Test-I English Language

Directions (Q. 1-15): 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.

We are in the midst of a severe economic crisis. Our macroeconomic indices are weakening. The first quarter growth figure has come in at 4.4 per cent and some analysts are projecting a figure for FY 2013-14 of below 4 per cent — the Hindu rate that we all thought was a historical memory. Inflation in critical items is well above double digits — year-on-year prices of vegetable goods have increased by 46 per cent; that of cereals by 18 per cent and proteins by 11 per cent. The rupee is hovering close to Rs. 70 to the dollar and the Sensex is gyrating, but in fall. The finance minister has pronounced a 10-point programme to narrow the fiscal deficit, balance the current account, stabilise the currency, **contain** inflation and bring the economy back onto the growth path. Whether he succeeds or not remains to be seen. The odds are against him. He has to **contend** with populist political colleagues, and the immune system of the economy has been so weakened that it seems no longer capable of countering the **convulsions** of the international market. But even if he does succeed, there is doubt that potential investors will bring India back onto their radar screen. Sure, "hot money" might flow back, but investments into the more stable and longer-term "bricks and mortar" and services sectors will most likely remain lacklustre.

This is because the current crisis is not just about "poor economics". It is also about the loss of confidence in the government's commitment to upholding the constitutional checks and balance of governance. It is about the weakening of the pilars upon which Brand India has been built and which so positively differentiated us from other emerging economies.

As every marketer knows, there is a difference between "advertising" and "branding". Advertising is a **tangible** instrument for hawking a product. Branding is an intangible asset that **embodies** the qualities, values and experience of the company. The two are. of course, interrelated. Advertising helps build the "brand" and brand reinforces (hopefully) sales. But they are conceptually different.

When India was growing at 8 per cent plus, it was not difficult to develop a compelling advertorial for the country.

The pitch was pegged on the fundamentals of the economy — the large market, our youthful population, the reservoir of talent—and the ingredients of Brand India. Economic growth had not done away with corruption, red tape and **shoddy** infrastructure, but these negatives were offset by the assurance that if and when the entry hurdles were overcome, the strength of our institutions would ensure a level playing field, respect for contracts and protection against the arbitrary and discretionary exercise of power.

Today, these assurances have been dented. Investors see not only an economy on the skids, but a governance process that is opaque and unpredictable The government may have had "good" reasons for the spate of tax charges that have been slapped on the multinationals and for unilaterally rewriting binding contracts and passing orders with retroactive effect, but the result has been to make investors nervous about the operating environment, for the first time since the onset of economic reforms, boardroom discussions are not about specific investments but about the fundamentals of the Indian polity. People are asking **generic** questions. What is the nature of India's democracy? How strong are the institutions of the executive, legislature and judiciary? Have these institutions got so hollowed out that there is a power vacuum? And so. where does power reside? Investors will want satisfactory answers to these questions before they bring India back on their investment agenda.

Investors invest in a country's future. Whilst they may be influenced by its present they do not invest in it. Nor do they invest on the basis of a comparison between a country's past and its present Herein lies our hope. We have messed up the present, but we can still recover the future. To do so the government will have to no doubt first resolve the current crisis. This will not be easy. The PM and FM arc confident they can bring the fiscal and current account deficit under control. But unfortunately, the numbers are not adding up and the international market is not helping.

1. **Why has the author specifically mentioned that this is the first lime since the onset of economic reforms that boardroom discussions are not about specific investment but about the fundamentals of the Indian polity?**
   (a) Because of excessive political interference in the economic matters of the country
   (b) Because of the proven inefficiency of the present Finance Minister and the Chairman of the Planning Commission
   (c) Because of the Induction of political leaders in the Cabinet Committee on Economic Affairs

(d) Because of the severe economic crisis and failure of the govt on the economic front

(e) None of these

2. **Which of the following is the characteristics of 'Branding'? Give your answer in the context of the given passage.**
   (a) Branding is the version of a product made by one particular manufacturer.
   (b) Branding is a permanent mark on the face of the product.
   (c) Branding embodies the qualities, values and experience of the company and enforces sales.
   (d) Branding of the product is the presentation of it to the public in a way that makes it easy for people to recognise or identify.
   (e) All the above

3. **Why is the author apprehensive about the success of the 10-point programme pronounced by the Finance Minister to resolve the current economic crisis?**
   (A) Because the parties in opposition, in most of the instances in the past, have not supported the ruling parties.
   (B) Because the steps taken by the finance Minister have proved a big failure.
   (C) Because the current economic crisis is not only about poor economics but also about the loss of confidence in government's commitment to upholding the constitutional checks and balances of governance.
   (a) Only (C)   (b) Only (B)
   (c) Only (A)   (d) Only (A) and (C)
   (e) Only (A) and (B)

4. **What are the factors that influence the investors' mentality as far as investment is concerned?**
   (a) Stable govt, experienced Finance Minister and open market
   (b) Good past and present record of the economy of a country
   (c) Better prospect of returns on invested money
   (d) Assurance of very high rate of returns by the govt
   (e) None of these

5. **Find the incorrect statement on the basis of the given passage.**
   (A) All newspapers except *The Hindu* are not happy with the macroeconomic indices of our country.
   (B) Among edible items, vegetable goods have posted the highest percentage increase.
   (C) As per the projection by the economic analysts the growth figure for the financial year 2013-14 is less than 4 per cent.
   (a) Only (B) and (C)   (b) Only (A)
   (c) Only (A) and (C)   (d) Only (B)
   (e) Only (C)

6. **What steps have been taken by the government to bring the economy back onto the growth path?**
   (a) The Congress Working Committee has decided to cut govt subsidies, discontinue some of the major welfare schemes and launch new schemes to lure foreign investors.
   (b) The govt has decided to seek help from the world bank and the IMF.
   (c) The Finance minister has pronounced a 10-point programme.
   (d) The Prime Minister has called for a meeting of world-class economists to resolve the economic crisis.
   (e) None of these

7. **What arguments about India were placed before investors in heyday of economic prosperity?**
   (a) India is a large market for investors.
   (b) India has liberalised its economic policy and kept its market open for foreign investors since 1991.
   (c) India has assured to respect contractual obligations and to provide protection against the arbitary exercise of power.
   (d) Only I)and(b)
   (e) Only l)and(c)

8. **Why are investors afraid of investing in India?**
   (A) Because of unilateral rewriting of binding contracts and passing orders with retroactive effect
   (B) Because of opaque and unpredictable governance process
   (C) Because of a number of tax charges slapped on the multinationals
   (a) Only (A) and (B)   (b) Only (B) and (C)
   (c) All (A), (B) and (C)   (d) Only (A)
   (e) None of these

9. **Which of the following affected the economic growth to a great deal? Give your answer in the context of the given passage**
   (a) Corruption   (b) Inferior infrastructure
   (c) Red tapism   (d) All (a), (b) and (c)
   (e) None of these

Directions (Q. 10-12): Choose the word/group of words which is MOST SIMILAR in meaning to the word/group of words printed in bold as used in the passage.

10. **Convulsions**
    (a) recession   (b) constrictions
    (c) reduction   (d) uncertainty
    (e) cramp

11. **Embodies**
    (a) excludes   (b) disintegrates
    (c) concentrates   (d) exhibits
    (e) personifies

12. **Generic**

(a) specific   (b) awkward (c) general
(d) difficult   (e) rude

Directions (Q. 13-15): Choose tfie word/group of words which is MOST OPPOSITE in meaning to the word/group of words printed in bold as used in the passage.

13. **Contain**
    (a) enclose   (b) incorporate
    (c) Increase   (d) decrease
    (e) drop

14. **Contend**
    (a) agree   (b) cede   (c) clash   (d) confront
    (e) meet

15. **Shoddy**
    (a) shabby   (b) cheap   (c) sleazy   (d) noble
    (e) superior

Directions (Q. 16-20): Read each sentence to find out whether there is any grammatical or idiomatic 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 (e). (Ignore errors of punctuation, if any.)

16. **(a) Imagine, if Pakistan and India have been together / (b) the Taliban would have spread / (c) its poison / (d) all across India. / (e) No error**

17. **(a) When a nation starts to descend into a crisis / (b) the satire and the ironic humour / (c) of its hapless citizenry / (d) begins to blossom. / (e) No error**

18. **(a) Syed Abdul Karim Tunda is thought to be the mastermind (b)/ behind several bomb incidents in various Indian cities/(c) including a failed attempt in New Delhi /(d) during the 2010 Common wealth Games/ (e) No error**

19. **(a) Challenged by the leader of opposition in the Rajya Sabha/(b) to explain the current economic crisis/(c) the Prime Minister broke his vow of silence to say/(d) there was no need to become panic./(e) No error**

20. **(a) A federal court in New York has issued summon / (b) to Congress president Sonia Gandhi for "shielding and protecting" leaders / (c) of her party who were allegedly involved / (d) in the anti-Sikh riots in India in 1984. / (e)No error**

Directions (Q. 21-25): Each question below has two blanks, each blank indicating that something has been omitted. Find out which option can be used to fill up the blanks in the sentence in the same sequence to make it meaningfully complete.

21. **Yasin Bhatkal, who was wanted in over two dozen terror cases_____India and had dodged**

security agencies on several_____, was arrested in Raxaul on the India-Nepal border.
(a) of, months   (b) around, years
(c) in, times   (d) across, occasions
(e) within, places

22. **The Lok Sabha passed the land _____ Bill, even as parties expressed_____on aspects of the legislation.**
    (a) requisition, resentment
    (b) acquisition, reservations
    (c) requirement. anger
    (d) distribution, dissatisfaction
    (e) procurement, disappointment

23. **A saram, the self-styled godman, that Congress leaders Sonia Gandhi and Rahul Gandhi were behind_____him in the sexual assault case.**
    (a) claimed, tarnishing   (b) insulted, arresting
    (c) alleged, confining   (d) asked, accusing
    (e) insinuated, framing

24. **The government in UP has _____ praise for its handling of the VHP's plan for a Parikarma____Ayodhya.**
    (a) received, around   (b) achieved, of
    (c) exclaimed, in   (d) claimed, surrounding
    (e) obtained, round

25. **The government and the BSP entered into a fresh after the Rajya Sabha passed a government _____ for appointment of two members in the JPC   on 2G spectrum.**
    (a) violence, legislation   (b) scuffle, law
    (c) confrontation, motion   (d) argument, move
    (e) discussion, ruling

Directions (Q. 26- 30): Rearrange the following sex en sentences (A), (B), (C), (D), (E), (F) and (G) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) The Governor of the Reserve Bank announces the Monetary Policy in April every year for the financial year that ends in the following March.

(B) Year 2014, saw major changes in monetary policy.

(C) The objectives of monetary policy in India have evolved to include **maintaining price stability, ensuring adequate flow of credit** to productive sectors of the economy for supporting economic growth, and **achieving financial stability.**

(D) This is followed by bi monthly policy reviews in which overall macroeconomic stability is sought to be ensured by tinkering with means such as CRR, SLR, and MSF etc.

(E) Further, Urjit Patel Committee recommended use of 'Inflation targeting' for purpose of monetary policy, instead of previous 'multiple indicators' regime

(F) Earlier there was review every 45 days, it was increased to 60 days so that impact of changes in policy is clearly visible and need for further actions could be properly gauged.

(G) So now RBI's monetary policy is solely based to target Inflation in the economy.

26. **Which of the following is the last sentence of the paragraph?**
   (a) A   (b) D   (c) G   (d) B

27. **Which of the following is the second last sentence of the paragraph?**

(a) C   (b) F   (c) G   (d) E

28. **Which of the following is the third sentence of the paragraph?**
   (a) A   (b) D   (c) G   (d) B

29. **Which of the following is the second sentence of the paragraph?**
   (a) C   (b) D   (c) A   (d) B

30. **Which of the following is the first sentence of the paragraph?**
   (a) C   (c) D   (c) G   (d) B

Test-II Reasoning Ability

31. **How many such pairs of letter are there in the word MANAGED each of which has as many letters between them in the word as in the English alphabetical series?**
   (a) Two   (b) Three   (c) None
   (d) More than three   (e) None of these

32. **How many meaningful English words can be formed with the letters RLIA, using each letter only once in each word?**
   (a) One   (b) Two   (c) Four
   (d) More than four   (e) Three

Directions (Q. 33-35): Read the following information carefully and answer the questions.

There is a group of six persons M, N, O, P, Q and R. Each of them has a different height. P is taller than Q. M is taller than N but smaller than O. R is shorter than only two persons. Q is shorter than only one person.

33. **Who among the following is the tallest?**
   (a) P   (b) R   (c) O   (d) N
   (e) None of these

34. **Who among the following is the third shortest?**
   (a) N   (b) Q   (c) R   (d) P   (e) O

35. **How many persons are taller than only M?**
   (a) One   (b) Two   (c) Three   (d) Four
   (e) Five

Directions (Q. 36-40): Study the following information carefully and answer the given questions.

A word and number arrangement machine when given an input line of words and numbers, rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : based 18 scheme 49 after 9 interested 25 aadhar 4 payment 42

Step I : aadhar 4 based 18 scheme 49 after 9 interested 25 payment 42

Step II : aadhar 4 after 9 based 18 scheme 49 interested 25 payment 42

Step III : aadhar 4 after 9 based 18 interested 25 scheme 49 payment 42

Step IV : aadhar 4 after 9 based 18 interested 25 payment 42 scheme 49

Step IV is the last step of the above input as the desired arrangement is obtained. As per the rules followed in the above question find the appropriate step for the given input.

Input : people 100 India 24 added 9 country 12 democratic 16 eligible 19

36. **How many steps will be required to complete the above input?**
   (a) Five   (b) Six   (c) Eight   (d) Nine
   (e) Four

37. **In Step III what will be the position of 16 from the left?**
   (a) Third   (b) Seventh   (c) Fifth   (d) Sixth
   (e) Eighth

38. **How many numbers exist between 9 and 24 in Step V?**
   (a) Two   (b) Three   (c) Four   (d) Six
   (e) Five

39. **In Step IV, if 16 is related to 19 then which number or word will 9 be related to?**
   (a) 24   (b) people   (c) 12   (d) 100
   (e) eligible

40. **Which of the following steps would be the last step but one?**
   (a) VI   (b) IV   (c) 11   (d) V   (e) Vn

41. **If the expressions, R < P and Q   T are true, then which of the following symbols should be placed in the blank spaces respectively in the given expression?**
   R _ P > N = T _ Q
   (a) >,   (b) ,<   (c) <,   (d) >,
   (e) ,

42. **Which of the following expressions is not necessarily true, if the given expression is true?**
   S   T   R   P   N   O   Q
   (a) S > P   (b) T > N   (c) T > P   (d) P > Q
   (e) None of.these

43. **Which of the following symbols should be placed in the blank spaces respectively to make the expressions T > O, R ☐ O and S < R definitely true?**
    O_S_R_T
    (a) <,>,<   (b) <, <,   (c) >,>,<   (d) <, , >
    (e) None of these

44. **Which of the following expressions is true, if the given expression is true?**
    B < U E > V L
    (a) L < E   (b) L >   (c) L E   (d) U > V
    (e) None of these

45. **In the following number sequence, how many such odd digits are there which are each divisible by its immediate preceding digit but not exactly divisible by its immediate succeeding digit?**
    3 9 4 2 6 5 3 1 2 2 8 3 1
    (a) One   (b) Three   (c) Four   (d) None
    (e) Two

Directions (Q. 46-50): Study the following information carefully and answer the given questions.

In BRICS summit the PM of each country is denoted by letters A, B, C, D and E. They are sitting around a circular table for dinner, but not in the same order, The PM of China is sitting second to the right of B. The PM of Russia is sitting second to the right of the PM of SA. Neither A nor E is the PM of Brazil or Russia. C is not the PM of India, who is sitting on the immediate left of the PM of Russia. The PM of China is sitting second to the left of D. C and E are immediate neighbours of each other.

46. **Who is the PM of SA?**
    (a) E   (b) B   (c) Either A or D
    (d) A   (e) Can't be determined

47. **What is the position of the PM of India with respect to E?**
    (a) Immediate left   (b) Second to the right
    (c) Second to the left   (d) Immediate right
    (e) Can't be determined

48. **If A becomes the PM of Brazil, then who will become the PM of SAf The two countries interchange their PMs)?**
    (a) D   (b) C   (c) Either D or B
    (d) Can't be determined   (e) None of these

49. **How many persons are sitting between B and C, if we start counting from B in clockwise direction?**
    (a) One   (b) None   (c) Two   (d) Three
    (e) Four

50. **In which of these pairs is the first PM not sitting on the immediate left of the second one?**
    (a) EA   (b) DB   (c) CE   (d) AD
    (e) CB

Directions (Q. 51-55): Study the following information carefully and answer the given questions.

- Seven friends P, Q, R, S, T, U and V study in Class X in three different sections A, B and C.
- Not less than two friends study in one section.
- All of them have a different favourite subject—Social Science, Physics, History, Mathematics, English, Biology and Chemistry.
- Each of them has a favourite sport - Cricket, Hockey, Football, Basketball, Tennis, Volleyball and Table Tennis.
- T's favourite subject is Chemistry and plays Table Tennis.
- Q and V study in the A section. Q's favourite subject is History. Neither Tennis nor Volleyball is his favourite game.
- The one whose favourite game is Football has Physics as his favourite subject and is in Section B only with R.
- P's favourite subject is Social Science. He plays Cricket and studies only with U.
- R studies Mathematics and V studies Biology. U plays Basketball.
- The one whose favourite subject is Maths doesn't play Volleyball.

51. **Who plays Tennis?**
    (a) P   (b) R   (c) T   (d) U   (e) V

52. **Who among the following study in Section B?**
    (a) RP   (b) UT   (c) RS   (d) TS   (e) PS

53. **How many friends study in Section A?**
    (a) Four   (b) Three   (c) Two   (d) One
    (e) None of these

54. **Who among the following plays Hockey?**
    (a) P   (b) Q   (c) R   (d) S   (e) T

55. **Which of the following pairs of games is not played by students of the same section?**
    (a) Cricket and Basketball
    (b) Hockey and Tennis
    (c) Tennis and Football
    (d) Hockey and Volleyball
    (e) TableTennis and Volleyball

Directions (Q. 56-60): Study the following information carefully to answer the given questions.

In a certain code language 'weather is so cool' is written as 'a pa ma se', 'so are we going' is written as 'ma ne ta ra', 'as going cool' is written as 'pa ne he', 'is weather hot' is written as 'la se ka', 'desert are hot' is written as 'ka te ra' and 'mountains are cool' is written as 'pa ra ha'.

56. **What is the code for 'mountains'?**
    (a) pa   (b) ra   (c) pa or ha
    (d) ha   (e) Can't be determined

57. **What is the code for 'cool'?**
    (a) pa   (b) la   (c) na   (d) ra

(e) None of these

58. **What is the code for 'going'?**
    (a) ne   (b) la   (c) ka   (d) se   (e) ma

59. **What is the code for 'going hot desert'?**
    (a) nekala   (b) katese   (c) katene   (d) ka ta na
    (e) None of these

60. **What will be the code for 'so desert'?**
    (a) ma ta   (b) se te   (c) mase   (d) te ne
    (e) None of these

Directions (Q. 61-62): In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

(a) if only conclusion 1 follows.
(b) if only conclusion II follows.
(c) if either conclusion I or II follows.
(d) if neither conclusion I nor II follows.
(e) if both conclusions I and II follow.

(61-62) :

Statements: Only medicines are tablets.
Most tablets are tonic.
Many tablets are bitter.

61. **Conclusions:** I. Many tonics are medicines.
II. Many bitter are medicines.

62. **Conclusions :** I. Only tonics being tablets is a possibility.
II. Only tonics being bitter is a possibility.

63. **Statements :** A few towns are cities.
Only cities are villages.
No city is cool.
Conclusions : I. No village is cool.
II. Only villages being cool is a possibility.

(64-65):

64. **Statements:** Some red are colours.
No red is a paint.
All colours are black.
Conclusions: I. Some colours are not paints.
II. All red being black is a possibility.

65. **Conclusions: I.** Some black being paints is a possibility.
II. All paints being black is a possibility.

Test-III Quantitative Aptitude

66. **5 persons are chosen at random from a group of 4 men, 3 women and 5 children. The probability that exactly 3 of them are children is them are children is**
    (a) $\dfrac{36}{48}$ (b) $\dfrac{35}{132}$ (c) $\dfrac{34}{139}$ (d) $\dfrac{35}{221}$
    (e) $\dfrac{37}{135}$

67. **There are two mixtures in which milk and water are in the ratio of 2 : 3 and 3 : 7 respectively. In what ratio should the two mixtures be mixed to form a new mixture in which the ratio of milk to water is 4 : 7?**
    (a) 7 : 4   (b) 7 : 3   (c) 7 : 2   (d) 3 : 8
    (e) None of these

68. **A money lender finds that due to a fall in the rate of interest from 13% to $12\dfrac{1}{2}$% his yearly income has reduced by Rs. 104. What is his capital?**
    (a) Rs. 10400   (b) Rs. 20800
    (c) Rs. 10800   (d) Rs. 20400
    (e) None of these

69. **The traffic lights at three different road crossings change after every 48 seconds. 72 seconds and 108 seconds respectively. If they all change simultaneously at 8 : 20 hours then at what time will they again change simultaneously?**
    (a) 8 : 27min 12 sec   (b) 8 : 28 min 12 sec
    (c) 8 : 30 min 12 sec   (d) 8 : 29 min 12sec
    (e) None of these

70. **An aeroplane started 30 minutes later than the scheduled time from a place-1800 km away from its destination. To reach the destination at the scheduled time the pilot increased the speed by 300 kmph. What was the speed of the aeroplane in kilometre per hour during the entire journey?**
    (a) 1300 km/h   (b) 1200 km/h
    (c) 1250 km/h   (d) 1320 km/h
    (e) 1420 km/h

71. **There is an equilateral triangle of which each side is 2m. With all three corners as centres, circles of radius in each are described. Calculate the area common to all the circles and triangles.**
    (a) 1.57 m^2 (b) 15.7 m^2
    (c) 0.157 m^2 (d) 1.67 m^2
    (e) None of these

72. **What sum of money at compound interest will amount to Rs. 2249.52 in 3 years, if the rate of interest is 3% for the first year, 4% for the second year and 5% for the third year?**

(a) Rs. 4000   (b) Rs. 5000
(c) Rs. 3080   (d) Rs. 2000
(e) Rs. 2530

73. **Three partners altogether invested Rs. 114000 in a business. At the end of the year, the first partner got Rs. 337.50, the second partner got Rs. 1125 and the third partner got Rs. 675 as profit. What is the ratio of their investments?**
(a) 3 : 10 : 6   (b) 10 : 3 : 6
(c) 6 : 10 : 3   (d) 6 : 3 : 10
(e) None of these

74. **A box contains 4 white balls, 3 black balls and 9 red balls. In how many ways can 4 balls be drawn from the box, if at least one white ball is to be included in a draw?**
(a) 1325   (b) 1421   (c) 325   (d) 428
(e) 912

75. **The area of a rectangle is equal to the area of the circle whose radius is 21 cm. If the length and the breadth of the rectangle are in the ratio of 14:11, what is its perimeter?**
(a) 142 cm   (b) 140 cm   (c) 132 cm   (d) 136 cm
(e) 150 cm

Directions (Q. 76-80): In each question below equations are given, find the relation between x and y and mark your answer:

(a) If x y (b) If x y
(c) If x y (d) If x y
(e) If x y

76. $\dfrac{3}{4} \quad \dfrac{7}{6} x \quad \dfrac{12}{15} \quad \dfrac{25}{24} y$

77. $\dfrac{42}{33} \quad \dfrac{12}{7} x \quad \dfrac{18}{7} \quad \dfrac{28}{27} y$

78. (i) $x \quad y \quad 16$
(ii) $x^2 \quad y^2 \quad xy \quad 192$

79. (i) $x^2 \quad 8x \quad 16 \quad 0$
(ii) $y^2 \quad 7y \quad 12 \quad 0$

80. (i) $x^2 \quad 10x \quad 24 \quad 0$
(ii) $y^2 \quad 12y \quad 36 \quad 0$

Directions (81-85): In each of the following questions a number series is given A number in the series is represented by x. You have to find out the number in the place of x and use this number of find at the value in the place of question mark (?) in the equation following the series.

81. **23   30 x 53   69   88   110**
$x^2 \quad 500 \quad$ **?**
(a) 1000   (b) 1100   (c) 1200   (d) 1300
(e) 1400

82. **16   21   30   45 x 101**
$x \quad 12 \quad$ **?   4**
(a) 320   (b) 325   (c) 330   (d) 340

(e) 350

83. **15   35   75 x 315   635**
$x \quad 30 \quad$ **?**
(a) $4\dfrac{1}{3}$ (b) $5\dfrac{1}{2}$ (c) $4\dfrac{1}{2}$ (d) $5\dfrac{1}{3}$
(e) $5\dfrac{1}{6}$

84. **276   24   2.25   1.5   1.4641 x**
$x \quad 4.5 \quad$ **?**
(a) 4.455   (b) 4.545   (c) 5.445   (d) 4.554
(e) none of these

85. $x \quad \dfrac{3}{10} \dfrac{1}{5} \dfrac{1}{10} \dfrac{1}{15} \dfrac{1}{30}$
$x \quad \dfrac{2}{5} \quad$ **?**
(a) 1   (b) $\dfrac{4}{5}$ (c) $\dfrac{3}{5}$ (d) $\dfrac{2}{5}$
(e) none of these

Directions (Q. 86-90): Study the following information carefully and answer the questions given below:
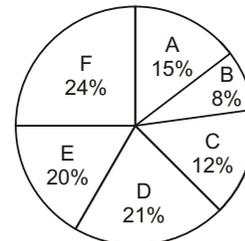
Pie-chart-I shows the percentage distribution of students who appeared in an examination from six different schools and pie-chart-II shows the percentage distribution of students who passed from these schools.

Pie-chart-I

A 18%, B 13%, C 10%, D 22%, E 20%, F 17%
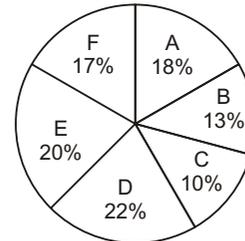
Total students appeared = 9500

Pie-chart-II

A 15%, B 8%, C 12%, D 21%, E 20%, F 24%

Total students passed = 2400

86. **What is the difference between the number of students appeared from School A and those appeared from School D?**
(a) 320   (b) 340   (c) 360   (d) 380
(e) 400

87. **How many students passed from School B and School F together?**
(a) 760   (b) 768   (c) 774   (d) 784
(e) 788

88. **How many students failed from School C?**
(a) 662   (b) 664   (c) 666   (d) 668
(e) 672

89. **What is the difference the total number of failed and passed students from School D?**
    (a) 1012   (b) 1048   (c) 1064   (d) 1078
    (e) 1082

90. **Total number of failed students from School E is approximately what percentage of the total number of appeared students from all six schools together?**
    (a) 15%   (b) 18%   (c) 21%   (d) 24%

Directions (Q. 91-95): Each of these questions consists of a question followed by information in three statements. You have to study the question and the statements and decide that information in which of the statement (s) is/are necessary to answer the question.

91. **How many people have opted for VRS from Company X?**
    I. 17% of males and 19% of females have opted for VRS.
    II. The ratio of total male employees to female employees was 7 : 9.
    III. The total number of employees before VRS was 8000.
    (a) Only II and II   (b) III and either I or II
    (c) Only I and II   (d) All I, II and III
    (e) Any two of the three

92. **What is the distance covered by Ram?**
    I. The distance covered by Manish is 10 km, which is half of the distance covered by Leroy,
    II. The distance covered by Ram is $\frac{3}{4}$ of the distance covered by Leroy.
    III. Leroy covers a distance of 20 km.
    (a) Only II   (b) Only II and III
    (c) Only I and II   (d) II and either I or III
    (e) Any two of the three

93. **What is the speed of a train?**
    I. The train crosses a pole in 9 seconds.
    II. The train crosses a platform in 30 seconds.
    III. The length of the train in metres is 108.
    (a) Only I and III   (b) Only II and III
    (c) All I, II & III   (d) Any two of the three
    (e) Question cannot be answered even with the information in all three statements

94. **What is the rate of interest p.c.p.a.?**
    I. An amount of Rs 9,000 fetches simple interest of Rs. 5,400.
    II. The amount fetches compound interest of Rs 1.560 in 2 years.
    III. The amount doubles itself in five years through simple interest.
    (a) Any one of the three   (b) Only III
    (c) Only II   (d) Only I
    (e) Question cannot be answered even with the information in all three statements

95. **What is the measure of the diagonal of a rectangle?**
    I. Length of the rectangle is 9 metres.
    II. Area of the rectangle is 72 sq metres.
    III. Breadth of the rectangle is 8 metres.
    (a) All I, II & III   (b) Only I and III
    (c) Any two of the three   (d) Only II
    (e) Question cannot be answered even with the information in all three statements

Directions (Q. 96-100): What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)

96. **32.156   41.998   24.053   ?**
    (a) 30418   (b) 28625   (c) 26544   (d) 32483
    (e) 39623

97. $(85.05)^2$ **?**
    (a) 7200   (b) 6400   (c) 7800   (d) 7700
    (e) 6900

98. **8989   45   ?**
    (a) 150   (b) 200   (c) 250   (d) 300
    (e) 100

99. **12.999   18.956   284.005   ?**
    (a) 396   (b) 301   (c) 316   (d) 338
    (e) 361

100. $\sqrt{7550}$ **?**
    (a) 94   (b) 78   (c) 64   (d) 70
    (e) 87

- Answer key

1. (d)	**2.** (c)	**3.** (a)	**4.** (c)	**5.** (b)	**6.** (c)	**7.** (e)	**8.** (c)	**9.** (e)	**10.** (e)
11. (d)	**12.** (b)	**13.** (c)	**14.** (a)	**15.** (e)	**16.** (a)	**17.** (d)	**18.** (b)	**19.** (d)	**20.** (a)
21. (d)	**22.** (b)	**23.** (e)	**24.** (a)	**25.** (c)	**26.** (c)	**27.** (d)	**28.** (b)	**29.** (c)	**30.** (a)
31. (b)	**32.** (d)	**33.** (a)	**34.** (e)	**35.** (d)	**36.** (a)	**37.** (d)	**38.** (b)	**39.** (c)	**40.** (b)
41. (c)	**42.** (d)	**43.** (e)	**44.** (a)	**45.** (a)	**46.** (d)	**47.** (b)	**48.** (b)	**49.** (d)	**50.** (e)
51. (b)	**52.** (c)	**53.** (b)	**54.** (b)	**55.** (b)	**56.** (d)	**57.** (a)	**58.** (a)	**59.** (c)	**60.** (e)
61. (d)	**62.** (e)	**63.** (a)	**64.** (e)	**65.** (e)	**66.** (b)	**67.** (a)	**68.** (b)	**69.** (a)	**70.** (b)
71. (a)	**72.** (d)	**73.** (a)	**74.** (a)	**75.** (e)	**76.** (c)	**77.** (b)	**78.** (a)	**79.** (d)	**80.** (e)
81. (b)	**82.** (a)	**83.** (e)	**84.** (c)	**85.** (a)	**86.** (d)	**87.** (b)	**88.** (a)	**89.** (e)	**90.** (a)
91. (d)	**92.** (d)	**93.** (a)	**94.** (b)	**95.** (c)	**96.** (d)	**97.** (a)	**98.** (b)	**99.** (c)	**100.** (e)

Hint & Solutions

16. **Replace 'have' with 'had'**

17. **Replace 'begins' with 'begin'**

18. **Replace 'bomb' with 'bombing'**

19. **Delete 'become'**

20. **Replace 'summon' with 'summons'**

(33-35) :

$P \quad Q$ …(i)

$O \quad M \quad N$ …(ii)

$\_ \quad \_ \quad R$ …(iii)

$\_ \quad Q$ …(iv)

Combining these, we get

$P \quad Q \quad R \quad O \quad MN$

(36-40): The machine rearranges the words in alphabetical order one by one. The numbers remain tagged with their preceding word.

Input: people 100 India 24 added 9 country 12 democratic 16 eligible 19

Step I: added 9 people 100 India 24 country 12 democratic 16 eligible 19

Step II: added 9 country 12 people 100 India 24 democratic 16 eligible 19

Step III: added 9 country 12 democratic 16 people 100 India 24 eligible 19

Step IV: added 9 country 12 democratic 16 eligible 19 people 100 India 24

Step V: added 9 country 12 democratic 16 eligible 19 India 24 people 100

41. **Check the options one by ones**

(Option 1) $R \quad P \quad N \quad T \quad Q$

This leads to $R \quad P$ and $T \quad Q$. hence, does not follow.

Option 2) $R \quad P \quad N \quad T \quad Q$

This leads to $R \quad R$ and $Q \quad T$. Hence it is flase and does not follow.

Option 3) $R \quad P \quad N \quad T \quad Q$

This leads to $R \quad P$ and $Q \quad T$, which is true and hence follows.

Option 4) $R \quad P \quad N \quad T \quad Q$

This leads to $R \quad P$ and $T \quad Q$, which is false and hence does not follow.

Option 5) $R \quad P \quad N \quad T \quad Q$

This leads to $P \quad R$ and $T \quad Q$, which is false and hence does not follow.

Hence only option (3) is true.

42. **Give expression :**

$S \quad T \quad R \quad P \quad N \quad O \quad Q$

Thus, $S \quad P$ is true, hence (1) does not follow.

Again, $T \quad N$ is true and hence (2) does not follow.

And, $T \quad P$ is true and hence (3) does nto follow.

We can't compare P and Q. Hence (d) follows.

43. **Check options one by one :**

(1) $O \quad S \quad R \quad T$

Thus T and O can't be compared. Hence does not follow.

(2) $O \quad S \quad R \quad T$

Thus, $T \quad O$. But $R \quad O$. Hence does not follow.

(3) $O \quad S \quad R \quad T$

Again, T and O can't be compared. Hence does not follow.

(4) $O \quad S \quad R \quad T$

T and O can't be compared. Hence, does not follow.

(51-55) : From the given statement we can draw the following chart :

Friend	Favourite subject	Favourite sport	Section
P	Social Science	Cricket	C
Q	History	Hockey	A
R	Mathematics	Tennis	B
S	Physics	Football	B
T	Chemistry	Table Tennis	A
U	English	Basketball	C
V	Biology	Volleyball	A

(56-60) :

Weather is so cool → la pa ma se ...(i)

so are we going → ma ne ta ra ...(ii)

as going cool → pa ne he ...(iii)

is weather hot → la se ka ...(iv)

desert are hot → ka te ra ...(v)

mountains are cool → pa ra ha ...(vi)

From (i) and (ii), so → ma ...(vii)

From (i), (iii) and (vi), cool → pa ...(viii)

From (ii), (v) and (vi), are → ra ...(ix)

From (ii) and (iii), going → ne ...(x)

From (iii), (vi) and (x), as → he ...(xi)

From (iv) and (v), hot → ka ...(xii)

From (v), (ix) and (xii), desert → te

From (vi), (viii) and (ix), mountains → ha

From (i) and (iv), weather/is → la/se

From (ii), (vii), (ix) and (x), we → ta

60. ma ta

61. **Only medicines are tables = all tablets are medicines (A) → conversion → Some medicines are tablets (I) + Most tablets are tonics (I) = I + I = No conclusion. Hence I does not follow. Similarly, II also does not follow.**

62. **Since there is no negative statement, the possibilities in I and II exist.**

63. **Only cities are villages → conversion → All villages are cities (A) + No city is cool (E) = A + E = E = No village is cool. Hence conclusion I follows. But conclusion II does not follow.**

64. **Some red are colours (I) + All colours are black (A) = I + A = I = Some red are black. Hence, conclusin II follows. Again, Some red are colours (I) → conversion → Some red (I) + No red is a paint (E) = I + E = O = some colours are not paints. Hence, conclusion I follows.**

65. **Some red are colours + All colours are black = I + A = I = Some red are black → conversion → Some black are red (I) No red is a paint = I + E = O = Some black are not paints. Thus, both I and II are possible.**

66. $n(S)$ = **Number of ways of selecting 5 persons out of 12** $= {}^{12}C_5 = \dfrac{12}{5!7!} = 792$

$n(E)$ = Number of ways of selecting 3 children out of 5, and 2 persons out of $(4 + 3 =)7$ persons

$= {}^5C_3 \times {}^7C_2 = \dfrac{5}{3 \times 2} \times \dfrac{7}{5 \times 2} = 210$

$P(E) = \dfrac{n(E)}{n(S)} = \dfrac{210}{792} = \dfrac{35}{132}$

68. **Let the capital be x.**

Then, $\dfrac{x \times 1 \times 13}{100} + \dfrac{x \times 25 \times 1}{2 \times 100} = 104$

or $\dfrac{x}{100}\left(13 + \dfrac{25}{2}\right) = 104$

or, $\dfrac{x}{100} \times \dfrac{1}{2} = 104$

$x = 104 \times 200 = $ Rs. 20800

69. **LCM of 48, 72, 108 = 432 seconds**

So, $\dfrac{432}{60} = $ 7 min, 12 sec

Thus required time = 8 hrs 20 min + 7 min 12 sec = 8 : 27 : 12 seconds

70. **Let the time taken at normal speed be $x - \dfrac{1}{2}$ hrs. Then time taken, when speed increases to 300 km/h, is x hrs.**

So, $\dfrac{1800}{x} - \dfrac{1800}{x - \dfrac{1}{2}} = 300$

or, $6\left(x - \dfrac{1}{2}\right) = 6x = x\left(x - \dfrac{1}{2}\right)$

or, $2x^2 - x - 6 = 0$

or, $2x^2 - 3x + 4x - 6 = 0$

$x(2x - 3) + 2(2x - 3) = 0$

or $(x + 2)(2x - 3) = 0$

or, $(x + 2) = 0$

$x = -2$ (neglect negative value)

And $(2x - 3) = 0$

$x = \dfrac{3}{2}$ hr

Speed $= \dfrac{1800}{\dfrac{3}{2}}$ km/h = 1200 km/h

72. **Let money be Rs. x.**

Then, $x\left(1 - \dfrac{3}{100}\right)\left(1 - \dfrac{4}{100}\right)\left(1 - \dfrac{5}{100}\right) = $ Rs. 2249

or, $x \times 1.03 \times 1.04 \times 1.05 = 2249.52$

$x = \dfrac{2249.52}{1.03 \times 1.04 \times 1.05} = $ Rs. 2000

$P = 2249.52 \times \dfrac{100}{103} \times \dfrac{100}{104} \times \dfrac{100}{105}$

= Rs. 2000

73. **HCF or 337.50, 1125 and 675 is 112.5. Then, ratio is $\dfrac{337.50}{112.5} : \dfrac{1125}{112.5} : \dfrac{675}{112.5} = $ 3 : 10 : 6**

74. **Reqd number of ways**

$= ({}^4C_1 \times {}^{12}C_3) + ({}^4C_2 \times {}^{12}C_2) + ({}^4C_3 \times {}^{12}C_1) + {}^4C_4$

$= 4 \times \dfrac{12 \times 11 \times 10}{6} + \dfrac{4 \times 3}{2} \times \dfrac{12 \times 11}{2} + (4 \times 12) + 1$

$= (4 \times 22 \times 10) + (6 \times 6 \times 11) + 48 + 1$

$= 880 + 396 + 48 + 1 = 1325$

75. **Area of circle $= \pi r^2 = \dfrac{22}{7} \times (21)^2$**

Let the length be $14x$ and breadth be $11x$.

Then,

Area of rectangle $= 14x \times 11x = \frac{21}{7} \times (21)^2$

Now, $x^2 \times 14 \times 11 = \frac{22}{7} \times 21 \times 21$

or, $x^2 = \frac{22 \times 21 \times 21}{7 \times 14 \times 11} = 9$

$x = 3$

Length of rectangle $= 14 \times 3 = 42$ cm.

Breadth $= 11 \times 3 = 33$ cm

Perimeter $= 2(42 + 33) = 2 \times 75 = 150$ cm

76. $\frac{3}{4} \times \frac{7}{6} x = \frac{12}{15} \times \frac{25}{24} y$

or, $\frac{7}{8}x = \frac{5}{6}y$

or, $\frac{x}{y} = \frac{5}{6} \times \frac{8}{7}$

or, $\frac{x}{y} = \frac{20}{21} < 1$

$x < y$

77. $\frac{42}{33} \times \frac{12}{7} x = \frac{18}{7} \times \frac{28}{27} y$

or, $\frac{24}{11}x = \frac{8}{3}y$

or, $\frac{x}{y} = \frac{8}{3} \times \frac{11}{24}$

or, $\frac{x}{y} = \frac{11}{9} > 1$

$x > y$

78. $x + y = 16$

$(x+y)^2 = (16)^2$

$x^2 + y^2 + 2xy = 256$

But $x^2 + y^2 + xy = 192$

On subtracting, $xy = 64$

$(x-y)^2 = (x+y)^2 - 4xy$

$(x-y)^2 = 256 - 4 \times 64$

$(x-y)^2 = 256 - 256$

$(x-y)^2 = 0$

$x - y = 0$

$x = y$

79. (i) $x^2 - 8x + 16 = 0$

$x^2 - 2 \times 4 \times x + (4)^2 = 0$

$(x-4)^2 = 0$

$x = 4$

(ii) $y^2 - 7y + 12 = 0$

$y^2 - 3y - 4y + 12 = 0$

$y(y-3) - 4(y-3) = 0$

$(y-3)(y-4) = 0$

$y = 3$ or 4

But $x = 4$

$x \geq y$

80. (i) $x^2 - 10x + 24 = 0$

$x^2 - 6x - 4x + 24 = 0$

$x(x-6) - 4(x-6) = 0$

$(x-6)(x-4) = 0$

$x = 6$ or 4

(ii) $y^2 - 12y + 36 = 0$

$y^2 - 2 \times 6 \times y + (6)^2 = 0$

$(y-6)^2 = 0$

$y = 6$

$x \leq y$

81. $23 \underset{7}{} 30 \underset{10}{} \overset{40}{x} \underset{13}{} 53 \underset{16}{} 69 \underset{19}{} 88 \underset{22}{} 110$

$x = 30 + 10 = 40$

$x^2 = 500 + (40)^2 = 500 + 1600 = 500$

$= 1100$

83. $15 \underset{2\ 5}{} 35 \underset{2\ 5}{} 75 \underset{2\ 5}{} \overset{155}{x} \underset{2\ 5}{} 315 \underset{2\ 5}{} 635$

$x = 75 \times 2 + 5 = 155$

$x = 30$?

or, $155 \times 30 = ?$

or, $? = \frac{155}{30} = \frac{31}{6} = 5\frac{1}{6}$

86. **Reqd difference** $= 9500 \times \frac{(22-18)}{100} = 380$

87. **Total number of students passed from School B and F together**

$= 2400 \times \frac{(8+24)}{100}$

$= 24 + 32 = 768$

88. $\because \quad C_{App} = 9500 \times \frac{10}{100} = 950$

$C_{pass} = 2400 \times \frac{12}{100} = 288$

Number of failed students $= 950 - 288 = 662$

89. $D_{App} = 9500 \times \frac{22}{100} = 2090$

$D_{Pass} = 2400 \times \frac{21}{100} = 504$

$D_{Fail} = 2090 - 504 = 1586$

Reqd difference $= 1586 - 504 = 1082$

90. $E_{Fail} = 9500 \times \frac{20}{100} - 2400 \times \frac{20}{100}$

$= 1900 - 480 = 1420$

Total appeared students $= 9500$

Reqd% $= \frac{1420}{9500} \times 100 = 14.94 = 15\%$

91. $? = \frac{5161.5}{18.5 \times 22.5} = \frac{5161.5}{416.25} = 12.4$

92. $? = \sqrt{81 + 144} = \sqrt{225} = 15$

93. $? = (20 - 3)^3$

$= (20)^3 - (3)^3 - 3 \times 20 \times 3(20 - 3)$

$= 8000 - 27 - (108 \times 23)$

$= 8027 - 4140 = 12167$

94. $? = 15 \times \frac{1}{5} \times \frac{1}{5} \times \frac{3}{5}$

96. $? = 32.156 + 41.998 \times 24.053 = 32483.280$

32483 (approx)