Test-I
English Language

Directions (Q. 1-5): Below is given a single word with its meaning in different contexts as options. You have to select all those options which are synonyms of the word when the context is changed. Select the correct alternative from 1), 2), 3), 4) and 5) which represents all those synonyms.

1. Copious
   (A) ample (B) debased
   (C) supporter (D) prudent
   1) Only (A) 2) Both (C) and (D)
   3) Both (B) and (D) 4) Only (D)
   5) All (A), (B), (C) and (D)
2. Nefarious
   (A) conspicuous (B) wicked
   (C) ambiguous (D) mischievous
   1) Only (B) 2) Only (A)
   3) Both (A) and (C) 4) Both (B) and (D)
   5) Only (A), (B) and (D)
3. Haven
   (A) eternal (B) refuge
   (C) protection (D) paradise
   1) All (A), (B), (C) and (D) 2) Both (A) and (C)
   3) Both (B) and (C) 4) Only (D)
   5) Both (A) and (D)
4. Despise
   (A) scorn (B) scoff
   (C) jeer (D) sneer
   1) Only (A) 2) Both (A) and (B)
   3) Only (A), (B) and (D) 4) Only (C)
   5) All (A), (B), (C) and (D)
5. Diminish
   (A) destroy (B) uproot
   (C) finish (D) wane
   1) Only (D) 2) Only (C)
   3) Both (A) and (B) 4) Only (A), (B) and (C)
   5) All (A), (B), (C) and (D)

Directions (Q. 6-10): Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) We have seen that increase or decrease in temperature causes extinction of organism if they are not able to tolerate this range of temperature.
(B) Temperature is an essential ingredient for survival of organisms.
(C) Some birds and mammals migrate to warmer places in winter to avoid extreme cold – this is essential for their survival.
(D) The living organisms can survive only in a narrow range of temperature which allows their metabolism.
(E) Therefore, for survival, an organism must develop physiological adaptation to withstand extremes of temperatures.
(F) Similarly, some desert animals like snakes, rats etc live inside burrows to avoid the intense heat of the desert.

6. Which of the following should be the **FIRST** sentence after rearrangement?
   1) C 2) D 3) B
   4) A 5) F
7. Which of the following should be the **SECOND** sentence after rearrangement?
   1) A 2) B 3) C
   4) E 5) D
8. Which of the following should be the **FIFTH** sentence after rearrangement?
   1) B 2) C 3) D
   4) A 5) F
9. Which of the following should be the **LAST (SIXTH)** sentence after rearrangement?
   1) F 2) C 3) D
   4) E 5) B
10. Which of the following should be the **THIRD** sentence after rearrangement?
    1) B 2) D 3) A
    4) C 5) F

Directions (Q. 11-15): In the following questions, a sentence has been given with some of its parts in bold. To make the sentence correct, you have to replace the bold part with the correct alternative given below. If the sentence is correct as it is, please give 5) as your answer (ie No correction required).

11. As Congress stood its ground, refusing to concede the opposition's demand for the scalps of Prime Minister and two of his cabinet colleagues, the BJP **scaled for** its vociferous call for Mr Singh's resignation.
    1) scaled on 2) scaled down
    3) scaled out 4) scaled in
    5) No correction required
12. He took the party by surprise when he walked into its parliamentary party meeting and attacked the leadership for **having being soft about** the UPA government on the corruption issue.

1) having been soft about
2) being soft for
3) being soft about
4) being soft on
5) No correction required

13. With the Supreme Court giving the green signal, the first reactor of the Kudankulam Nuclear Power Project **is thinking to go** critical any time this month.
1) is likely to go 2) likes to go
3) thinks to go 4) imagining to go
5) No correction required

14. There was never a **quo pro quid** between dismantling of structures put up by the Indian army and the withdrawal by Chinese troops after three weeks of camping on a disputed plateau in eastern Ladakh.
1) pro quo quid 2) pro quid quo
3) quid pro quo 4) quo quid pro
5) No correction required

15. He said it also violated the guidlines of the UGC, as it is mandatory that changes in the course structure **have to get its nod**.
1) has to gets nod
2) has to get its not
3) have to receive its concession
4) have to follow its permission
5) No correction required

Directions (Q. 16-24): Read the passage carefully and answer the questions given below it.

The alarm bells should start ringing any time now. An important component of the economy has been sinking and needs to be rescued urgently. This critical piece is 'savings' and, within this overall head, household savings is the one critical sub-component that needs close watching and nurturing.

While it is true that one of the primary reasons behind the current economic slowdown is the tardy rate of capital expansion—or, investment in infrastructure as well as plant and machinery—all attempts to stimulate investment activity are likely to come to nought if savings do not grow. Without any growth in the savings rate, it is futile to think of any spurt in investment and, consequently, in the overall economic growth. If we source all the investment funding from overseas, it might be plausible to contemplate investment growth without any corresponding rise in savings rate. But that is unlikely to happen.

Within the overall savings universe, the sub-component 'household savings' is most critical. It provides the bulk of savings in the economy, with private corporate savings and government saving contributing the balance. The worrying factor is the near-stagnation in household savings over the last eight years or so. What's even more disconcerting is the fact that household savings remained almost flat during the go-go years of 2004-08.

This seems to be counter-factual. There are many studies that show that there is a direct relationship between overall economic growth and household savings. So, at a time when India's GDP was growing by over 9% every year, the household savings rate stayed almost constant at close to 23% of GDP. There was, of course, an increase in absolute terms, but it remained somewhat fixed as a proportion of GDP.

What is responsible for this contradictory movement? The sub-group on household savings, formed by the working group on savings for the 12th Plan set up by the Planning Commission and chaired by RBI deputy governor Subir Gokarn, has this to say, "... a recent study ... had attributed the decline in the household saving ratio in the UK during 1995-2007 to a host of factors such as declining real interest rates, looser credit conditions, increase in asset prices and greater macro-economic stability... While recognising that one of the key differences in the evolving household saving scenario between the UK and India is the impact of demographics (dependency ratio), anecdotal evidence on increasing consumerism and the entrenchment of (urban) lifestyles in India, apart from the easier availability of credit and improvement in overall macroeconomic conditions, is perhaps indicative of some 'drag' on household savings over the last few years as well as going forward."

India has another facet: a penchant for physical assets (such as bullion or land). After the monsoon failure of 2009, and the attendant rise in the price levels that has now become somewhat deeply entrenched, Indians have been stocking up on gold. Consequently, savings in financial instruments dropped while those in physical assets shot up. This is also disquieting for policy planners because savings in physical assets stay locked in, and are unavailable to the economy for investment activity. There is a counter view that higher economic growth does not necessarily lead to higher savings. According to a paper published by Ramesh Jangili (Reserve Bank of India Occasional Papers, Summer 2011), while economic growth doesn't inevitably lead to higher savings, the reciprocal causality does hold true. "It is empirically evident that the direction of causality is from saving and investment to economic growth collectively as well as individually and there is no causality from economic growth to saving and (or) investment."

Whichever camp you belong to, it is beyond doubt that savings growth is a necessary precondition for promoting economic growth. The Planning Commission estimates that an investment of $1 trillion, or over 50 lakh crore, will be required for the infrastructure sector alone. And, a large part of this critical investment will have to be made from domestic savings.

16. What is the main concern of the author behind saying that 'the alarm bells should start ringing anytime now'?
1) The current economic growth is slowing down due to regular failure of monsoon.

2) Due to power shortage industrial growth could not touch the target.
3) Household savings are sinking and they require to be revamped.
4) Due to a sharp decline in real interest rates people have lost their enthusiasm to invest in govt schemes.
5) All the above

17. What is/are the primary reasons behind the current economic slowdown?
(A) Slow rate of capital expansion
(B) Tardy investment in infrastructure as well as plant and machinery
(C) A rapid increase in the cases of corruption, and decreased FDI
1) Only (A) 2) Both (A) and (B)
3) Either (A) or (C) 4) Both (B) and (C)
5) All (A), (B) and (C)

18. Which of the following is true about household savings?
1) Household savings provide bulk of savings in the economy.
2) These savings complement private corporate savings and govt savings.
3) Household savings have remained stagnant over the last eight years or so.
4) Household savings remained almost flat during the years 2004-08.
5) All the above

19. How is household savings related to overall economic growth? Give your answer in the context of the passage?
(A) Overall economic growth is directly related to household savings.
(B) Overall economic growth is inversely proportional to household savings.
(C) There is no specific relationship between overall economic growth and household savings.
1) Only (C) 2) Only (B)
3) Only (A) 4) Either (A) or (B)
5) Either (A) or (C)

20. What was/were the reason(s) of drop in savings in financial instruments after 2009?
1) Rise in price level of gold
2) Decrease in real interest rates on savings in financial instruments
3) Investment in physical assets, particularly land
4) Only 1) and 3)
5) Only 2) and 3)

21. Which of the following is/are the reasons of a drag on household savings in India over the last few years?
1) Increasing consumerism
2) Entrenchment of urban lifestyle
3) Easier availability of credit
4) Improvement in overall macroeconomic conditions
5) All the above

22. Find the incorrect statement on the basis of the given passage.
(A) The household savings rates continued to remain constant at close to 23% even when India's GDP was growing by over 9% every year.
(B) No doubt, there was an increase in absolute terms but household savings remained somewhat fixed as a proportion of GDP.
(C) In comparison to other factors of GDP, household savings do not contribute much.
1) Only (C) 2) Only (B)
3) Both (A) and (B) 4) Both (B) and (C)
5) All (A), (B) and (C)

23. As per the given passage, what factors caused the decline in the household savings ratio in the United Kingdom during 1995-2007?
1) Decline in real interest rates
2) Looser credit conditions
3) Increase in asset prices
4) Greater macroeconomic stability
5) All the above

24. Find the correct statement on the basis of the given passage.
(A) Higher economic growth does not necessarily lead to higher savings.
(B) It has now become evident that savings do not play any major role in economic growth, rather it is FDI which does so.
(C) Higher saving leads to higher economic growth.
1) All (A), (B) and (C)
2) Only (A) and (B)
3) Only (A) and (C)
4) Only (B)
5) Only (A)

Directions (Q. 25-30): In each sentence below four words that the printed in bold have been lettered (1), (2), (3), (4) and (5). One of them may be wrongly spelt or inappropriate in the context of the sentence. Find out the word, which is wrongly spelt or inappropriate if there is any. The letter of that word is the answer. If all the words, which are printed in bold, are correctly spelt and appropriate in the context of the sentence, mark (5) as the answer ie All orrect.

25. They are **negotiating** 1)/ to try and **reach** 2)/ an agreement which will **beneficial** 3)/ everyone **concerned** 4)/. All correct 5)

26. The company has **decided** 1)/ to **allott** 2)/ a **substantial** 3)/ **portion** 4)/of its profits to research and development. All correct 5)

27. It **remains** 1)/to be seen **whether** 2)/ these **reforms** 2)/ will be **acceptable** 4)/ by the Board. All correct 5)

28. His main **reasoning** 1)/ for **applying** 2)/ for this promotion is the **possibility** 3)/ of an overseas **posting** 4)/. All correct 5)

29. Since our financial **resources** 1)/ are **limitless** 2)/ we cannot **afford** 3)/ this **alternative.** All correct 5)
30. Your marketing **strategy** 1)/ should be **devised** 2)/ **dependent** 3)/ on the kind of business you **own.** All correct 5)

Test-II
Reasoning Ability

Directions (Q. 31-37): Study the following information carefully and answer the given questions.

P, Q, R, S, W, V, T and U are eight family members sitting around a circular table, facing the centre, but not necessarily in the same order. Each member has a different hobby, viz Watching TV, Swimming, Cooking, Singing, Reading, Dancing, Walking and Listening to Music, but not necessarily in the same order.

P is the head of his family and sits third to the left of wife Q. T has two sisters and sits second to the right of his grandfather, whose hobby is Watching TV. S sits on the immediate left of her brother, who sits in front of his father. V sits between the person who likes Swimming and the person who likes Singing. Her hobby is Reading. Q has two sons and one of the sons' hobby is Singing. U sits in front of her mother-in-law, whose hobby is Music. W's son's hobby is Walking. R and his sister-in-law like Singing and Cooking respectively.

31. How is W related to P?
    1) Brother 2) Father 3) Daughter
    4) Son 5) None of these
32. How many couples are there in the family?
    1) One 2) Two 3) Three
    4) Either 2) or 3) 5) None of these
33. Who among the following sits third to the left of W?
    1) Q 2) R 3) T
    4) S 5) None of these
34. Which of the following pairs of hobbies are a couple's hobbies?
    1) Cooking – Dancing 2) Music – Singing
    3) Watching TV – Reading 4) Swimming – Cooking
    5) None of these
35. What is the hobby of S?
    1) Cooking 2) Singing 3) Dancing
    4) Reading 5) None of these
36. Who among the following sits in front of R and what is the relationship between them?
    1) Q, who is brother of R
    2) P, who is daughter of R
    3) Q, who is mother of R
    4) P, who is father of R
    5) None of these
37. Which of the following statements is true?
    1) P is grandfather of V and sits third to the right of V.
    2) W is husband of U and sits on the immediate right of R.
    3) T is sister of V.
    4) All are true
    5) None of these

Directions (Q. 38-40): Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the questions.

38. Who among Sunita, Naina, Veena and Meena is the youngest?
    I. Veena is younger than Meena but older than Sunita and Naina.
    II. Meena is older than Naina and Veena but not older than Sunita.
    III. Sunita is older than Naina but not older than Veena.
    1) Only I and II 2) Only II and III 3) Only II and III
    4) Only I and III 5) None of these
39. How is the woman in the photograph related to Suraj?
    I. Pointing to the photograph, Suraj said, "She is mother of my father's only granddaughter".
    II. Pointing to the photograph, Suraj said, "She is the only daughter-in-law of my mother."
    III. Suraj has no siblings but has a daughter.
    1) Only I 2) Only II
    3) Either I or II 4) Only II and III
    5) None of these
40. Among five friends Aman, Neelam, Vidya, Rani and Sapna, whose salary is the highest?
    I. Vidya's basic salary is 100 more than Rani's.
    II. Rani's basic salary is more than those of Aman and Neelam but not more than that of Sapna.
    III. Neelam's salary is more than that of Aman.
    1) Only II and III 2) All I, II and III
    3) Only I and III 4) Only II
    5) None of these
41. The management of a company sent out an email, "…Do catch the legend playing his last international cricket match… being telecast live in our office cafeterias. Use your discretion to balance work and passion."
    Which of the following **inferences** can be drawn from the above statement? (An inference is something which is not directly stated but can be inferred from the given facts.)
    1) The cafeterias will have quite a number of employees watching the match.
    2) The cafeterias will be packed with employees.
    3) The bosses will be there in the cafeteria but not the subordinates.

4) The legend will reward those employees who watch the match.
5) None of these

42. According to Gartner, global PC shipments declined 8.6% in the third quarter of 2013, marking the sixth consecutive quarter of fall.
Which of the following can be a **probable cause(s)** of the above phenomenon?
(A) Computer chips are now being used in fewer walks of life.
(B) There has been a shift in consumer preference from PCs to tablets for daily content consumption.
(C) Internet-of-things will drive the next wave of computing.
1) Only B 2) None 3) Only B and C
4) Only A and C 5) Only C

43. The higher education system in the country is dealing with an acute faculty shortage.
Which of the following can be a **course(s) of action** to tackle the situation?
(A) There should be an improvement in the pay and perks of the faculty.
(B) The faculty should be exposed to the corporate world.
(C) More management institutes should be opened across the nation.
1) Only A and C 2) None 3) Only A
4) Only B 5) None of these

44. It would not be proper for the government to bestow the Bharat Ratna on Dhyan Chand nearly 34 years after he passed away.
Which of the following substantially **weakens** the argument given in the above statement?
1) Tendulkar was not considered for the Bharat Ratna in 2011 or 2012 because he was still playing.
2) Sardar Patel died in 1950 but he was given the Bharat Ratna in 1991.
3) There is a complete lack of transparency in the system of selecting the winners.
4) The Narasimha Rao-led Congress government in 1991 awarded the Bharat Ratna to the late Rajiv Gandhi, who had passed away a few months earlier.
5) None of these

45. "When you have support on the ground, it shows up in voting. There is a difference between a spontaneous crowd and a rented one." – A political leader
Which of the following **assumptions** is implicit in the above statement? (An assumption is something supposed or taken for granted.)
1) Rallies are hardly relevant in this day of tweets and 24x7 news.
2) Great public meetings are no longer the barometers of public opinion they once used to be.
3) The Left parties are past masters at organising crowds, but this rarely translates into electoral victory except in their old pockets of strength.
4) The crowd that you see at rallies is often gathered by hiring supporters.
5) None of these

Directions (Q. 46-50): In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. 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.

46. **Statements:** Some jeeps are trains.
All trains are buses.
Some boats are jeeps.
Some scooters are buses.
Conclusions: **I.** Some scooters are trains.
II. Some boats are buses.
III. Some jeeps are scooters.
IV. All buses are trains.
1) None follows 2) Only IV follows
3) Only II and IV follow 4) Only III follows
5) None of these

47. **Statements:** All teachers are engineers.
All engineers are cooks.
Some cooks are merchants.
All merchants are poets.
Conclusions: **I.** Some cooks are teachers.
II. Some merchants are engineers.
III. All cooks are engineers.
IV. Some cooks are poets.
1) None follows 2) Only I follows
3) Only II and IV follow 4) Only I and IV follow
5) None of these :

48. **Statements:** Some tools are hammers.
Some hammers are nails.
All nails are screws.
All screws are nuts.
Conclusions: **I.** All nuts are screws.
II. Some nuts are tools.
III. Some hammers are screws.
IV. All nuts are nails.
1) All follow 2) Only I follows
3) Only II follows 4) Only II and III follow
5) None of these

49. **Statements:** All pens are bags.
All bags are glasses.
No glass is a spoon.
All spoons are books.
Conclusions: **I.** Some glasses are pens.
II. Some books are bags.

III. No spoon is a pen.
IV. No bag is a book.

1) Only II and III follow
2) Only I, III and either II or IV follow
3) Either II or IV follows
4) All follow
5) None of these

50. **Statements:** All petals are flowers.
All thorns are flowers.
Some leaves are thorns.
Some stems are flowers.

Conclusions: **I.** Some petals are leaves.
II. All leaves are flowers.
III. Some stems are petals.
IV. No petal is a leaf.

1) None follows
2) Only II follows
3) Only II and either I or IV follow
4) Only either I or IV follows
5) None of these

Directions (Q. 51-55): Study the following information carefully to 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 the input and its rearrangement.

Input: site 72 easy owl 28 11 pull 81 40 cut
Step I: easy site 72 owl 28 pull 81 40 cut 11
Step II: easy owl site 72 pull 81 40 cut 11 28
Step III: easy owl cut site 72 pull 81 11 28 40
Step IV: easy owl cut pull site 81 11 28 40 72
Step V: easy owl cut pull site 11 28 40 72 81

Step V is the last step of the above input. As per the rules followed in the above steps, find out in each of the following questions, the appropriate step for the given input below and answer the questions based on it.

Input: curtail 53 vitiate 49 33 artifice 45 aptitude 23 ice 69 entourage bevy

51. How many steps will be required to complete the arrangement of the above input?
1) Four 2) Five 3) Six
4) Seven 5) None of these

52. What will be the position of '69' in Step IV?
1) 9th from the left 2) Fifth from the right
3) Extreme left 4) Extreme right
5) None of these

53. Which step would be the following output?
'aptitude artifice entourage curtail 53 vitiate 49 ice 69 bevy 23 33 45'
1) IV 2) V 3) VI
4) III 5) VII

54. Which word/number would be at the 9th position from the right end in Step V?
1) curtail 2) vitiate 3) bevy
4) 53 5) 49

55. Which of the following steps would be the last step but one?
1) V 2) VI 3) VII
4) IV 5) None of these

56. Y is to the west of X and north of W. R is to the southeast of Y and to the northwest of Q, who is to the east of W. R is in which direction of W?
1) South 2) West 3) Northeast
4) Can't be determined 5) None of these

57. Among Q, P, L, M and N, each scores a different marks. P scores more than only L and N and less than M and Q. Who scores the highest marks?
1) Q 2) M
3) N 4) Data inadequate
5) None of these

Directions (Q. 58-59): Study the following information carefully and answer the given questions.

R 5 8 E % M F 4 J I U @ H 2 © 9 T 1 6 W 3 P #

58. What will come in place of question mark (?) in the following series based on the above arrangement?
8% E FJ4 UH@ ?
1) ©9T 2) ©T9 3) 9T©
4) ©2T 5) None of these

59. Which of the following is fifth to the left of the eighteenth from the left end of the above arrangement?
1) @ 2) © 3) H
4) 2 5) None of these

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

A, Z, B, C, D, W, X and Y are eight friends sitting around a square table, two on each side. All of them are facing away from the centre and each is opposite another. There are three female members and they are not seated next to one another.

X sits between D and Z. Y is a female member who sits second to the left of X. Z is not a female member but sits opposite A, who is a female. C sits third to the left of W and is not a male member.

60. Who among the following sits on the immediate left of Z?
1) W 2) X 3) Y
4) B 5) None of these

61. Which of the following statements is true about W and X?
1) Both are opposite each other.
2) Both are males.
3) W is a female but X is a male.
4) Both are females.
5) None of these

62. Which of the following groups includes only females?
1) YAW 2) ACB 3) XYZ
4) ACY 5) None of these

63. Who among the following is sitting between B and W?
1) A 2) C and D 3) C
4) A and D 5) None of these

64. Who among the following sits third to the right of Z?
1) A 2) C 3) W
4) D 5) None of these

65. How many such pairs of letters are there in the word UBIQUITOUS each of which has as many letters between them in the word as in the English alphabetical series?
1) None 2) One 3) Two
4) Three 5) None of these

Test-III
Quantitative Aptitude

66. The number of students studying Arts, Commerce and Science in an Institute in the year 2002 were in the ratio 8 : 5 : 6 respectively. If the number in the three disciplines increased by 30%, 20% and 60% respectively in the year 2003, what was the new respective ratio?
1) 9 : 7 : 8 2) 26 : 15 : 24
3) 27 : 13 : 12 4) Cannot be determined
5) None of these

67. In how many different ways can the letters of the word 'HOUSING' be rearranged?
1) 120 2) 720 3) 2150
4) 2520 5) None of these

68. A boy walks 14 metres to cross a square field diagonally. What is the area of the square?
1) 78 sq mtrs 2) 120 sq mtrs
3) 118 sq mtrs 4) Cannot be determined
5) None of these

69. 8 women can complete a work in 10 days and 10 children take 16 days to complete the same work. How many days will 10 women and 12 children take to complete the work?
1) 5 2) 7
3) 3 4) Cannot be determined
5) None of these

70. The difference between the compound interest and the simple interest accrued on an amount of Rs 2,500 in 3 years was Rs 153.86. What was the rate of interest p.c.p.a.?
1) 15 2) 12
3) 14 4) Cannot be determined
5) None of these

Directions (Q. 71-15): In each of these questions a number series is given. Only one number is wrong in each series. You have to find out the wrong number.

71. 289 288 279 254 205 128 3
1) 288 2) 254 3) 205
4) 128 5) None of these

72. 2 10.5 53 265.5 1327.5 6640.5
1) 10.5 2) 1327.5 3) 6640.5
4) 265.5 5) None of these

73. 16 18 32 52 86 138 224
1) 52 2) 86 3) 138
4) 18 5) None of these

74. 6 35 173 689 2063 4125 4115
1) 689 2) 35 3) 4125
4) 2063 5) None of these

75. 4 5 18 81 385 2065
1) 385 2) 18 3) 2065
4) 81 5) None of these

Directions (Q. 76-80): Answer these questions based on the following information:

The average age of Ramesh, Sushant, Vijay, Neel, Amit and Rodney is 58 years. Amit and Vijay's total age is 124 years. Sushant is thrice Neel's age. The average age of Ramesh and Rodney is 52 years. Vijay is four years younger than Sushant. The ages of Ramesh and Rodney are in the ratio 29 : 23.

76. Who amongst the following is the youngest?
1) Rodney 2) Ramesh 3) Vijay
4) Neel 5) Amit

77. What is the average age (in years) of Sushant, Neel, Vijay and Amit?
1) 173 2) 61 3) 57
4) 48 5) None of these

78. In how many years will Neel be exactly half of Vijay's present age?
1) 4 2) 20 3) 13
4) 18 5) None of these

79. What is the ratio of the ages of Amit and Neel?
1) 19 : 15 2) 29 : 21 3) 17 : 18
4) 13 : 11 5) None of these

80. How old is Vijay (in years)?
1) 82 2) 66 3) 58
4) 74 5) None of these

Directions (Q. 81-85): 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.

81. 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.
1) Only II and II 2) III and either I or II
3) Only I and II 4) All I, II and III
5) Any two of the three

82. 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.

1) Only II
2) Only II and III
3) Only I and II
4) II and either I or III
5) Any two of the three

83. 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.

1) Only I and III
2) Only II and III
3) All I, II & III
4) Any two of the three
5) Question cannot be answered even with the information in all three statements

84. 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.

1) Any one of the three
2) Only III
3) Only II
4) Only I
5) Question cannot be answered even with the information in all three statements

85. 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.

1) All I, II & III
2) Only I and III
3) Any two of the three
4) Only II
5) Question cannot be answered even with the information in all three statements

Directions (Q. 86-90): These questions are based on the following table. Study it carefully and answer the questions:
Number of Items (in thousands) manufactured (M), rejected (R) and sold (S) by five different companies over the years

Company	A			B			C			D			E		
Year	M	R	S	M	R	S	M	R	S	M	R	S	M	R	S
2001	136	1.2	125	98	0.5	90	165	3.5	158	158	1.5	149	85	0.6	80
2002	164	1.7	138	115	1.1	102	172	2.9	166	169	1.9	162	96	0.8	90
2003	148	1.5	136	152	2.6	132	169	2.3	160	173	2.3	168	88	0.5	83
2004	156	2.2	145	147	1.8	140	178	3.2	172	166	2.1	159	102	0.9	98
2005	168	2.5	160	138	1.3	129	158	1.8	152	159	2.0	150	86	0.7	81
2006	175	2.8	168	168	2.2	148	180	2.4	171	171	2.4	165	105	0.8	101

Note: No. of Items accepted = No. of Items manufactured - No. of Items rejected

86. What is the percentage (rounded off to two digits after decimal) of items rejected out of the total items manufactured by Company 'B' in the year 2003?

1) 1.97 2) 1.71 3) 1.82
4) 1.96 5) None of these

87. How many items remained unsold out of the accepted items by Company A in 2004?

1) 800 2) 880 3) 8000
4) 8800 5) None of these

88. What is the total number of items accepted by all the five companies together in 2002?

1) 707600 2) 77600 3) 70760
4) 776000 5) None of these

89. **Approximately**, what was the average no. of items rejected by Company D for all the given years?

1) 2100 2) 2060 3) 2090
4) 1990 5) 2030

90. What was the total number of items manufactured by all the companies together in 2006?

1) 582000 2) 827000 3) 789000
4) 595000 5) None of these

Directions (Q. 91-95): What will come in place of the question-mark (?) in the following?

91. $8^4 \times \frac{1}{8^3} \times 8^5 \div 8^2 = 8^?$

1) 7 2) 2 3) 3
4) 4 5) None of these

92. $-(a - b) \times ? = b - a$

1) –1 2) 1 3) -a
4) a 5) None of these

93. $(a + b) = ? \times (-a - b)$
1) 1 2) –a 3) –1
4) –b 5) None of these

94. $|? + 14| = 11$
1) –3 2) –25 3) 25
4) 3 5) Either –3 or –25

95. $16 + 26 \times 2 = ?$
1) 84 2) 44 3) 40
4) 832 5) None of these

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

96. $63251 \times 82 = ? \times 42105$
1) 101 2) 123 3) 147
4) 165 5) 189

97. $\sqrt{84111} = ?$
1) 240 2) 270 3) 330
4) 290 5) 310

98. $(54.78)^2 = ?$
1) 3000 2) 3300 3) 3500
4) 3700 5) 3900

99. $(7171 + 3854 + 1195) \div (892 + 214 + 543) = ?$
1) 13 2) 18 3) 3
4) 26 5) 7

100. $(562\% \text{ of } 816) + 1449 = ?$
1) 4145 2) 5675 3) 6035
4) 7325 5) 8885

Answers and explanations

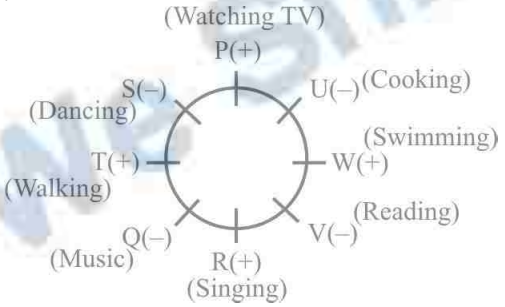
1. 1 2. 4 3. 3 4. 5 5. 1

(6-10): BDAECF

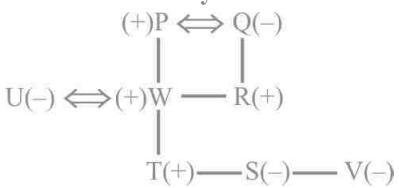
6. 3 7. 5 8. 2 9. 1 10. 3
11. 2 12. 4 13. 1 14. 3 15. 5
16. 3 17. 2 18. 5 19. 3 20. 4
21. 5 22. 1 23. 5 24. 3

25. 3; The appropriate word is *'benefit'*.
26. 2; The correct spelling is *'allot'*.
27. 4; The appropriate word is *'accepted'*.
28. 1; The appropriate word is *'reason'*.
29. 2; The appropriate word is *'limited'*.
30. 3; The appropriate word is *'depending'*.

(31-37):



Family tree



31. 4 32. 2 33. 1 34. 4 35. 3
36. 4 37. 1

38. 4; **From I:** Meena > Veena > Sunita, Naina
From II: Sunita > Meena > Naina, Veena
From III: Veena > Sunita > Naina
From I and III: Meena > Veena > Sunita > Naina.
Hence, Naina is the youngest.

39. 3; **From I:** The woman in the photograph may be Suraj's wife or Suraj's brother's wife.
From II: Again, Suraj's wife or Suraj's brother's wife.
From III: Suraj has no brother.
Hence, either I and III, or II and III are required to reach a certain conclusion, viz the woman is Suraj's wife.

40. 5; **From I:** Vidya's salary is 100 more than Rani's.
From II: Sapna > Rani > Aman, Neelam
From III: Neelam > Aman
Hence, all are not sufficient to answer the question.

41. 1; Choice 2 is ruled out because an appeal has been made to use one's "discretion to balance work and passion".

42. 1; (A) is the effect and not the cause. (C) has nothing to do with PCs. But (B) seems to be the probable cause quite obviously. If consumers start buying less PCs, their shipments are bound to decline.

43. 3; (B) may improve the quality of the faculty but won't address their shortage. (C) will only aggravate the crisis. (A) will address the shortage because "pay and perks" are a great puller for human resources.

44. 2; Choice 4 also weakens the argument but not substantially so. Rajiv Gandhi received the Bharat Ratna only "a few months" after his death.

45. 4; This one is implicit in the reference to "rented crowd" and its relation to the first sentence.

46. 1; All trains are buses → conversion → Some buses are trains (I). Hence IV does not follow. Now, Some scooters are buses + Some buses are trains = I + I = No conclusion. Hence I and consequently III do

not follow. Some boats are jeeps + Some jeeps are trains + All trains are buses = I + I + A = No conclusion. Hence II does not follow.

47. 4; All teachers are engineers + All engineers are cooks = A + A = A = All teachers are cooks → conversion → Some cooks are teachers (I). Hence I follows. All engineers are cooks + Some cooks are merchants = A + I = No conclusion. Hence II does not follow. All engineers are cooks (A) → conversion → Some cooks are engineers (I). Hence III does not follow. IV follows by combining the last two statements.

48. 5; All screws are nuts (A) → conversion → Some nuts are screws (I). Hence I does not follow. Some hammers are nails + All nails are screws = I + A = I = Some hammers are screws. Hence III follows. All nails are screws + All screws are nuts = A + A = A = All nails are nuts → conversion → Some nuts are nails (I). Hence IV does not follow. II also can't be concluded when we combine all the statements.

49. 2; All pens are bags + All bags are glasses = A + A = A = All pens are glasses → Some glasses are pens (I). Hence I follows. All pens are glasses + No glass is a spoon = A + E = E = No pen is a spoon → conversion → No spoon is a pen (E). Hence III follows. All bags are glasses + No glass is a spoon + All spoons are books = (A + E) + A = E + A = O = Some books are not bags. Hence neither II nor IV follows by combination. However, since they make a complementary I-E pair, either II or IV follows.

50. 4; All petals are flowers + conversion of All thorns are flowers = A + I = No conclusion. Hence I does not follow. Nor does IV follow. However, since they make a complementary I-E pair, either I or IV follows. Combining the last two statements, we get I + I = No conclusion. Hence II does not follow. Some stems are flowers + conversion of All petals are flowers = I + I = No conclusion. Hence III does not follow.

(51-55): The machine rearranges one word and one number in each step. The words starting with a vowel are arranged first in alphabetical order from the left. When this is done, the words starting with a consonant are arranged in alphabetical order. The numbers are arranged in ascending order from the right end.

Input: curtail 53 vitiate 49 33 artifice 45 aptitude 23 ice 69 entourage bevy

Step I: aptitude curtail 53 vitiate 49 33 artifice 45 ice 69 entourage bevy 23

Step II: aptitude artifice curtail 53 vitiate 49 45 ice 69 entourage bevy 23 33

Step III: aptitude artifice entourage curtail 53 vitiate 49 ice 69 bevy 23 33 45

Step IV: aptitude artifice entourage ice curtail 53 vitiate 69 bevy 23 33 45 49

Step V: aptitude artifice entourage ice bevy curtail vitiate 69 23 33 45 49 53

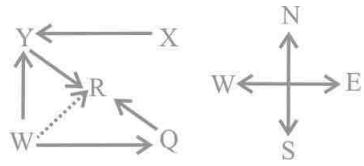
Step VI: aptitude artifice entourage ice bevy curtail vitiate 23 33 45 49 53 69

51. 3

52. 5; 8th from the left or 6th from the right

53. 4 54. 3 55. 1

56. 3;



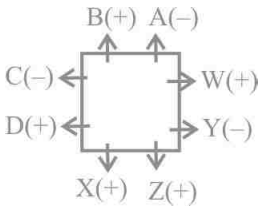
Hence, R is towards northeast of W.

57. 4; M, Q > P > L, N Hence, either M or Q.

58. 2;

59. 3; Fifth to the left of the eighteenth from the left end is (18 – 5 =) 13th from the left end, ie H.

(60-64):



60. 3 61. 2 62. 4 63. 1 64. 2

65. 2; U B I Q U I T O U S

66. 2; Suppose the number of students studying in Arts, Commerce and Science in the institute in the year 2002 be 800, 500 and 600 respectively. After increase in their strengths the new ratio would be as follows:

Arts : Commerce : Science

$$\frac{800\times130}{100} \quad \frac{500\times120}{100} \quad \frac{600\times160}{100}$$

= 1040 : 600 : 960 = 104 : 60 : 96 = 26 : 15 : 24

67. 5; The word HOUSING consists of seven distinct letters. Hence, total number of required arrangements = 7! = 7 × 6 × 5 × 4 × 3 × 2 × 1 = 5040

68. 5; We know that

$$\text{Area of a square field} = \text{side} \times \text{side} = \left(\frac{\text{Diagonal}}{\sqrt{2}}\right)^2$$

[$\because$ Diagonal of the square = $\sqrt{2}$ × side]

$\therefore$ Required area $= \left(\frac{14}{\sqrt{2}}\right)^2 = \frac{14\times14}{2} = 98$ sq m

69. 1; Suppose the work consists of 80 pillars (LCM of 10 and 16). Now, since 8 women can complete 80 pillars in 10 days, it implies that one woman can complete a pillar in a single day. Similarly, since 10 children take 16 days to complete 80 pillars, it implies that one child can complete ½ pillar in a single day.
Again, note that a group of 10 women and 12 children can complete (10 + 6 =) 16 pillars in a day. Hence, the whole work will be completed in (80 ÷ 16 =) 5 days.
Other method:
From the first part we can conclude that work done by 8 women = work done by 16 children
$\therefore$ 1W = 2C
Hence, a group of 10 women and 12 children possesses the strength equal to 16 women.
Now, it is obvious that a group of 16 women will complete the work in only 5 days because 8 women do the same work in 10 days.

70. 3; According to the given information

$$2500\left(1+\frac{r}{100}\right)^3 - \frac{2500\times r\times 3}{100} = 153.86$$

or, $$2500\left(\frac{100+r}{100}\right)^3 - \frac{2500\times r\times 3}{100} = 153.86$$

By solving the above equation we get r = 14%

71. 4; The series is
$-1^2, -3^2, -5^2, -7^2, -9^2, -11^2$.
Obviously, 128 should be replaced by 124.

72. 2; The series is ×5 + 0.5, ×5 + 0.5, ...
Obviously, 1327.5 should be replaced by 1328.

73. 5; Look at the series from the right end. You get that 224 is the sum of the two preceding terms (86 and 138). The same is true for 138 also [$\because$ 52 + 86 = 138].
Obviously, the number 32 should be replaced by 34 [$\because$ 16 + 18 = 34].

74. 3; The series is ×6 – 1, ×5 – 2, ×4 – 3, ...
Obviously, 4125 should be replaced by 4121.

75. 1; The series is $\times1 + 1^3, \times2 + 2^3, \times3 + 3^3$, ...
Obviously, 385 should be replaced by 388.

(76-80) :

Let us rename the persons Ramesh, Sushant, Vijay, Neel, Amit and Rodney as A, B, C, D, E and F respectively.
Now, according to the given information,
A + B + C + D + E + F = 348 years ... (i)
C + E = 124 years ... (ii)
A + F = 104 years ... (iii)
B = C + 4 ... ((iv)
B = 3D ... (v)
A : F = 29 : 23 ... (vi)
From (i) and (ii), we get
A + B + D + F = 224 years ... (vii)
From (iii) and (vi), we get

$$\text{A's age} = \frac{29\times104}{(29+23)} = 58 \text{ years}$$

F's age = 104 – 58 = 46 years
Now, using (vii), we get
B + D = 120 years
Again, from (v), we get
3D + D = 120 years
Therefore, **D = 30 years** and **B = 90 years**
Now, from (iv), we get **C = 90 – 4 = 86 years**
Again, from (ii), we get **E = 124 – 84 = 38 years**
Thus, the above information can be tabulated as below:

Persons	**Age (in years)**
1. Ramesh (A)	58
2. Sushant (B)	90
3. Vijay (C)	86
4. Neel (D)	30
5. Amit (E)	38
6. Rodney (F)	46

76. 4; Sushant > Vijay > Ramesh > Rodney > Amit > Anil

77. 2; The required average age

$$= \frac{90+86+30+38}{4} = 61 \text{ years}$$

78. 3; The required time $= \frac{86}{2} - 30 = 13$ years

79. 1; The required ratio $= \frac{38}{30} = \frac{19}{15}$ ie 19 : 15

80. 5; 86 years.

81. 4; From statements I, II and III we get:
Total number of employees = 8000

$$\text{Number of males} = \frac{7}{(7+9)}\times8000 = 3500$$

Number of females = 8000 – 3500 = 4500
Total number of employees who opted for VRS
= 17% of 3500 + 19% of 4500 = 595 + 855 = 1450

82. 4; We need the distance covered by Leroy to reach the answer while using statement II. We can get the distance covered by Leroy from any of the statements I and III.

83. 1

84. 2

85. 3; We know that

Diagonal of a rectangle $= \sqrt{(\text{Length})^2 + (\text{Breadth})^2}$

Hence, any two of the three statements can fulfil our need.

86. 2; Required $\% = \frac{2.6}{152} \times 100 = 1.71\%$

87. 4; Number of items that remain unsold out of the accepted items for company 'A' in year 2004
$= (156 - 2.2) - 145 = 8.8$
Since the figures in thousand is the accepted items that remain unsold $= 8.8 \times 1000 = 8800$.

88. 1; Total no. of items accepted in year 2002
$= (164 - 1.7) + (115 - 1.1) + (172 - 2.9) + (169 - 1.9) + (96 - 0.8)$
$= 162.3 + 113.9 + 169.1 + 167.1 + 95.2 = 707.6$
Since the figure is in thousands, no. of items accepted in year 2002
$= 707.6 \times 6 \times 1000 = 707600$

89. 5; No. of items rejected by Company D
$= 1.5 + 1.9 + 2.3 + 2.1 + 2.0 + 2.4 = 12.2$
Since the figure is in thousands,
no. of items rejected $= 12.2 \times 1000 = 12200$

$\therefore$ Average no. $= \frac{12200}{6} = 2033.33 \cong 2030$

90. 3; $(175 + 158 + 180 + 171 + 105)$ thousand $= 789000$

91. 4; $8^4 \times \frac{1}{8^3} \times 8^5 \times \frac{1}{8^2} = 8^{4-3+5-2} = 8^4$
$\therefore \; ? = 4$

92. 2; $-(a - b) \cdot x = b - a$
Put x replacing '?' (question mark)
or $-[-(a - b)x] = -[b - a]$
or $(a - b)x = a - b$
or $x = \frac{a - b}{a - b} = 1$

93. 3; $a + b = ? \times (-a - b)$
or $a + b = x \cdot (-a - b)$
[Put x replacing '?' (question mark)]
or $a + b = -x(a + b)$
or $x = -1$

94. 5; $|? + 14| = 11$
or $? + 14 = 11$
or -11
$\therefore \; ? = -25$ or -3

95. 5; $16 + 26 \times 2 = 16 + 52 = 68$

96. 2; $? \approx \frac{63251 \times 82}{42105} \approx 123$

97. 4; $\sqrt{84111} \approx 290$

98. 1; $(54.78)^2 \approx 55^2 = 3025$

99. 5; $? = \frac{12220}{1449} \approx 7$

100. 3; 562% of $816 + 1449 = 5.62 \times 816 + 1449 \approx 6000$