per annum for 2 years
    (1) Quantity I > Quantity II
    (2) Quantity I ≥ Quantity II
    (3) Quantity I < Quantity II
    (4) Quantity I ≤ Quantity II
    (5) Quantity I = Quantity II or the relationship cannot be determined

39. **Quantity I:** What is the normal time taken by Rashmi (in minutes) to reach her destination if it is known that when she reduces her speed by $\frac{2}{5}$ th then she reaches her destination 24 minutes late?
    Quantity II: 15
    (1) Quantity I > Quantity II
    (2) Quantity I < Quantity II
    (3) Quantity I ≥ Quantity II
    (4) Quantity I ≤ Quantity II
    (5) Quantity I = Quantity II or the relationship cannot be determined

40. Ratio of present ages of father and mother is 8 : 7
    Quantity I: Difference between their present ages if after 5 years, the ratio of their ages is 9 : 8
    Quantity II: Difference between their present ages if after 2 years, the ratio of their ages is 25 : 22
    (1) Quantity I > Quantity II
    (2) Quantity I < Quantity II
    (3) Quantity I ≥ Quantity II
    (4) Quantity I ≤ Quantity II
    (5) Quantity I = Quantity II or a relation can't be established

41. **Quantity I:** 16.4 hours
    Quantity II: One – third of a water tank can be filled by pipe A is 12 hours. If the efficiency of pipe B is 25% more than that of pipe A, how much time will B take to fill half of the tank?
    (1) Quantity I > Quantity II
    (2) Quantity I < Quantity II
    (3) Quantity I ≥ Quantity II
    (4) Quantity I ≤ Quantity II
    (5) Quantity I = Quantity II or relationship can't be established

42. If the length and breadth of a rectangle are increased by 12 cm and 8 cm respectively, the perimeter is increased by 40 cm. What was the area of the rectangle initially?
(1) 120 sq. cm   (2) 300 sq. cm   (3) 200 sq. cm   (4) 225 sq. cm   (5) Can't say

Direction (Qs.43-47): Find the wrong term in the series given below.

43. 75 80 95 117 155 200
(1) 155   (2) 117   (3) 75   (4) 95   (5) 80

44. 25 76 229 688 2067 6196
(1) 76   (2) 25   (3) 688   (4) 2067   (5) 229

45. 775 750 703 620 499 330
(1) 775   (2) 620   (3) 703   (4) 499   (5) 750

46. 98 50 26 16 8 5
(1) 26   (2) 8   (3) 50   (4) 98   (5) 16

47. 231 330 447 584 735
(1) 735   (2) 231   (3) 584   (4) 447   (5) 330

48. Ratio of age of A to that of B before 2 years from present was 5 : 7 while the ratio of age of A to that of B after 4 years from present will be 3 : 4, then what is the ratio of present age of A to that of B?
(1) 4 : 7   (2) 8 : 9   (3) 4 : 5   (4) 8 : 11   (5) None of these

49. Ratio of income of A to B is 5 : 8 and ratio of their expenditure is 2 : 3 respectively. If savings of persons B is Rs.3000 more than that of A and out of his total income, B spends 75% of it, then what is the total savings of person A and B together?
(1) Rs.8000   (2) Rs.6000   (3) Rs.9000   (4) Rs.12000   (5) None of these

50. A received Rs.600 as profit from the total profit of Rs.1250 which he and B earned at the end of the one year of the business. If A started the business with an initial investment of Rs.7200 and B joined him after 2 months, then what is the investment of B?
(1) Rs.9360   (2) Rs.7820   (3) Rs.8400   (4) Rs.8260   (5) Rs.9550

51. A fruit seller had some oranges and apples. He sold 20% oranges to A, 40% of remaining to B and had 48 oranges left. Similarly, he sold 40% apples to A, 100 apples to B and had 10% apples left. Find the total number of apples and oranges that the shopkeeper had initially.
(1) 200   (2) 250   (3) 300   (4) 350   (5) 400

52. The selling price of 8 articles is equal to the cost price of 10 articles. What is the percentage profit in selling the articles?
(1) 15%   (2) 12%   (3) 20%   (4) 25%   (5) 28%

53. A sum of Rs.2900 amounts to Rs.3422 in 3 years at simple interest. If the interest rates were increased by 3% value what would it amount to in the same period?
(1) Rs.4465   (2) Rs.3683   (3) Rs.3596   (4) Rs.3096   (5) Can't say

Direction (Qs.54-63): What **approximate** value will come in place of question mark (?) in the following questions? (You are not expected to calculate the exact value.)

54. $\dfrac{63.99}{188.02} \times \dfrac{46.98}{384.05} \times ? = 17.98$

(1) 383   (2) 488   (3) 425   (4) 467   (5) 432

55. $14.98 \times 8.04 + 21.07 \times 30.05 = ?$

(1) 675   (2) 900   (3) 600   (4) 780   (5) 750

56. $1653.04 \div 57.01 \times 39.93 = ? + 19.98$

(1) 1185   (2) 1260   (3) 1140   (4) 1050   (5) 1035

57. $18.95 \times \sqrt{224.95} = ? \times \sqrt{25.03}$

(1) 63   (2) 69   (3) 57   (4) 42   (5) 60

58. $23.03^2 + 33.95^2 + 29.96^2 = ?$

(1) 2785   (2) 2585   (3) 2765   (4) 2725   (5) 2565

59. $\sqrt[3]{4913.87} - \sqrt[3]{5833.32} - \sqrt[3]{124.3} = ?$

(1) -13   (2) 1   (3) -34   (4) -41   (5) -6

60. $27.96 \times 31.96 - 21.02 = ? \times 35.07$

(1) 25   (2) 21   (3) 31   (4) 8   (5) 33

61. $(35.06)^2 - 25.07 = ? \times 29.95$

(1) -50   (2) 175   (3) -5   (4) -80   (5) 40

62. $(?)^2 + 6.97^3 = 37.07^2 - 2.07$

(1) 24   (2) 32   (3) 52   (4) 48   (5) 44

63. 49.93% of $2679.91 + \sqrt{256.09} = 454.02 + ?$

(1) 909   (2) 951   (3) 888   (4) 902   (5) 930

64. Jatin and Josh started simultaneously towards each other with speeds in the ratio 3 : 4. If the initial separation between the two is 4.2 km and they meet in 3 minutes, what is the difference between their speeds?

(1) 8 km/hr   (2) 10 km/hr   (3) 12 km/hr   (4) 15 km/hr   (5) 18 km/hr

65. A tank is normally filled in 10 hours but due to leak at bottom it takes 2 hours more. If the tank is full, the leak will empty it in

(1) 45 hours   (2) 50 hours   (3) 55 hours   (4) 60 hours   (5) 65 hours

TEST-III: REASONING ABILITY

Direction (Qs.66-70): Study the following information carefully and answer the below questions.

Eight persons A, B, C, D, E, F, G, and H are seated around a square table such that 4 of them are seated at the corners and four are seated on the sides. The persons on the corner seat are facing outside the centre and the persons on the sides are facing the centre.

- C is 2nd to the left of D who is to the immediate left of F.
- F is seated opposite to A's neighbour who is seated 2nd to the left of H.
- E is 2nd to the left of B.
- G faces outside the centre and is not a neighbour of H.

66. If A is related to C and H is related to E than to who among the following is D related to?
    (1) B   (2) F   (3) G   (4) A   (5) H

67. Four of the following bear a similar relationship and hence form a group, who among the following is not a part of that group?
    (1) H   (2) E   (3) F   (4) C   (5) B

68. Who is seated opposite to the person who is third to the left of A?
    (1) B   (2) C   (3) D   (4) F   (5) H

69. What is the position of D with respect to B?
    (1) Opposite   (2) Immediate left   (3) Immediate right
    (4) Second to the right   (5) Third to the right

70. Who are the immediate neighbours of A?
    (1) B, C   (2) C, H   (3) H, D   (4) H, B   (5) B, E

Direction (Qs.71-75): Study the following information carefully and answer the below questions.

A student attended classes of different subjects on different days of a week starting from Monday onwards. Six subjects were taught on six different days of the week and one day was an off day i.e., no subject was taught on that day. The subjects were Computer, Physics, Geography, English, Mathematics and Biology not necessarily in the same order.

- Three subjects were taught between Physics and Geography. Physics was taught before Geography
- Geography was taught immediately after the off-day
- English was taught immediately after Computer
- Biology was taught on Friday or Saturday

71. Which of the following was the off-day?
    (1) Wednesday (2) Thursday   (3) Friday   (4) Saturday   (5) Can't say

72. How many subjects were taught between computer and biology?
    (1) None   (2) 1   (3) 2   (4) 3   (5) Can't say

73. On which of the following days was computer taught?
    (1) Monday   (2) Tuesday   (3) Wednesday (4) Thursday   (5) Saturday

74. When was Mathematics taught?
(1) Sunday (2) Monday (3) Tuesday (4) Wednesday (5) Thursday

75. Which subject was taught immediately after Mathematics?
(1) Off-day (2) Biology (3) Computer (4) Physics (5) Can't say

76. R is the husband of M. B is mother of R. S is husband of B. G is mother-in-law of B. K is father of S. How is K related to R?
(1) Father (2) Grandson (3) Grandfather (4) Brother (5) Brother-in-law

Direction (Qs.77-81): Study the given codes and answer the questions that follow:

In a certain code language,
'summer winter autumn seasons' is coded as '12 31 15 23'
'green summer chilly winds' is coded as '17 23 46 11'
'winds blow green seasons' is coded as '35 46 17 15'
'winter winds chilly seasons' is coded as '46 15 31 11'

77. What will be the difference between the codes of 'winds' and 'summer'?
(1) 23 (2) 6 (3) 15 (4) 14 (5) Can't say

78. Which of the following will be the code for 'green winter'?
(1) 31 46 (2) 15 46 (3) 31 17 (4) 17 46 (5) Can't say

79. Which of the following word's code has the 2nd highest numerical value?
(1) Winds (2) Blow (3) Green (4) Seasons (5) None of the above

80. Which of the following words have codes numerical value greater than that of the code for 'summer'?
(I) Winter (II) Green (III) Winds
(1) Only (I) (2) Only (II) (3) Only (III)
(4) Both (I) and (III) (5) Both (II) and (III)

81. Which of the following can be the code for 'cold winter seasons'?
(1) 31 15 23 (2) 15 23 35 (3) 31 16 15 (4) 31 16 23 (5) 15 35 31

Direction (Qs.82-84): In each of the questions 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 both the statements and choose the correct option.

82. Who is to the immediate left of T among five persons P, Q, R, S and T facing south?
Statements:
(I) S does not have anyone to his left side
(II) R is to the immediate right of T, who is second to the right of P
(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 given in both statements 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

83. On which day of the month is Divya's birthday?
    Statements:
    (I) Divya's brother correctly remembers that Divya's birthday is after 15th but before 20th of the month
    (II) Divya's sister correctly remembers that Divya's birthday is after 18th but before 24th of the month
    (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 in statement I alone or in statement II alone are sufficient to answer the question
    (4) If the data in both the statements I and II are not sufficient to answer the question
    (5) If the data in both the statements I and II together are necessary to answer the question

84. Who among A, B, C, D and E scored the second highest?
    Statements:
    (I) B and C scored less than D
    (II) A scored more than E, who scored more than D
    (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 in statement I along or II alone are not sufficient to answer the question.
    (4) If the data in both the statements I and II together are not sufficient to answer the question.
    (5) If the data in both the statements I and II together are necessary to answer the question.

Direction (Qs.85 & 86): In the following question assuming the given statements to be true, find which of the conclusions among the given conclusions is/are definitely true and then give your answers accordingly.

Give answer (1): If only conclusion I is true
Give answer (2): If only conclusion II is true
Give answer (3): If either conclusion I or II is true
Give answer (4): If neither conclusion I nor II is true
Give answer (5): If both conclusions I and II are true

85. **Statements:** $F \geq E, B \geq A, C = B, E \geq D, D \geq C$
    Conclusions: I. $F \geq A$ II. $E \geq B$

86. **Statements:** $Z < Y \leq X; P > Y \leq B; Y \geq N$
    Conclusions: I. $B \geq N$ II. $P > N$

Direction (Qs.87-91): There are five 4-letter words as given below. Answer the following questions based on these words:

BEEN THIO KILO VOUS KUSH

87. If the letters of the word are arranged in alphabetical order from left to right and words thus formed are arranged as they appear in the English dictionary then, which of the following word will be placed fourth from left?
    (1) VOUS   (2) BEEN   (3) THIO   (4) KUSH   (5) KILO

88. If TAX = 45 and DOG = 26 then, value of which of the following word is the first smallest?
    (1) THIO   (2) KUSH   (3) BEEN   (4) KILO   (5) VOUS

89. If in each of the given words, each vowel is changed to the next alphabet and each consonant is changed to the previous alphabet then, in how many words have no vowel appears after the rearrangement?
    (1) Three   (2) Two   (3) None   (4) One   (5) Four

90. If in each of the given words, each consonant is changed to the next alphabet and each vowel is changed to the previous alphabet then, in how many newly formed words having two or more same letters?
    (1) Three   (2) Two   (3) One   (4) None   (5) Five

91. If all the words are written together (left to right) without any spaces, thus formed series of letters are arranged in reverse alphabetical order from left to right then, how many letters remains at same position after rearrangement?
    (1) 6   (2) 2   (3) 4   (4) 1   (5) 3

92. How many such pair of digits are there in the number 2794362, which have as many digits between them in the number as they have in the number system in both backward and forward Direction?
    (1) 9   (2) 8   (3) 5   (4) 6   (5) 4

Direction (Qs.93-97): Study the following information carefully and answer the below questions.

Ten persons A, B, C, D, E, F, G, H, I and J were seated in two rows such that five of them were in row 1 facing South and the other five were in row 2 seated facing North. Persons seated in the two rows were facing each other.
- J was 3rd to the right of A who was seated facing South
- G was seated neighbouring the one who was seated opposite to A
- G and H were seated at a gap of 1
- E was third to the right of C who faced F
- F was seated neighbouring D
- B was seated at one of the extreme ends

93. Four of the following bear a similar relationship and hence form a group, who among the following is not a part of that group?
    (1) A   (2) B   (3) H   (4) J   (5) E

94. _____ was seated _____ to the left of I?
    (1) C, 3rd   (2) F, 2nd   (3) B, immediate
    (4) H, 3rd   (5) H, Immediate

95. Who among the following was/were seated facing North?
    (I) C (II) I (III) B
    (1) Only I   (2) Only II   (3) Both I and III (4) Both I and II (5) Only III

96. Who among the following were in the immediate neighbours of G?
    (1) H, I   (2) B, H   (3) C, E   (4) J, F   (5) C, I

97. Who among the following was seated facing A?
    (1) I   (2) B   (3) D   (4) E   (5) Can't say

Direction (Qs.98-100): Study the following information carefully and answer the below questions.

In an international conference, more than 10 persons were seated around a circular table facing the centre.
- R was 2nd to the right of P who was 2nd to the right of T
- T was at a gap of 1 from Q
- Q and S were seated at a gap of 3 persons
- U was 2nd to the left of S
- Only 4 persons were seated between P and U

98. How many persons were seated around the table?
      (1) Twelve   (2) Thirteen   (3) Fourteen   (4) Fifteen   (5) Sixteen

99. How many persons were there between U and T when counted from the left of T?
      (1) Five   (2) Six   (3) Seven   (4) Eight   (5) Nine

100. What was the position of R with respect to U when counted from the left of U?
      (1) Immediate left   (2) Second to the left   (3) Third to the left
      (4) Fourth to the left   (5) Fifth to the left

- - × - -
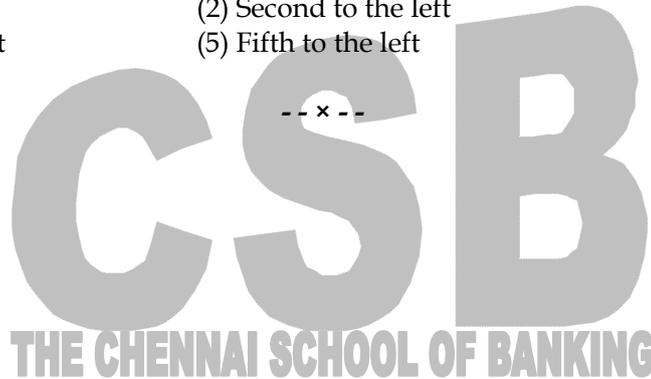
ANSWERS

1. <u>**Ans (3): Govern**</u>
A plural verb is needed in the blank to be in agreement with the plural subject 'regulations'. 'Violates' and 'decides' are singular verbs; hence option (1) and (4) are eliminated. 'Protective' is an adjective; hence option (2) is eliminated. 'Govern' means to control, influence, or regulate; option (3) is the correct answer.

2. <u>**Ans (2): upending**</u>
'Upend' means to set or turn (something) on its end or upside down: to change completely, and fits both grammatically and contextually in the context.

3. <u>**Ans (4): Slashing**</u>
A gerund is needed here in the blank. A gerund is an instance when a verb is being used as a noun. When a verb is used after a preposition, it must always be used as a gerund, and not in any other form. 'Share' is a noun as well as a verb in its base form and 'latest' is an adjective; hence option (1) and (3) are eliminated. 'Spend' is a verb in its base form; hence option (2) is eliminated.

4. <u>**Ans (4): Prioritizing**</u>
A gerund is needed here in the blank. A gerund is an instance when a verb is being used as a noun. When a verb is used after a preposition, it must always be used as a gerund, and not in any other form. 'Suspend', 'prioritize' and 'boast' are verbs in their base form; hence option (1), (2) and (3) eliminated.

5. <u>**Ans (2): Sided**</u>
A verb in the past participle form is needed as the sentence is in the present perfect tense and the structure of the present perfect tense is **have/has + the past participle**. "Happy" is an adjective, hence option (4) is eliminated. 'Ignored' and 'repeated' will be contextually incorrect in the blank. 'Ignored' and 'with' do not make any sense together. 'Side' as a verb means to support or oppose in a conflict, dispute, or debate; to take a side.

6. <u>**Ans (4): The rate of increase in direct tax collections post demonetisation has not been entirely unprecedented**</u>
(1) is incorrect as 'has' should have been used in place of 'is', due to the use of 'been'. (2) is incorrect as 'by' should have been used in place of 'upon' to connect the two noun phrases 'the Economic Survey' and 'Finance Ministry'. (3) is incorrect as the present tense form 'consists' is wrong. 'Consisted', i.e., the past tense form is to be used here because the sentence refers to a time in the past ('prior to the GST rollout'). (4) is grammatically correct and meaningful.

7. <u>**Ans (1): The good news is that the death of the internal combustion engine is nearing and electric-vehicle sales are on a tear**</u>
(1) is grammatically correct and meaningful. (2) is incorrect as we need an adjective and not a noun (detail) before 'plans'. So, it should have been 'detailed'. Option (3) is incorrect as the preposition 'than' needs to be used in place of the adverb 'then', as a comparison is being done here. Option (4) is incorrect as the adjective 'electrical' should replace the adverb 'electrically', to modify the noun 'variant' that follows.

8. <u>**Ans (2): Now, using electroencephalography (EEG) studies, researchers from Indian Institute to Technology (IIT) Kanpur have deciphered different mechanisms and alternations in the neural networks that lead to enhanced cognitive effects**</u>
(1) is incorrect as the adjective 'cognitive' should replace the noun 'cognition' to modify the noun 'abilities' that follows. (2) is grammatically correct and meaningful. Option (3) is incorrect as the

preposition 'at' is incorrectly used; it should have been 'of' instead. Option (4) is incorrect; either we need to place the conjunction 'in' after 'reduction' or change the noun 'reduction' to the adjective 'reduced', to modify the noun 'information'.

9. <u>**Ans (3): Traditional computer algorithms are also to correctly identify 90 percent of the radiation sources**</u>
(1) is incorrect as the correct preposition to be used after 'galaxies' in the sentence is 'in', not 'on'. (2) is incorrect as the correct form of the verb to be used after 'to' is 'spot', not the past form 'spotted'. (3) is grammatically correct and meaningful. (4) is incorrect as the noun 'catalogue' should have been used in place of 'catalogued'. 'Catalogued' can be a verb or an adjective depending on usage and the use of either is incorrect here as we are in need of a noun.

10. <u>**Ans (1): After a long gap, a flock of five Greater flamingoes has been spotted on the Coast of Hope Island, a part of the Coringa Wildlife Sanctuary**</u>
(1) is grammatically correct and meaningful. (2) is incorrect as the adjective 'long-legged' should have been used instead of 'long-leg'. Option (3) is incorrect due to the incorrect preposition 'of' after 'spread'; it should have been 'over' instead. (4) is incorrect due to the incorrect preposition 'on', where 'in' should have been used (in and around).

11. <u>Ans (5): No correction required</u>
The sentence states the fact that there are two things that occur in the lives of all highly successful people. 'Happen' is a synonym of occur. Plural verb will be used to refer to plural noun 'two mental shifts'. This eliminates options (1) and (3) as 'occurs' and 'happens' are singular verbs. Also, the present tense is used to talk about facts and the sentence is stating a fact only; we need a verb in its base form. Hence option (2) and (4) are eliminated as 'occurred' and 'happened' are past participles. Option (5) is the correct answer. The sentence is correct as it is.

12. <u>Ans (3): Besides building</u>
The sentence is in future continuous tense, so the verb in the highlighted part should also be in the continuous tense. (1) is incorrect as it does not make the sentence meaningful. (2) is incorrect as 'be sides' does not convey the same meaning as 'besides'. (4) is incorrect as 'buildings' is a noun and not a verb in continuous tense. Option (3) can make the sentence grammatically correct and meaningful.

13. <u>Ans (5): No correction required</u>
The highlighted part is grammatically correct, and it makes the sentence meaningful. Window of opportunity – A favourable opportunity for doing something that must be seized immediately.

14. <u>Ans (2): Which came into being</u>
The highlighted part is incorrect as 'being', which can mean 'existence', is the right word to be used in the context. (1) is incorrect as 'which' is the suitable determiner instead of the relative pronoun 'who', which is used only for person/people. Option (3) is incorrect as the past tense form of verb 'came' should have been used, as the event happens almost a decade ago. Option (4) is incorrect for the same reason as (1) 'which' had to be used here.

15. <u>Ans (5): No correction required</u>
The highlighted part does not have any errors and makes the sentence grammatically correct and meaningful.

16. <u>Ans (4): Soggy</u>
An adjective is needed in the blank to qualify the noun 'climate'. This eliminates option (1) noun, (2) verb and (3) adverb. Soggy – wet and soft; dull and lifeless

17. <u>Ans (2): Both (I) & (III)</u>
(I) is true as given in the 5th sentence of the 3rd paragraph - "The old man jumped up and, clasping his crucifix tightly, began to recite the prayers against earthquakes." (II) is not true as it says that the young man was very powerful, but this characteristic has nowhere been outlined in the passage, for it to be considered. (III) is true and can be established from the 2nd to last sentence of the 4th paragraph - "You wait here. Do not fear." assured the father, "I will soon be back after I see for myself who it is that dares call me out at this hour.

18. <u>Ans (1): Both (I) & (II)</u>
The last sentence of the 1st paragraph - "He went out and treated the youth very harshly, saying many bad words to him" and the opening sentence of the 2nd paragraph - "When the young man said that he wanted to marry his eldest daughter, he became very angry on him and chased him away without hearing to any of his entreaties", establishes (I) and (II), respectively. Now, the 2nd sentence of the 2nd paragraph - "He also sent his daughter away to a distant place" does not explicitly points out, which daughter he sent away. Moreover, since the young man wanted to marry the eldest daughter, sending the youngest daughter will not make any sense.

19. <u>Ans (3): Because they feared that he would fall down and die in the earthquake</u>
The answer is contained in the 3rd sentence of the 4th paragraph - "His daughters begged him not to go, for they feared he would fall down and die in such a terrible earthquake." This makes option (3) the clear answer here.

20. <u>Ans (4): Both (II) & (III)</u>
The answer is given in the opening two sentences of the last paragraph - "It does not seem to be earthquake. The ground is intact, and the house has not suffered any cracks." (I) is not contained anywhere in the passage, for it to be considered. Hence, option (4) will be the correct answer.

21. <u>Ans (2): Doubtful</u>
'Determined' means having made a firm decision and being resolved not to change it. Apart from options (1) & (2), all the others are synonyms of determined; hence, incorrect. 'Absolute' = not qualified or diminished in any way; total, which makes no sense here. Therefore, 'doubtful' = feeling uncertain about something, will be the correct choice, making option (2) the right answer.

22. <u>Ans (3): Region</u>
A noun is needed in the blank. This eliminates option (1) (adverb) and (2) (past form of verb)

23. <u>Ans (2): Roughly</u>
An adverb is needed in the blank. An adverb is a part of speech that provides greater description to a verb (in this case 'lose'), adjective, another adverb, a phrase, a clause, or a sentence. This eliminates option (1) (adjective/noun), (3) (adjective) and (4) (adjective).

24. <u>Ans (1): Endured</u>
A verb in its past participle form is needed in the blank as the sentence is in present perfect tense. This eliminates option (2) (base form of verb) and (3) (gerund/present participle verb). Option (4) is contextually incorrect. Endure – Suffer; undergo; experience.

25. <u>Ans (1): Smothered</u>
The act of thinking by the scientist is happening currently but the incidence of the entire planet being covered by ice is in past (approx. 700 million years ago). There are two types of tense in the sentence. (1) verb in the past form is needed in the blank. This eliminates option (2) (3rd person present verb), (3) (gerund/present participle verb) and (4) (base form of verb). Smother - cover someone or something entirely with. Option (1) is the correct answer.

26. **Ans (5): No rearrangement required**
The sentence is meaningful and coherent as it is. Hence, no rearrangement is required.

27. **Ans (3): BCDA**
The correct sentence: "Google Maps might be detailed enough to help you find a new restaurant, but if you want your car to autonomously drive you to dinner, it's going to need a map that's far more accurate".

28. **Ans (4): CDBA**
The correct sentence: "With the Lok Sabha elections drawing close, consumption spending and investment could worsen in the interim, further dragging economic growth with it".

29. **Ans (2): BADC**
The correct sentence: "The trend of the addition of five to six lakh vehicles each year indicates that the number of vehicles within the Bengaluru metropolitan area will cross one crore in about three years".

30. **Ans (4): CADB**
The correct sentence: "Prime Minister Narendra Modi had recently launched a scheme called UDAN and said his dream was to see a person who wore a 'hawai chappal' also flew on the 'hawai jahaz' or airplane.

31. **Ans (5): None of these**
Step 1: 6l water, 4l acid
4l will contain" 2.4 l water, 1.6 l acid
Step 2: Water = 6 l – 2.4 l = 3.6 l
Acid = 10 – 3.6 = 6.4 l
Percentage of acid $= 6.4 \times \dfrac{100}{10} = 64\%$

32. **Ans (4): 5 : 4**
Number of employees working in Sales department in 2011 = 250
Number of employees working in Marketing department in 2013 = 200
Required ratio = 250 : 200 = 5 : 4

33. **Ans (1): 72%**
Number of employees working in Sales department in 2013 = 360
Number of employees working in Marketing department in 2015 = 500
Required percentage $= \dfrac{360}{500} \times 100 = 72\%$

34. **Ans (4): 680**
Number of employees working in 2012 = 300
Number of employees working in Marketing department in 2012 = 380
Required sum = 300 + 380 = 680

35. **Ans (3): 20**
Number of employees working in Marketing department in 2011 = 440
Number of employees wrong in Sales department in 2015 = 420
Required difference = 440 – 420 = 20

36. **Ans (2): 1 : 2**
Number of employees working in Sales department in 2014 = 150
Number of employees working in Marketing department in 2014 = 300
Required ratio = 150 : 300 = 1 : 2

37. **Ans (5): Quantity I = Quantity II or the relationship cannot be determined**
Quantity I:
Let the side of the square = A
$A^2 = 576 \Rightarrow A = 24$ m
Then, Perimeter = 4A = 96 m
Quantity II:
All the sides of the rectangle are not equal hence we can't calculate the perimeter of the rectangle.

38. **Ans (1): Quantity I > Quantity II**
Quantity I:
Simple Interest $= 1250 \times 8 \times \dfrac{3}{100} = $ Rs.300
Quantity II:
Compound Interest $= 1200 \times (1.1)^2 - 1200 = 1452 - 1200 = $ Rs.252
Quantity I > Quantity II

39. **Ans (1): Quantity I > Quantity II**
Quantity I:
Let original speed = 5
Reduced speed = 5 – 2 = 3
∴ Time taken (Original : new) = 3 : 5
∴ Time taken for original speed $= \dfrac{3}{2} \times 24 = 36$ minutes

Quantity II: 15

40. **Ans (2): Quantity I < Quantity II**
Quantity I:
$\dfrac{(F+5)}{(M+5)} = \dfrac{9}{8} \Rightarrow \dfrac{(8x+5)}{(7x+5)} \Rightarrow \dfrac{9}{8} \Rightarrow 64x + 40 = 63x + 45 \Rightarrow x = 5$
∴ Difference = 5
Quantity II:
$\dfrac{(F+2)}{(M+2)} = 25 : 22 \Rightarrow \dfrac{(8x+2)}{(7x+1)} = \dfrac{25}{22} \Rightarrow 176x + 44 = 175x + 50 \Rightarrow x = 6$
∴ Difference = 6

41. **Ans (1): Quantity I > Quantity II**
Efficiency A : B = 100 : 125
Time taken = 125 : 100 = 5 : 4
∴ Half of the tank filled by pipe B in $\Rightarrow \dfrac{4}{5} \times \dfrac{36}{2} = 14.4$ hours
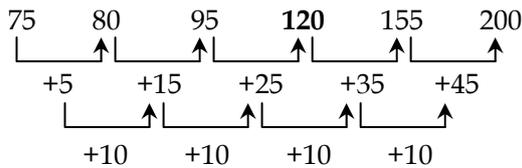
42. **Ans (5): Can't say**
Let the length and breadth of the rectangle be *l* and *b* respectively
The perimeter = 2*l* + 2*b* cm
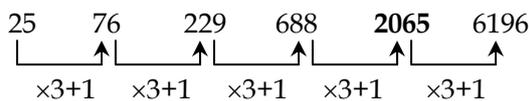The perimeter of the new rectangle = 2(*l* + 12) + 2 (*b* + 8) = 2*l* + 2*b* + 40
Without knowing the value of *l* and *b*, we could not determine the required answer
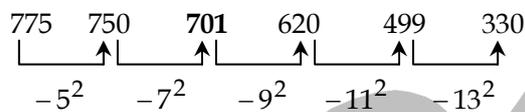
43. **Ans (2): 117**

75	80	95	**120**	155	200

+5   +15   +25   +35   +45

+10   +10   +10   +10

The wrong number is 117

44. **Ans (4): 2067**

25	76	229	688	**2065**	6196

×3+1   ×3+1   ×3+1   ×3+1   ×3+1

The wrong number is 2067

45. **Ans (3): 703**

775	750	**701**	620	499	330

-5^2 -7^2 -9^2 -11^2 -13^2

The wrong number is 703

46. **Ans (5): 16**

98	50	26	**14**	8	5

-48   -24   -12   -6   -3
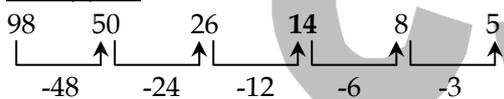
The wrong number is 16

47. **Ans (3): 584**

231	330	447	**582**	735

+99   +117   +135   +153

$10^2 - 1$ $11^2 - 4$ $12^2 - 9$ $13^2 - 16$
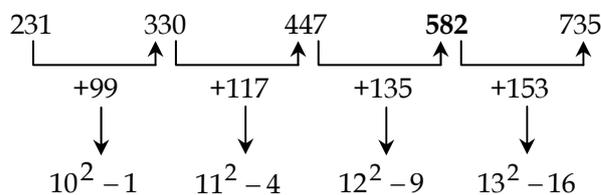
The wrong number is 584

48. **Ans (4): 8 : 11**

$$\therefore \frac{5x + 2 + 4}{7x + 2 + 4} = \frac{3}{4} \Rightarrow x = 6$$

$\therefore$ Present ages A : B $\Rightarrow$ 5(6) + 2 : 7(6) + 2 $\Rightarrow$ 32 : 44 = 8 : 11

49. **Ans (3): Rs.9000**

Let the income of A and B is $5x$ and $8x$ respectively

Expenditure of B = 75% of $8x$ = $6x$

Expenditure of A $= 6x \times \left(\frac{2}{3}\right) = 4x$

Savings of A = $5x - 4x = x$

Savings of B = $8x - 6x = 2x$

$\therefore 2x - x = 3000 \Rightarrow x = 3000$

Total savings of A and B together = $x + 2x = 3x$ = Rs.9000

50. Ans (1): Rs.9360

Total profit = Rs.1250

Share of A in profit = Rs.600

Share of B in profit = 1250 – 600 = Rs.650

Profit ratio, A : B = 600 : 650 = 12 : 13

Investment of A = Rs.7200

Let investment of B = x

Period of investment of A = 12 months

Period of investment of B = 12 – 2 = 10 months

Profit ratio A : B = 7200 × 12 : x × 10 = 8640 : x

∴ 12 : 13 = 8640 : x ⇒ x = Rs.9360

51. Ans (3): 300

Let 'a' and 'b' are number of oranges and apples respectively

48 = 60% of (100 – 20)% of a ⇒ 48% of a = 48

a = 100

100 = (100 – 40 – 10)% of b

b = 200

Total apples and oranges = 100 + 200 = 300

52. Ans (4): 25%

S.P of 8 articles = C.P of 10 articles

S.P of 1 article = C.P of $\left(\dfrac{5}{4}\right)$ article

Let C.P of 1 article be Rs.4

S.P of 1 article $=\left(\dfrac{5}{4}\right)\times 4 = $ Rs.5

Percentage profit $=\dfrac{(5-4)}{4}\times 100 = 25\%$

53. Ans (2): Rs.3683

SI = 3422 – 2900 = Rs.522

Rate $=\text{SI}\times\dfrac{100}{\left(\text{P}\times\text{time}\right)}=522\times\dfrac{100}{\left(2900\times 3\right)}=6\%$

New rate = 6 + 3 = 9%

New SI $=2900\times 9\times\dfrac{3}{100}=$ Rs.783

Amount = P + SI = 2900 + 783 = Rs.3683

54. Ans (5): 432

$? \approx \dfrac{\left(18\times 384\times 188\right)}{\left(64\times 47\right)} \Rightarrow ? \approx 18\times 6\times 4 \Rightarrow ? \approx 432$

55. Ans (5): 750

$? \approx 15\times 8 + 21\times 30 \Rightarrow ? \approx 120 + 630 = 750$

56. Ans (3): 1140

$? \approx 1653 \div 57 \times 40 - 20 \Rightarrow ? \approx 29\times 40 - 20 \Rightarrow ? \approx 1160 - 20 = ? \approx 1140$

57. Ans (3): 57

$? \approx \dfrac{\left(19 \times \sqrt{225}\right)}{\sqrt{25}} \Rightarrow ? \approx \left(19 \times \dfrac{15}{5}\right) = 57$

58. Ans (2): 2585

$? \approx 23^2 + 34^2 + 30^2 \Rightarrow ? \approx 529 + 1156 + 900 = 2585$

59. Ans (5): -6

$? \approx \sqrt[3]{4913} - \sqrt[3]{5832} - \sqrt[3]{125} = ? = 17 - 18 - 5 \Rightarrow ? \approx -6$

60. Ans (1): 25

$? \approx \dfrac{(28 \times 32 - 21)}{35} \Rightarrow ? \approx \dfrac{(896 - 21)}{35} \Rightarrow ? \approx \dfrac{875}{35} = 25$

61. Ans (5): 40

$? \approx \dfrac{\left(35^2 - 25\right)}{30} \Rightarrow ? \approx \dfrac{(1225 - 25)}{30} \Rightarrow ? \approx \dfrac{1200}{30} = 40$

62. Ans (2): 32

$(?)^2 \approx 37^2 - 2 - 7^3 \Rightarrow ?^2 \approx 1369 - 2 - 343 \Rightarrow ?^2 = 1024 \Rightarrow ? = 32$

63. Ans (4): 902

$? \approx \left(\dfrac{50 \times 2680}{100}\right) + \sqrt{256} - 454 \Rightarrow ? \approx 1340 + 16 - 454 = 902$

64. Ans (3): 12 km/hr

Let the speeds of Jatin and Josh be $3x$ km/hr and $4x$ km/hr

Relative speed = $3x + 4x = 7x$ km/hr

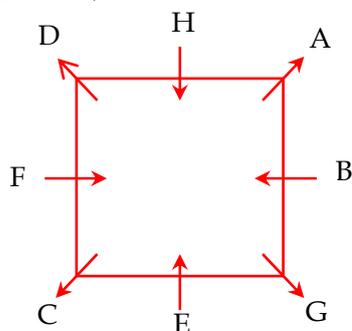$7x \times \left(\dfrac{3}{60}\right) = 4.2 \Rightarrow x = 12$

Difference between their speeds = $4x - 3x = 12$ km/hr

65. Ans (4): 60 hours

Let leak empty in x hours, then

$\dfrac{1}{10} - \dfrac{1}{x} = \dfrac{1}{12} \Rightarrow \dfrac{1}{x} = \dfrac{1}{60} \Rightarrow x = 60$ hours

For (Qs.66-70):

66. Ans (3): G

D related to G.

67. Ans (4): C

Apart from C, others are seated at the sides or facing the centre.

68. Ans (1): B

B is seated opposite to F who is third to the left of A.

69. Ans (5): Third to the right

D is 3rd to the right of B

70. Ans (4): H, B

H and B are the immediate neighbours of A.

For (Qs.71-75):

Day	Subject
Monday	Mathematics
Tuesday	Physics
Wednesday	Computer
Thursday	English
Friday	Biology
Saturday	off day
Sunday	Geography

71. Ans (4): Saturday

Saturday was the off-day.

72. Ans (2): 1

Only one subject was taught between computer and biology.

73. Ans (3): Wednesday

Computer was taught on Wednesday.

74. Ans (2): Monday

Mathematics was taught on Monday.

75. Ans (4): Physics

Physics was taught immediately after Mathematics

76. Ans (3): Grandfather

K (+) ⟺ G (-)
|
S (+) ⟺ B (-)
|
R (+) ⟺ M (-)

(+)	→ Male
(-)	→ Female
|	→ Next Generation
—	→ Sibling
⟺	→ Couple

K is grandfather of R

For (Qs.77-81):

Word	seasons	winter	winds	chilly	summer	autumn	green	blow
Code	15	31	46	11	23	12	17	35

77. Ans (1): 23

Required difference = 46 (winds) – 23 (summer) = 23

78. **Ans (3): 31 17**
'Green winter' is coded as '17 31'

79. **Ans (2): Blow**
Code for second highest numerical value is (35) 'blow'
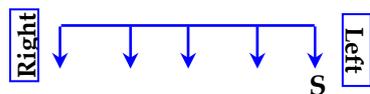
80. **Ans (4): Both I and III**
Summer = 23
Winds (46) > winter (31) > summer (23) > Green (17)

81. **Ans (3): 31 16 15**
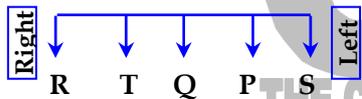'Winter seasons' is coded as '31 15' and 'cold' may be coded as '16'

82. **Ans (5): The data in both statements I and II together are necessary to answer the question**
From statement I,

From statement II,

From statements I and II,

Q is to the immediate left of T.

83. **Ans (5): The data in both the statements I and II together are necessary to answer the question**
From statement I: Divya's birthday is on 16, 17, 18 or 19
From statement II: Divya's birthday is on 19, 20, 21, 22 or 23
From both statements I and II: Divya's birthday is on 19

84. **Ans (5): The data in both the statement I and II together are necessary to answer the question**
From statement I: D > B & C
From statement II: A > E > D
From both I and II, A > E > D > B & C
E has scored the second highest mark.

85. **Ans (5): Both conclusions I and II are true**
Statement: $F \geq E \geq D \geq C = B \geq A$
Conclusions: I. $F \geq A$ (✓)   II. $E \geq B$ (✓)

86. **Ans (5): Both conclusions I and II are true**
Statement:
$P > Y \leq B$
   ↓
$X \geq Y \geq N$
   ↓
$Z > Y$
Conclusions: I. $B \geq N$ (✓)   II. $P > N$ (✓)

87. <u>Ans (5): KILO</u>
After rearrangement of letters in alphabetical order: BEEN HIOT IKLO OSUV HKSU
After arranging the word as per dictionary: BEEN HIOT HKSU IKLO OSUV
∴IKLO is placed fourth from left.

88. <u>Ans (3): BEEN</u>
TAX: (20 + 1 + 24) = 45
DOG: (4 + 15 + 7) = 26
From the above data,
BEEN: (2 + 5 + 5 + 14) = 26
THIO: (20 + 8 + 9 + 15) = 52
KILO: (11 + 9 + 12 + 15) = 47
VOUS: (22 + 15 + 21 + 19) = 77
KUSH: (11 + 21 + 19 + 8) = 59
∴26 is the first smallest value which belongs to BEEN

89. <u>Ans (1): three</u>
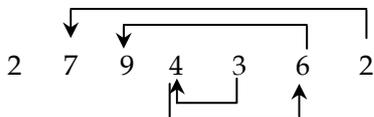After rearrangement of letters of the words: AFFM **SGJP JJKP** UPVR **JVRG**

90. <u>Ans (1): three</u>
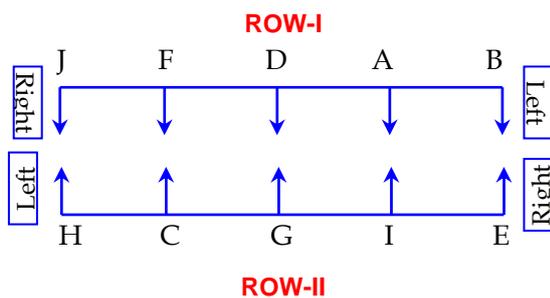After rearrangement of letters of the words: **CDDO** UIHN LHMN **WNTT LTTI**

91. <u>Ans (2): 2</u>

B	E	E	N	T	H	I	**O**	K	I	**L**	O	V	O	U	S	K	U	S	H
V	U	U	T	S	S	O	**O**	O	N	L	K	K	I	I	H	H	E	E	B

92. <u>Ans (5): 4</u>

2   7   9   4   3   6   2

For (Qs.93-97):

ROW-I

J   F   D   A   B

H   C   G   I   E

ROW-II

93. <u>Ans (1): A</u>
Apart from A, others were seated at the extreme ends.

94. <u>Ans (4): H, 3rd</u>
H was seated 3rd to the left of I.

95. <u>Ans (4): Both I and II</u>
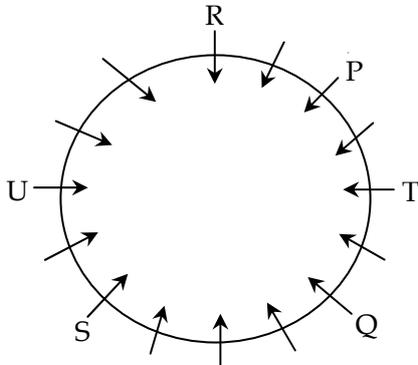C and I were seated facing North.

96. Ans (5): C, I
C and I were the immediate neighbours of G.

97. Ans (1): I
I was seated opposite to A.

For (Qs.98-100):

98. Ans (4): Fifteen
There were 15 persons around the table.

99. Ans (3): Seven
There were seven persons between U and T when counted from the left of T.

100. Ans (3): Third to the left
R was 3rd to the left of U.

- - × - -