(Based on IBPS PO (Prelims) latest pattern for IBPS PO EXAM)

No. of Questions : 100   **Time : 1:00 hrs**

Name of Student : _____   **Father's Name:** _____

Centre : _____   **Batch No.:** _____

Read the directions (given below) carefully.

1. इस पुस्तिका में निम्नलिखित तीन प्रश्नावलियां हैं :
   प्रश्नावली I - अंग्रेजी भाषा   प्र.क्र.   1-30
   प्रश्नावली II - संख्यात्मक अभियोग्यता   प्र.क्र.   31-65
   प्रश्नावली III - तर्कशक्ति   प्र.क्र.   66-100

2. इन चार प्रश्नावलियों के उत्तर देने के लिए आपको कुल 1:00 घंटे का समय दिया जाएगा। प्रश्नावलियों के लिए अलग-अलग समय नहीं है। आप अपनी इच्छा के अनुसार समय का संविभाजन कर सकते हैं, परंतु आपको स्मरण रखना चाहिए कि इस परीक्षा में सफल होने के लिए आपको तीनो प्रश्नावलियों में अलग-अलग सफल होना आवश्यक है।

3. तर्कशक्ति और संख्यात्मक अभियोग्यता की प्रश्नावलियां हिन्दी और अंग्रेजी दोनों भाषाओं में छपी हुई हैं। हिन्दी रूपान्तर बाएं तरफ के पन्ने पर और अंग्रेजी दाहिने तरफ के पन्ने पर छपे हुए हैं।

4. अगर आप गलत उत्तर देंगे तो दंडस्वरूप आपके अंकों में कटौती की जाएगी। ऐसे किसी भी प्रश्न के निर्धारित अंकों में से, जिसका आपने गलत उत्तर दिया है, दंड के रूप में एक-चौथाई या 0.25 अंक काट लिए जाएंगे।

5. रफ काम, यदि आप करना चाहें, तो इस पुस्तिका में ही करना चाहिए न कि उत्तरपत्र पर। इस हेतु हाशिए की अथवा अन्यत्र उपलब्ध खाली जगह का उपयोग कीजिए अन्य किसी कागज का उपयोग न कीजिए।

6. अपने उत्तर अलग उत्तरपत्र पर एच.बी. पेन्सिल का प्रयोग कर दर्शाइए। उत्तर दर्शाने के लिए उत्तरपत्र में दिए गए अनुदेशों का पालन कीजिए।

7. आपके उत्तरपत्र में उत्तर दर्शाने के लिए 100 उत्तरस्थान हैं। इस पुस्तिका में दिए हुए 100 प्रश्नों के उत्तर देने के लिए 100 उत्तरस्थानों का उपयोग कीजिए।

8. जब तक निर्देश न मिले इस पुस्तिका को मत खोलिए। पुस्तिका खोलने का निर्देश मिलने पर पुस्तिका के बाएं किनारे पर लगे हुए मुड़े हुए तार निकालने का प्रयास न करें। पेंसिल के पिछले भाग की मदद से दाहिनी तरफ लगे स्टीकर को फाड़कर पुस्तिका को खोलें।

9. पुस्तिका खोलते ही जांच लीजिए कि सभी पृष्ठ जिन पर प्रश्न 1 से 100 हैं, सही प्रकार से छपे हुए हैं और फिर प्रश्नावलियों के उत्तर देना प्रारंभ कीजिए। यदि पुस्तिका दोषपूर्ण हो तो इसे उसी प्रश्नावली प्रारूप क्रमांकवाली दूसरी प्रश्नपुस्तिका से बदलवा लीजिए।

1. This Booklet contains three tests as follows :
   Test I - English Language   Q.Nos.   1-30
   Test II - Quantitative Aptitude   Q.Nos.   31-65
   Test III- Reasoning   Q.Nos.   66-100

2. You will be given an aggregate time of 1:00 hour to answer all the three tests. The tests are not separately timed. You may distribute the time as you please but remember that to qualify in the written test as a whole you have to qualify on each of the three tests separately.

3. Tests of Reasoning and Quantitative Aptitude are printed in both Hindi and English. The Hindi version is printed on the left hand side page and the English version on the right hand side page.

4. There will be penalty for wrong answers marked by you. For each question for which a wrong answer has been given by you, one-fourth or 0.25 of the marks assigned to that question will be deducted as penalty.

5. Rough work, if you want to do any, is to be done in this booklet itself and not on the answersheet. For this purpose use the empty space in the margin or anywhere else you find in this booklet. Do not use any other paper.

6. Indicate your answers on the separate answersheet (given at the end of the booklet), using HB Pencil. Follow the instructions given on the answersheet for indicating your answers.

7. Your answersheet contains answer-spaces for answering 100 questions. Use 100 answer spaces for answering the 100 questions given in this booklet.

8. Do not open the booklet until you are told to do so. When the instruction for opening the booklet is given, do not try to remove the wire staples at the left. Insert the blunt end of your pencil under the sticker and tear it to open the booklet.

9. Immediately after opening the booklet, verify that all the pages containing questions from 1 to 100 are properly printed in your booklet and then begin answering the test. In case the booklet is defective get it replaced by another test booklet.

Test I
English Language

Directions (Q. 1-5): Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is 5). (Ignore the errors of punctuation, if any.)

1. 1) Any material change in the status /2) of a borrower has to be /3) communicated to the credit information company /4) into a specified time period. /5) No error

2. 1) Given the instances for /2) misuse of personal information /3) it is critical that /4) borrowers' data are adequately protected. /5) No error

3. 1) Islam does recognise the /2) necessity for divorce in cases where /3) marital relations have been much poisoned /4) that peaceful domestic life is impossible. /5) No error

4. 1) To meet the competition in /2) IT-enabled services /3) India needs to /4) improve its physical infrastructure. /5) No error

5. 1) If China can become /2) the world's manufacturing hub /3) and extract know-how benefits /4) India can surely do. /5) No error

Directions (Q. 6-10): In the following passage there are blanks, each of which has been numbered. These numbers are printed behw the passage and against each, five words are suggested, one ol which fife the blank appropriately. Find out the appropriate word in each case.

One of the more marked test of character is the manner in which we (**6**) ourselves towards others, a graceful behaviour, towards superiors, inferiors, and (**7**) is constant source of pleasure. It pleases others because it indicates (**8**) for their personality, but it gives tenfold more (**9**) to ourselves. Every man may, to large extent be a self educator in good (**10**) as in every else, he can be civil and kind if he thinks he has not a penny in his purse.

6. 1) conduct   2) manage   3) nature   4) present   5) dispose

7. 1) equals   2) juniors   3) seniors   4) superiors   5) priors

8. 1) happiness   2) honour   3) regard   4) respect   5) influence

9. 1) force   2) requirement   3) pleasure   4) dedication   5) loudness

10. 1) status   2) behaviour   3) character   4) career   5) condition

Directions (Q. 11–15): Each question below has two blanks, each blank indicating that something has been omitted. Choose the set of words for each pair of blanks that best fits the meaning of the sentence as a whole.

11. The Hindi film industry is now_____ good_____ to artists to do something new.
    1) checking, potential   2) providing, remittance   3) spending, money
    4) offering, opportunities   5) making, access

12. The supporters _____ flags and gathered outside his residence to _____ him to the seminar which he was going to address.
    1) raised, accompany   2) hoisted, move   3) lifted, develop
    4) lifted, fuel   5) moved, empower

13. The earthquake, which was _____ at around 4pm _____ 95 km east of Kathmandu.
    1) observed, started   2) felt, exhibit   3) assumed, emerged
    4) anticipated, came   5) felt, struck

14. This robot is_____ of _____ pictures with fibre optic and satellite communication.
    1) made, making   2) capable, taking   3) inevitable, cropping
    4) enhanced, creating   5) significant, saving

15. Bandhan Bank is the first microfinance company to _____ _____ into a full-fledged scheduled commercial bank.
    1) do, inequality   2) open, branch   3) merge, operations
    4) establish, growth   5) be, transformed

Directions (Q. 16-20): Rearrange the following five sentences A, B, C, D and E in the proper sequence so as to form a meaningful paragraph; then answer the questions given below them:

(A) Devika was told that the report was urgent.
(B) Even though the whole day was available she could not finish it.
(C) Her boss had told her this right in the morning.
(D) Her boss asked her again when the office was about to close.
(E) She had to disappoint her boss that day.

16. Which sentence should come **THIRD** in the paragraph?
    1) A   2) B   3) C   4) D   5) E

17. Which sentence should come **FIRST** in the paragraph?
    1) A   2) B   3) C   4) D   5) E

18. Which sentence should come **LAST** in the paragraph?
    1) A   2) B   3) C   4) D   5) E

19. Which sentence should come **SECOND** in the paragraph?
    1) A   2) B   3) C   4) D   5) E

20. Which sentence should come **FOURTH** in the paragraph?
    1) A   2) B   3) C   4) D   5) E

Directions (Q. 21-30): Read the passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

The RBI orders a moratorium when a bank's financial stability is **threatened**. Depositors face some restrictions on withdrawing money from their accounts during this period. Currently the restriction is confined to premature withdrawal of FDs in case of Kapol Bank. Customers can still withdraw money from their savings and current accounts. However, the Banking Regulation Act has provisions for relief to customers facing a financial emergency. "Banks' administrative board can approach the RBI with a plea for relaxing the withdrawal limits in case of account holders such as those who have saved or deposited money for their medical treatment or educational purpose and pensioners," says VN Kulkarni, chief credit counsellor with the Bank of India-backed Abhay Credit Counselling Centre.

Since one cannot do much after the bank gets into trouble or the RBI comes into the **picture**, it would be wise to take some precautions. "Depositors need to be selective not only in choosing the bank, but also in depositing the amount using different combinations," says Kulkarni. For instance, you can maintain the first deposit in your name, held jointly with your spouse or children. Similarly, the second joint FD could be created with your wife as the first holder. This will help you benefit from the deposit insurance cover extended to retail depositors.

Currently, deposits are insured up to ₹1 lakh per bank, and not per branch of the same bank. You can also look at maintaining FDs in more than one bank to spread out the risk.

However, this may not be feasible for some individuals. For instance, a retiree who wishes to invest her huge retirement corpus in FDs. "It is not feasible to split a huge amount of, say, ₹50 lakh into 50 deposits with different banks. Senior citizens have to **strike** a balance between convenience, risks and higher returns that some of the smaller banks offer," says Suresh Sadagopan, certified financial planner and founder, Ladder7 Financial Advisories. He recommends **diversification** by investing in fixed-income options like company FDs, non-convertible debentures (NCDs) as also more secure alternatives such as tax-free bonds and senior citizens savings scheme, which offers an interest rate of 9.2 % . You must also evaluate the bank's credentials carefully before **parking** your money in it. "While selecting the bank, you need to ascertain its gross NPAs. It should be not higher than 5%. Similarly, ensure that your bank has adequate capital as prescribed by the regulators," says Kulkarni. "That is, minimum 9% of risk-weighted assets, and at least 12%, in case of co-operative banks." You will find this information in the balance sheets of banks.

21. What is the effect of a moratorium on a bank?
    (A) Only senior citizens are allowed partial withdrawal of maturity amount for their medical treatment.
    (B) Maturity amount is paid in instalments rather than in one lump sum.
    (C) Certain restrictions are imposed on withdrawal of money from bank account.
    1) Only (A)   2) Only (B)   3) Only (C)
    4) Only (A) and (B)   5) All (A), (B) and (C)

22. Which of the following statements is based on the provisions related to bank deposits?
    (A) Every branch of a bank allows insurance covers on deposits upto `1 lakh.
    (B) FD can be maintained in more than one bank to spread out the risk with the exception of retirees wishing to invest a very huge amount in FDs.
    (C) Senior citizens are allowed extra risk cover and high returns on their fixed deposits.
    1) Only (A)   2) Only (B)   3) Only (C)
    4) Only (A) and (B)   5) Only (B) and (C)

23. Which of the following is not definitely true with respect to Kapol Bank?
    1) It is a private sector bank.
    2) At present, premature withdrawal of FD cannot be allowed.
    3) Customers of this bank have been allowed withdrawal of money from their CASA.
    4) There are no restrictions on withdrawal except of premature fixed deposits.
    5) None of these

24. What care should be taken before depositing money with a bank? Answer in the context of the given passage.
    (A) The NPA of the concerned bank is not higher than five per cent.
    (B) The bank has adequate capital as per the provisions for the bank.
    (C) There is a minimum 9% of risk-weighted assets (if the bank is other than a cooperative bank).
    1) Only (A) and (B)   2) Only (B) and (C)   3) Only (A) and (C)
    4) Only (C)   5) All (A), (B) and (C)

25. Find the statement which is not based on the facts mentioned in the passage.
    1) Under certain circumstances, account holders facing financial emergency can be allowed withdrawal of money beyond withdrawal limit as per the provisions laid down in the Banking Regulation Act.
    2) When the bank gets into trouble it is better for a depositor to be selective in both choosing the bank and depositing the amount using different combinations.
    3) When the financial stability of a bank is at stake the central bank orders a moratorium.
    4) The central bank has ordered a moratorium on Kapol Bank.
    5) None of these

    Directions (Q. 26-28): Choose the word which is most similar in meaning to the word printed in bold as used in the passage.

26. **Parking**
    1) removing   2) depositing   3) stopping   4) walking   5) strolling

27. **Picture**
    1) scene   2) mainstream   3) portrait   4) role   5) forefront

28. **Diversification**
    1) variegation   2) homogenous   3) allocation   4) division   5) accumulation

Directions (Q. 29-30): Choose the word/group of words which is most opposite in meaning of the word/group of words printed in bold as used in the passage.

29. **Threatened**
    1) warned   2) jeopardised   3) ensured   4) exposed   5) vulnerable

30. **Strike**
    1) maintain   2) hit   3) knock   4) lose   5) smack

Test II
Quantitative Aptitude

Directions (Q. 31-35): In each of the following questions two equations are given. On the basis of the given equation find the relationship between p and q. Mark answer –

1) if p = q   2) if p > q   3) if q > p

4) if p $\geq$ q   5) if q $\geq$ p or if you cannot establish any relation between p and q.

31. **I.** $42p^2 + 53p + 15 = 0$ **II.** $42p^2 - 53q + 15 = 0$

32. **I.** $p^2 + 24p + 143 = 0$ **II.** $q^2 + 6q - 55 = 0$

33. **I.** $p^2 - 14p + 48 = 0$ **II.** $q^2 + 16q + 63 = 0$

34. **I.** $6p^2 - 41p + 63 = 0$ **II.** $6q^2 - 59q + 143 = 0$

35. **I.** $p^2 - 14p + 45 = 0$ **II.** $q^2 - 8q + 15 = 0$

Directions (Q. 36-40): In each of the following number series a wrong number is given. Find out the wrong number.

36. 120 136 142 132 100 60
    1) 136   2) 142   3) 132   4) 100   5) 60

37. 5 20 80 610 6140 73630
    1) 5   2) 20   3) 80   4) 610   5) 6140

38. 117484 14679 2094 345 64 10
    1) 117484   2) 14679   3) 2094   4) 345   5) 64

39. 6 15 33 59 96 141
    1) 6   2) 15   3) 33   4) 59   5) None of these

40. 200 208 321 652 1641 4935
    1) 208   2) 321   3) 652   4) 1641   5) None of these

Directions (Q. 41-45): Study the following graph carefully and answer the questions given below:
The graph given below shows the sales of Laptops of (in thousands) of different companies in India in six different years.

━▲━ **Dell**   ━●━ **HP**   ━■━ **Sony**   ━◆━ **Samsung**
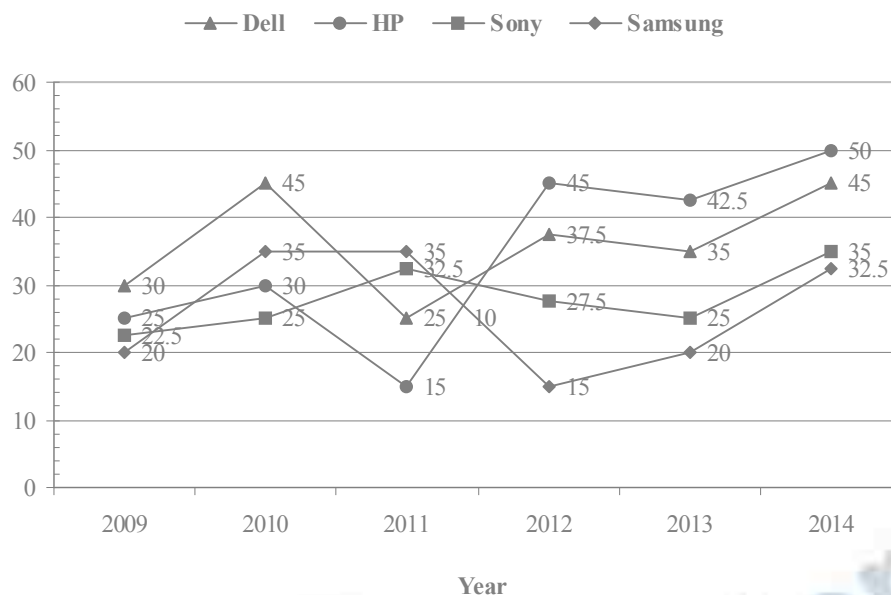
41. Which of the following companies recorded maximum percentage increase in the sale in the year 2014 as compared to the year 2009?
    1) Dell 　　　　　　 2) HP 　　　　　　 3) Samsung 　　　　　 4) Sony 　　　　　 5) Both 2 and 3

42. What is the approximate percentage increase in the total sales of laptop, of all companies together in the year 2014 as compared to the year 2009?
    1) 50.67% 　　　　 2) 62.67% 　　　　 3) 56.67% 　　　　 4) 66.67% 　　　　 5) 52.47%

43. In which of the following year, the average sale of the companies together is minimum?
    1) 2009 　　　　　 2) 2014 　　　　　 3) 2013 　　　　　 4) 2011 　　　　　 5) 2012

44. The total sales of sony in all the years together is approximately what percent more or less than the total sales of Dell in all the years together?
    1) 23% more 　　　 2) 29% less 　　　 3) 23% less 　　　 4) 26% less 　　　 5) 28% more

45. Which of the following companies recorded second highest average sales of laptop in all the years together?
    1) Samsung 　　　 2) Dell 　　　　　 3) Sony 　　　　　 4) HP 　　　　　 5) Either 2 or 3

46. Eight litres of milk is drawn from a container full of milk and it is then filled with water. Eight litres of the mixtures are drawn and the container is again filled with water. The quantity of milk now left in the container is to that of water in it is 121:23. How much milk does the container hold?
    1) 102 litre 　　　 2) 92 litre 　　　 3) 96 litre 　　　 4) 64 litre 　　　 5) 48 litre

47. When two dice are thrown, what is the probability that the sum of the numbers appeared is less than 8?
    1) 5/12 　　　　　 2) 5/6 　　　　　 3) 3/4 　　　　　 4) 8/11 　　　　　 5) 7/12

48. Two men undertook to do a piece of work of ₹ 400. One alone could do it in 6 days, the other in 8 days. With the assistance of a boy they finish it in 3 days. Find the share of boy.
    1) ₹ 25 　　　　　 2) ₹ 50 　　　　　 3) ₹ 75 　　　　　 4) ₹ 100 　　　　　 5) ₹ 60

49. Find the compound interest earned on a sum of ₹ 2,00,000 for 2 years at 8% interest p.a compounded half yearly?
    1) ₹ 33971.712 　 2) ₹ 33971 　　　 3) ₹ 32971 　　　 4) ₹ 35891.614 　 5) ₹ 34971.712

50. Find the area of an equilateral triangle whose height is 9 cm.
  1) 49 cm²   2) 44.784 cm²   3) 46. 764 cm²   4) 42 cm²   5) 52.784 cm²

Directions (Q. 51-55): These questions are based on the following Pie-charts.

The following pie charts show classification of appeared candidates in a competitive exam from different states and qualified cadidates from those states.

The number of appeared candidates = 54,000   **Total number of qualified candidates=32000**
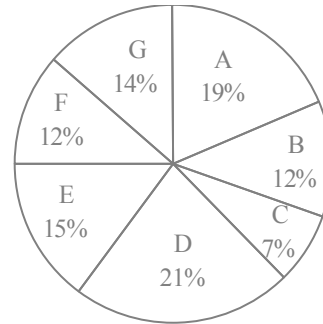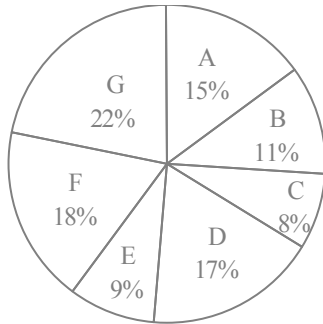
51. What is the ratio of the number of appeared candidates from states C and E together to that of appeared candidates from states A and F together?
  1) 3:5   2) 5:3   3) 17:33   4) 33:17   5) None of these

52. In which state the percentage of qualified candidates with respect to appeared candidates is maximum?
  1) A   2) B   3) C   4) D   5) None of these

53. What is the difference between the numbers of appeared candidates of states B and E?
  1) 504   2) 680   3) 1080   4) 1260   5) None of these

54. What is the percentage of qualified candidates with respect to appeared candidates from states A and D taken together?
  1) 74.07   2) 65.8   3) 82.5   4) 18.7   5) 60.12

55. What is the ratio of the number of candidates qualified from states C and D together to the number of candidates appeared from state G?
  1) 17 : 33   2) 201 : 317   3) 224 : 297   4) 297 : 224   5) None of these

56. The ratio of the number of girls to the number of boys is the 5 : 2 in a class of 28 students. A group of three students is to be selected at random amongst them. What is the probability that the selected group of students contain one boy and two girls?
  1) $\dfrac{14}{71}$ 2) $\dfrac{14}{117}$ 3) $\dfrac{20}{71}$ 4) $\dfrac{20}{117}$ 5) None of these

57. A square room is surrounded by a verandah of width 6 m. If the area of the verandah is 696 sq m, what is the area of the room?
  1) 441 sq m   2) 484 sq m   3) 529 sq m   4) 576 sq m   5) None of these

58. 18 persons are sitting around a circular table. In how many ways can they be seated if six particular persons are to always sit together?
  1) 18! × 6!   2) 17! × 5!   3) 13! × 6!   4) 12! × 6!   5) 12! × 5!

59. A person sold an item at a profit of 45%. Had he sold it for ₹1463 more, he would have gained 64%. What is the cost price of the item?
  1) ₹72   2) ₹75   3) ₹77   4) ₹78   5) ₹82.5

60. A person divided a sum of ₹72000 in two parts and deposited it in different banks at the rate of 11% pa and 17% pa respectively. After one year, he received ₹19080 as the total interest. What is the amount deposited at the rate of 17% pa?
  1) ₹27000   2) ₹45000   3) ₹30000   4) ₹42000   5) ₹32000

Directions (Q. 61–65): Study the following information carefully and answer the questions given below:

A school consists of 5100 students. The ratio of boys to girls is 6 : 11 respectively. All the students are hobby classes viz; Drama, Dancing and Singing. 14% of the total boys learn only Dancing. 27% of the total girls learn only Drama. The number of students enrolled in only singing is 1335. $\frac{1}{5}$ of the total boys are enrolled in all the three classes. Number of girls enrolled only in Dancing is 200% of the boys enrolled in the same. The remaining girls are enrolled in all the three classes. 20% of the boys are enrolled only in Drama and the remaining enrolled only in Singing.

61. How many students are enrolled only in Drama?
   1) 1215 2) 1240 3) 1251 4) 1351 5) 1291

62. What is the number of girls enrolled in all the three classes together?
   1) 1398 2) 1298 3) 1389 4) 1428 5) 1318

63. Number of boys enrolled in Singing only is approximately what percent of the number of girls enrolled in the same?
   1) 146% 2) 160% 3) 152% 4) 163% 5) 154%

64. What is the respective ratio of the number of boys enrolled only in Drama to the number of girls enrolled in the same?
   1) 44 : 103 2) 40 : 99 3) 41 : 99 4) 41 : 101 5) 40 : 91

65. How many boys are enrolled in Dancing?
   1) 252 2) 350 3) 360 4) 465 5) 612

Directions (Q. 66-70): In each question below, there are three statements followed by three conclusions numbered I, II and III. You have to take the 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 follow(s) from the given statements.

66. **Statements:** All dolls are windows. All bottles are windows.
   All cars are bottles.
   Conclusions: I. All cars are windows. II. No cars are dolls.
   III. All doll being cars is a possibility.
   1) Only I and II follow 2) Only II and III follow
   3) Only I and III follow 4) All follow
   5) None of these

67. **Statements:** Some players are balls. All balls are circles.
   Some tigers are balls.
   Conclusions: I. Some circles are tigers. II. Some players are not circles .
   III. All circles being players is a possibility.
   1) Only I and II follow 2) Only II follows
   3) Only I and III follow 4) Only III follows
   5) None of these

68. **Statements:** Some chemists are surgeons. Some surgeons are editors.
   Some editors are translators.
   Conclusions: I. Some translators are surgeons. II. All editors being surgeons is a possibility.
   III. Some editors are chemists.
   1) None follows 2) Only I follows
   3) Only II follows 4) Only III follows
   5) All follow

69. **Statements:** All mangoes are apples. No apple is a fruit.
   All branches are fruits.
   Conclusions: I. Some branches are mangoes. II. No fruit is a mango.
   III. No mango is branch.
   1) None follows 2) Either I or III follows
   3) Only I follows 4) Either I or II or III follows
   5) None of these

70. **Statements:** All employees are workers. No manager is a worker.
   Some actors are managers.
   Conclusions: I. Some workers are actors. II. No actor is a employee.
   III. All workers being actors is a possibility.
   1) None follows 2) Only I follows
   3) Only II follows 4) Only III follows
   5) Either I or II follows

Direcitons (Q. 71-75): In the following questions, the symbols @, ©, +, % and # are used with the meaning as indicating below.
   'P @ Q' means 'P is not greater than Q'.
   'P © Q' means 'P is not smaller than Q'.

'P % Q' means 'P is neither smaller than nor equal to Q'.
'P # Q' means 'P is neither greater than nor equal to Q'.
'P + Q' means 'P is neither smaller than nor greater than Q'.

Now in each of the following question, assuming the given statements to be true. Find which of the two conclusions I and II given below them is/are definitely true. Give answer:–

1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either conclusion I or II is true.
4) if neither conclusion I nor II is true.
5) if both conclusion I and II are true.

71. **Statements:** C # D @ N % X, N @ U + O % A
    Conclusions: I. C # O
    II. X @ O

72. **Statements:** T % S + J @ D, S © Q + F % B
    Conclusions: I. D % F
    II. D + F

73. **Statements:** V @ R + W, K @ E @ V, E © N + Y
    Conclusions: I. K # Y
    II. W © Y

74. **Statements:** H © P + T, P @ S # L, T © J + U
    Conclusions: I. U # S
    II. L © U

75. **Statements:** F @ D + N, O © T + S % J, D @ J % R
    Conclusions: I. O % F
    II. O % R

Directions (Q. 76-80): Study the following information carefully and answer the given questions.

Six persons—A, B, C, D, E and F—stay on different floors of a six-storey building (ground floor is numbered as floor 1 and top floor is numbered as floor 6). Each of them is in a different profession, viz Doctor, Engineer, Lawyer, Architect, Journalist and Teacher.

D is a lawyer but stays neither on floor 2 nor on floor 5. B is neither an Architect nor a Journalist but stays on floor 6. The Journalist doesn't stay below the floor of the Architect but stays below the floor of the Engineer. The Teacher stays either on floor 1 or on floor 4. E doesn't stay on an odd-numbered floor. A, who stays on floor 4, is either a Journalist or an Architect. Either C or F is an Engineer.

76. If F stays on floor 1, what is the profession of C?
    1) Lawyer   2) Engineer   3) Teacher   4) Architect   5) Can't be determined

77. Who stays on floor 3?
    1) Engineer   2) Lawyer   3) Doctor   4) Architect   5) Teacher

78. Which of the following combinations is definitely true?
    1) C–Teacher–Floor 1   2) D–Lawyer–Floor 5   3) E–Architect–Floor 2
    4) F–Engineer–Floor 5   5) None of these

79. Which of the following combinations is definitely false?
    1) A–Journalist–Floor 2   2) B–Doctor–Floor 6   3) E–Architect–Floor 2
    4) D–Lawyer–Floor 3   5) None of these

80. If the Journalist stays on Floor 2, which floor will the Engineer stay on?
    1) 1   2) 5   3) 4
    4) 6   5) Can't say exactly

Directions (Q. 81-85): Study the following information carefully and answer the given questions.

Eight friends—A, B, C, D, E, F, G and H—are sitting around a square table in such a way that four of them sit at four corners of the table while the other four sit in the middle of the four sides. Those who sit in the middle of the four sides face the centre while those who sit at the four corners face outside.

A sits third to the left of C, who does not sit at any of the corners. E sits to the left but not on the immediate left of F, who is not an immediate neighbour of C. B and H are the immediate neighbours of neither each other nor of A and D respectively.

D does not sit in the middle of any sides and at least two persons can sit between A and D. E and G sit opposite each other but do not face each other. F cannot sit opposite C.

81. Who among the following sits third to the left of H?
     1) B   2) G   3) D   4) C   5) None of these

82. What is the position of B with respect to F?
     1) Third to the left   2) Third to the right   3) Fourth to the left
     4) Second to the right   5) None of these

83. Who among the following represent the immediate neighbours of F?
     1) HG   2) GA   3) BE   4) AH   5) None of these

84. If they all are rearranged clockwise in alphabetical order starting from A (A retains his original position), which of the following would retain his original position?
     1) H   2) G   3) D   4) E   5) None of these

85. Who among the following sits exactly between D and G?
     1) B   2) H   3) F   4) C   5) None of these

Direction (Q. 86-90): Read the following information carefully and answer the questions given below:

Four boys P, Q, R, S and their friends- W, X, Y, Z, not necessarily in the same order, go to Agra in a car. The car has eight seats, in such a way that there are two rows of three seats each and the front row has two seats, including the driver's seat. The car has six seats immediately next to six windows. The driver's seat is at the extreme right side in the front row of the car. The seating arrangement follows the pattern as given below.

Neither P nor Y nor their friends sit in the front row, which consists of two seats. X and R sit in the 2nd row and the 3rd row respectively. Y and Z are the only two persons who do not sit next to a window. Q sits in the same column as W and one place ahead of him. P is friend of W and sits in the same row in which R sits, but not in the same column in which the driver sits. No pair of friends sit in the same row or the same column. Y is friend of R.

86. Who among the following is sitting just beside the right window of the last row?
     1) Q   2) R   3) S   4) Q or R   5) R or S

87. Who among these eight persons is driving the car?
     1) W   2) P   3) Q   4) R   5) S

88. Who must be sitting to the immediate right of Y?
     1) W   2) X   3) Q   4) R   5) S

89. Which of the following is definitely true regarding their position?
     1) S and W are in same row   2) Both W and Y are sitting besides window.
     3) Both X and R are sitting in the same row 4) All are true
     5) None is true

90. Who among the following is sitting at last but one row?
     1) P   2) Z   3) X   4) X or W   5) Both X & Y

Directions (Q. 91-95): Read the following information carefully and answer the questions given below:

A, B, C, D, E, F, G, H, I and J are ten persons sitting around a circular table facing towards the centre of the table. Now read the following clues before answering the questions given.

(i)   A is sitting third to the left of I.
(ii)   F is sitting third to the right of H.
(iii) C is sitting fourth to the right of G.
(iv)   Only B is sitting between E and J.
(v)   I is sitting adjacent to C.
(vi)   E is not sitting third to the right of C or second to the left of G.

91.   Who is sitting third to the left of C?
       1) J   2) D   3) G
       4) Data inadequate   5) None of these

92.   Who is sitting on the immediate right of I?
       1) C   2) J   3) F
       4) Data inadequate   5) None of these

93.   In which of the following pairs is second person sitting fourth to the right of the first?

       1) C, B   2) H, E   3) G, F   4) B, C   5) A, B

94.   Four of the following five are alike according to their seating arrangement and hence form a group. Which of the following does not belong to that group?
       1) H, C   2) F, J   3) E, G   4) A, D   5) C, I

95.   Which of the following statements is not definitely true?
       1) F is the neighbour of I   2) A is the neighbour of H   3) B is sitting third to the left of A
       4) H is sitting between A and C   5) I is sitting second to the left of J

Directions (Q. 96–100): Study the following information carefully and answer the questions given below:

In a certain code language 'jump and run away' is written as 'tm jd qm ni', 'don't run too fast' is written as 'ki qm lt sa', 'watch fast and furious' is written as 'lt kb jd tec', and 'you jump too fast' is written as 'sa zn ni lt'.

96.   Which of the following represents the code for 'don't jump' in the given code language?
       1) ki ni   2) ki zn   3) zn ni   4) ni sa   5) None of these

97.   What is the code for 'you'?
       1) ni   2) lt   3) sa   4) zn   5) None of these

98.   What does the code 'tec' stands for?
       1) furious   2) watch   3) Either 1 or 2   4) and   5) None of these

99.   What is the code for 'away'?
       1) am   2) tm   3) ni   4) jd   5) None of these

100.   Which of the following may be represent the code for 'fast and fly?
       1) lt jd zn   2) lt jd ti   3) jd tec ni   4) lt zn ni   5) None of these

IBPSPO-PT-B-007

1. 4; Replace 'into' with 'in'.
2. 1; Replace 'for' with 'of'.
3. 3; Replace 'much' with 'so'.
4. 5
5. 4; Add 'so' after do.

6. 1	7. 1	8. 4	9. 3	10. 2
11. 4	12. 1	13. 5	14. 2	15. 5

(26-30): ACBDE

16. 2	17. 1	18. 5	19. 3	20. 4
21. 3	22. 2	23. 1	24. 5	25. 2
26. 2	27. 1	28. 1	29. 3	30. 4

31. 3; **I.** $42p^2 + 53p + 15 = 0$

or, $42p^2 + 18p + 35p + 15 = 0$
or, $6p(7p + 3) + 5(7p + 3) = 0$
or, $(6p + 5)(7p + 3) = 0$

$\therefore p = \dfrac{-5}{6}$ or $\dfrac{-3}{7}$

II. $42q^2 - 53q + 15 = 0$

or, $42q^2 - 18q - 35q + 15 = 0$
or, $6q(7q - 3) - 5(7q - 3) = 0$
or, $(6q - 5)(7q - 3) = 0$

or, $q = \dfrac{5}{6}$ or $\dfrac{3}{7}$

Hence, q > p.

32. 5; **I.** $p^2 + 24p + 143 = 0$

or, $p^2 + 11p + 13p + 143 = 0$
or, $p(p + 11) + 13(p + 11) = 0$
or, $(p + 13)(p + 11) = 0$
$\therefore p = -11$ or -13

II. $q^2 + 6q - 55 = 0$

or, $q^2 - 5q + 11q - 55 = 0$
or, $q(q - 5) + 11(q - 5) = 0$
or, $(q + 11)(q - 5) = 0$
$\therefore q = -11$ or 5

Hence q ≥ p

33. 2;; **I.** $p^2 - 14p + 48 = 0$

or, $p^2 - 8p - 6p + 48 = 0$
or, $p(p - 8) - 6(p - 8) = 0$
or, $(p - 6)(p - 8) = 0$
$\therefore p = 6$ or 8

II. $q^2 + 16q + 63 = 0$

or, $q^2 + 7q + 9q + 63 = 0$
or, $q(q + 7) + 9(q + 7) = 0$
or, $(q + 9)(q + 7) = 0$
$\therefore q = -9$ or -7

Hence p > q.

34. 5; **I.** $6p^2 - 41p + 63 = 0$

or, $6p^2 - 27p - 14p + 63 = 0$
or, $3p(2p - 9) - 7(2p - 9) = 0$
or, $(3p - 7)(2p - 9) = 0$

$\therefore p = \dfrac{7}{3}$ or $\dfrac{9}{2}$

II. $6q^2 - 59q + 143 = 0$

or, $6q^2 - 33q - 26q + 143 = 0$
or, $3q(2q - 11) - 13(2q - 11) = 0$
or, $(3q - 13)(2q - 11) = 0$

$\therefore q = \dfrac{13}{3}$ or $\dfrac{11}{2}$

We can't get any specific relationship between p and q.

35. 4; **I.** $p^2 - 14p + 45 = 0$

or, $p^2 - 5p - 9p + 45 = 0$
or, $p(p - 5) - 9(p - 5) = 0$
or, $(p - 9)(p - 5) = 0$
or, $p = 9$ or 5

II. $q^2 - 8q + 15 = 0$

or, $q^2 - 5q - 3q + 15 = 0$
or, $q(q - 5) - 3(q - 5) = 0$
or, $(q - 3)(q - 5) = 0$
$\therefore q = 3$ or 5

Hence p ≥ q.

36. 5; $11^2 - 1^3 = 120$

$12^2 - 2^3 = 136$

$13^2 - 3^3 = 142$

$14^2 - 4^3 = 132$

$15^2 - 5^3 = 100$

$16^2 - 6^3 = 40$

Hence, the wrong number in the series is 60.

37. 2; 5 × 4 - 10 = 10
10 × 6 + 20 = 80
80 × 8 - 30 = 610
610 × 10 + 40 = 6140
6140 × 12 - 50 = 73630
Hence, the wrong number in the series is 20.

38. 1; 117448 ÷ 8 - 2 = 14679
14679 ÷ 7 - 3 = 2094
2094 ÷ 6 - 4 = 345
345 ÷ 5 - 5 = 64
64 ÷ 4 - 6 = 10
Hence the wrong number in the series is 117484.

39. 4; $6 + 1^2 + (8 × 1) = 15$
$15 + 2^2 + (7 × 2) = 33$
$33 + 3^2 + (6 × 3) = 60$
$60 + 4^2 + (5 × 4) = 96$
$96 + 5^2 + (4 × 5) = 141$
Hence the wrong number in the series is 59.

40. 5; 200 × 1 + 8 = 208
208 × 1.5 + 9 = 321
321 × 2 + 10 = 652

$652 \times 2.5 + 11 = 1641$
$1641 \times 3 + 12 = 4935$
There is no wrong number in the series.

41. 2; The percentage increase in sales in the year 2014 as compared to the year 2009 of different companies are as follows:

Dell = $\dfrac{45-30}{30} \times 100 = 50\%$

HP = $\dfrac{50-25}{25} \times 100 = 100\%$

Sony = $\dfrac{35-22.5}{22.5} \times 100 = 55.56\%$

Samsung = $\dfrac{32.5-20}{20} \times 100 = 62.5\%$

Hence maximum is of HP.

42. 4; Required percentage increase

$= \dfrac{\left(45+50+35+32.5\right)-\left(30+25+22.5+20\right)}{30+25+22.5+20} \times 100$

$= \dfrac{162.5-97.5}{97.5} \times 100 \approx 66.67\%$

43. 1; Average sales (in thousands) of all the companies together in the years are as follows:

$2009 = \dfrac{30+25+22.5+20}{4} = 24.375$

$2010 = \dfrac{45+30+25+35}{4} = 33.75$

$2011 = \dfrac{25+15+32.5+35}{4} = 26.875$

$2012 = \dfrac{37.5+45+27.5+15}{4} = 31.25$

$2013 = \dfrac{35+42.5+25+20}{4} = 30.625$

$2014 = \dfrac{45+50+35+32.5}{4} = 40.625$

44. 3; Total sales of Sony (in thousand)
$= 22.5 + 25 + 32.5 + 27.5 + 25 + 35 = 167.5$
Total sales of Dell (in thousand)
$= 30 + 45 + 25 + 37.5 + 35 + 45 = 217.5$

∴ Required percentage less = $\dfrac{217.5-167.5}{217.5} \times 100 \approx 23\%$

45. 4; Average sales of laptops (in thousand) different companies in all the years together

Dell = $\dfrac{30+45+25+37.5+35+45}{6} = 36.25$

HP = $\dfrac{25+30+15+45+42.5+50}{6} = 34.58$

Sony = $\dfrac{22.5+25+32.5+27.5+25+30}{6} = 27.92$

Samsung = $\dfrac{20+30+35+15+20+32.5}{6} = 26.25$

Hence, second highest is in HP

46. 3; Capacity of container

$= \dfrac{8}{1-\left(\dfrac{121}{144}\right)^{1/2}} = \dfrac{8}{1-\dfrac{11}{12}} = 8 \times 12 = 96$ litre

47. 5; Desired sum of numbers are 2, 3, 4, 5, 6, 7
n (E) = {(1,1) ; (1,2); (1,3); (1,4); (1,5); (1,6); (2,1); (2,2); (2,3); (2,4); (2,5); (3,1); (3,2); (3,3); (3,4); (4,1); (4,2); (4,3); (5,1); (5,2), (6,1)}
$= 6 + 5 + 4 + 3 + 2 + 1 = 21$
And n(s) = 36

∴ Required probability = $\dfrac{21}{36} = \dfrac{7}{12}$

48. 2; Boy's share = $x\left[1-\left(\dfrac{x+y}{xy}\right)d\right]$

Where X = ₹ 400
x = 6, y = 8, d = 3

∴ Boy's share = $400\left[1-\left(\dfrac{6+8}{6\times8}\right)\times3\right]$

$= 400\left[1-\dfrac{14}{6\times8}\times2\right] = 400\left[1-\dfrac{7}{8}\right]$

$= 400 \times \dfrac{1}{8} = ₹\ 50$

49. 1; Compound interest = $200000\left(1+\dfrac{8}{200}\right)^4 - 2,00,000$

$= 200000\left(\dfrac{26}{25}\right)^4 - 2,00,000$

$= 233971.712 - 200000 = ₹\ 33971.712$

50. 3; Side = $9 \times \dfrac{2}{\sqrt{3}} = 6\sqrt{3}$

∴ Area = $\dfrac{\sqrt{3}}{4} \times 6\sqrt{3} \times 6\sqrt{3}$ $\left(\sqrt{3}=1.732\right) = 46.764\ \text{cm}^2$

51. 3;

	Total Appeared	Total Qualified
A	8100	5760
B	5940	3520
C	4320	2240
D	9180	6720
E	4860	4480
F	9720	3520
G	11880	4160

= 4320 + 4860 : 8100 +9720
= 9180 : 17820

= 17 : 33

52. 5; A → 71.11%   B → 59.26%
        C → 51.85%   D → 73.20%
        E → 92.18%   F → 36.21%
        G → 35.02%

53. 3; Difference = 5940 − 4860 = 1080
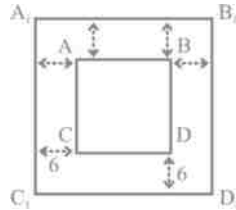
54. 1; $\dfrac{12800}{17280} \times 100 = 74.07\%$

55. 3; 8960 : 11880 = 224 : 297

56. 4; Total = 28   ∴ Boys = 20, Girls = 8
        $n(S) = {}^{28}C_3 = 3276$
        $n(E) = {}^{20}C_1 \times {}^{8}C_2 = 20 \times 28 = 560$

        ∴ $P(E) = \dfrac{n(E)}{n(S)} = \dfrac{560}{3276} = \dfrac{140}{819} = \dfrac{20}{117}$

57. 3; Let the side of the room be x metres.

        Area of the verandah = $2 \times \{(x + 12) \times 6 + 6 \times x\} = 696$
        or, $12\{(x + 12) + x\} = 696$
        ∴ $2x + 12 = 58$

        ∴ $2x = \dfrac{58-12}{2} = \dfrac{46}{2} = 23$ m

        ∴ Area of the square = $x^2 = (23)^2 = 529$ sqm

58. 4; We assume the six particular persons as one. So, total number of persons is 18 − 6 + 1 = 13 and they can sit around a circular table in 12! ways. Six particular persons can sit in 6! ways among themselves.
        ∴ Total number of ways = 12! × 6!

59. 3; Let the amount be x.
        ∴ x × 1.64 − x × 1.45 = 14.63
        0.19x = 14.63

        ∴ $x = \dfrac{14.63}{0.19} = 77$

60. 1; Let the amount deposited at 17% be x.

        ∴ $\dfrac{x \times 17 \times 2}{100} + \dfrac{(72000 - x) \times 11 \times 2}{100} = 19080$

        or, 34x + 1584000 − 22x = 1908000
        or, 12x = 1908000 − 1584000 = 324000

        ∴ $x = \dfrac{324000}{12} = 27000$

(61–65):

Number of girls = $\dfrac{11}{17} \times 5100 = 3300$

Number of boys = $\dfrac{6}{17} \times 5100 = 1800$

	Boys	Girls
Only Drama	20 × 18 = 360	27 × 33 = 891
Only Dance	14 × 18 = 252	2 × 252 = 504
Only Singing	828	1335 - 828 = 507
Drama +Dance + Singing	1800/5 = 360	1398

61. 3; Total number students enrolled in only Drama
        = 360 + 891 = 1251

62. 1; Required answer = 1398

63. 4; Required percentage = $\dfrac{828}{507} \times 100 \approx 163\%$

64. 2; Required ratio = 360 : 891 = 40 : 99

65. 5; Required number of boys = 252 + 360 = 612

66. 3; All cars are bottles (A) + All bottles are windows (A) = A + A = A = All cars are windows. Hence, conclusion I follows. But conclusion II does not follow because there is not negative statement.

        Again, All dolls are windows → conversion → Some windows are dolls. Now, All cars are windows (A) + Some windows are dolls (I) = A + I = No conclusion III follows.

67. 3; Some players are balls (I) + All balls are circles (A) = I + A = I = Some players are circles. It means All circles being players is a possibility. Hence, conclusion III follows.

        Again, Some tigers are balls (I) + All balls are circles (A) = I + A = I = Some tiger are circles → implication → Some circles are tigers. Hence, conclusion I follows. But conclusion II does not follow because there is no negative statement.

68. 3; Some surgeons are editors, it means All editors being surgeons is a possibility. Hence conclusion II follows.

        Again, Some chemists are surgeons (I) + Some surgeons are editors (I) = I + I = No conclusion. Hence, conclusion III does not follow.

        Now, Some surgeons are editors (I) + Some editors are translators (I) = I + I = No conclusion. Hence, conclusion I does not follow.

69. 5; All mangoes are apples (A) + No apple is a fruit (E) = A + E = E = No mango is a fruit → conversion → No fruit is a mango. Hence, conclusion II follows.

        Again, All branches are fruits (A) + No fruits is a mangoes (E) = A + E = E = No branches is a mangoes → conversion → No mango is a branch. Hence, conclusion III follows. But I does not follow.

70. 4; Some actors are managers (I) + No managers is a worker (E) = I + E = O = Some actors are not workers.

It means All workers being actors is a possibility. Hence, conclusion III follows. But I does not follows.

Again, No manager is a worker → conversion → Now worker is a manager.

Now, All employees are workers (A) + No worker is a managers = A + E = E = No employee is a managers → conversion → No manager is a employee (E)

So, Some actors are managers (I) + No manager is a employee (E) = I + E = O = Some actors are not employees. Thus, II does not follow.

(71–75):

$$P @ Q \rightarrow P \leq Q$$
$$P © Q \rightarrow P \geq Q$$
$$P \% Q \rightarrow P > Q$$
$$P \# Q \rightarrow P < Q$$
$$P + Q \rightarrow P = Q$$

71. 1; **Given statements:** C < D < N > X .... (i)
                          N < U = O > A .... (ii)

    Combining (i) and (ii)

    C < D ≤ N ≤ U = O > A

    Comparing C and O

    C < O ⟹ C # O

    thus I is true

    A < O = U ≥ N > X

    Comparing X and O

    X < O ⟹ X @ O

    thus II is not true.

72. 3; **Given statements:** T > S = J < D .... (i)
                          S > Q = F > B .... (ii)

    Combining (i) and (ii)

    B < F = Q ≤ S = J ≤ D

    Comparing D and F

    D > F ⟹ D © F

    thus I is not true

    D > F ⟹ D © F

    thus, II is not true

    Hence, either I or II is true.

73. 2; **Given statements:** V < R = W .... (i)
                          K < E < V............. (ii)
                          E > N = Y ....(iii)

    Combining (ii) and (iii)

    K ≤ E ≥ N = Y

    We can't compare K and Y

    Hence I is not true

    Again, combining (i), (ii) and (iii)

Y = N ≤ E ≤ V ≤ R = W

Comparing W and Y

W > Y ⟹ W © Y

Thus, II is true

74. 4; **Given statements:** H > P = T .... (i)
                          P < S < L ....(ii)
                          T > J = U ....(iii)

    Combining (i), (ii) and (iii)

    U = J ≤ T = P ≤ S < L

    Comparing U and S

    U < S ⟹ U @ S

    thus I is not true

    Comparing L and U

    L > U ⟹ L % U

    Thus, II is also not true.

75. 5; **Given statements:** F < D = N .... (i)
                          O > T = S > J .... (ii)
                          D < J > R .... (iii)

    Combining (i) (ii) and (iii)

    We get,

    O ≥ T = S > J ≥ D ≥ F

    Comparing O and F

    O > F ⟹ O % F

    Thus I is true

    O ≥ T = S > J > R

    Comparing O and R

    O > R ⟹ O % R

    Thus, II is true

(76-80):

Person	Profession	Floor
B	Doctor	6
C/F	Engineer	5
A	Journalist	4
D	Lawyer	3
E	Architect	2
F/C	Teacher	1

76. 2; If F stays on floor 1, C will stay on floor 5 and then he will be the Engineer by profession.

    77. 2   **78.** 3   **79.** 1

80. 2; According to the given condition, the Journalist must stay below the floor of the Engineer. So, if the Journalist stays on floor 2, the condition is not violated. Therefore, the Engineer keeps on staying on floor 5, ie his original position.
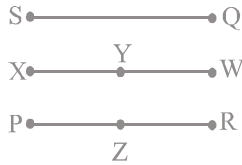
(81-85):
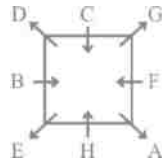
81. 3
82. 3
83. 2
84. 2;   Only G retains his original position.
85. 4;   C sits exactly between D and G.

(86-90):
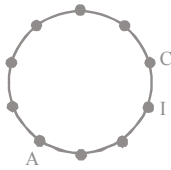

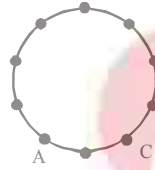86. 2   87. 3   88. 1   89. 5   90. 4

(91-95): Let us arrange the positions of the ten persons.
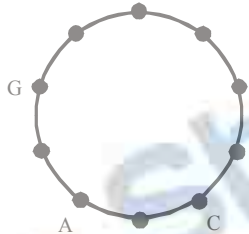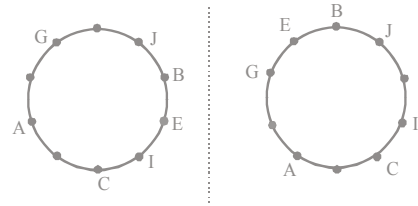From clues (i) and (v), we get

Possibility-I   **Possibility-II**

Now, using clue (iii), we reject possibility I.

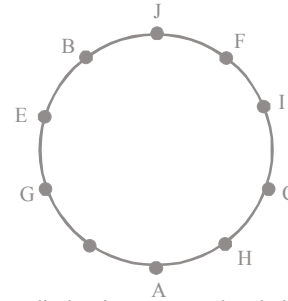Now, from clues (iv) and (vi), we get two possible cases:
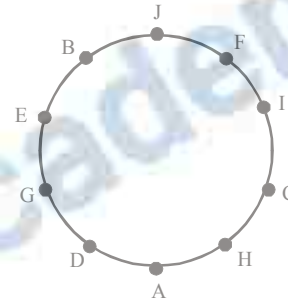

Possibility-II (a)   **Possibility-II (b)**

Reject possibility II(a) because positions of F and H can't be arranged according to clue (ii).
Using clue (ii), we get

Now, by elimination we get that it is 'D' who is sitting between G and A. Thus the complete arrangement is as follows:

91. 2   92. 3   93. 1
94. 4;   In others the second person is sitting on the immediate right of the first.
95. 3

(96–100):

jump and run away → tm jd qm ni	...(i)
don't run too fast → ki qm lt sa	...(ii)
watch fast and furious → lt kb jd tec	...(iii)
you jump too fast →sa zn ni lt	...(iv)
From (i) and (ii), run →qm	...(v)
From (ii) and (iii) , fast →lt	...(vi)
From (i) and (iii), and → jd	...(vii)
From (i) and (iv), jump →ni	...(viii)
From (i), (v), (vii) and (viii), away →tm	...(ix)
From (ii), (iv) and (vi), too → sa	...(x)
From (ii), (v), (vi) and (x), don't→ki	...(xi)
From (iv), (vi), (viii) and (x), you→zn	...(xii)
From (iii), (vi) and (vii),	
watch/furious → kb/tec	...(xiii)

96. 1   97. 4   98. 3   99. 2   100. 2