PART – I : ENGLISH LANGUAGE

Directions (1-8) : *Which of the phrases given against the sentences should replace the word/phrase given in* ***bold*** *in the sentence to make it grammatically correct ? If the sentence is correct as it is given and no correction is required, select 'No replacement required' as the answer.*

1. Nobody can deny the fact that Indian economy **is very different than** American economy.
   (1) are very different than
   (2) is so much different than
   (3) are very different from
   (4) is very different from
   (5) No replacement required
2. Accurate **statistics with regards to** the area occupied in different forms of cultivation are difficult to obtain.
   (1) statistic with regards to
   (2) statistics with regard to
   (3) statistic with regard to
   (4) statistics in regards to
   (5) No replacement required
3. **Seldom if ever** was there any training or instructions in such tactics for either the tank crews or the infantry formations.
   (1) Seldom or never
   (2) Seldom if never
   (3) Seldom or ever
   (4) Seldom has ever
   (5) No replacement required
4. As soon as I opened the front door of my house, **than I smelled** the distinctive aroma of fresh coffee.
   (1) then I smelled
   (2) that I smelled
   (3) I smelled
   (4) I smell
   (5) No replacement required
5. Although he had fewer supporters among the governing class, **but he was able** to get the popular vote.
   (1) he was able
   (2) and he was able
   (3) else he was able
   (4) or he was able
   (5) No replacement required
6. The party explicitly **denies that they are not** involved in mainstream politics.
   (1) denied that they are not
   (2) denies that they were
   (3) denied that they are
   (4) deny that they are not
   (5) No replacement required
7. I would rather be a poor man in a garret with plenty of good books to read than a king **who did not loved** reading.
   (1) who do not loved
   (2) who did not love
   (3) whom did not loved
   (4) whom did not love
   (5) No replacement required
8. The relatively static lattice in a diamond ensures that the scattering is at a minimum and the thermal conductivity **is exceptional** good.
   (1) are exceptional
   (2) was exceptional
   (3) are exceptionally
   (4) is exceptionally
   (5) No replacement required

Directions (9-13) : *Select the phrase/connector (it must be at the start) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.*

9. Some had hoped that Donald trump, in his inaugural address, would seek to heal the wounds created by a divisive campaign. His campaign was marked by the belligerence and rhetoric.
   A. When we see ourselves
   B. Despite the belligerence
   C. Healing the wounds
   (1) Only A (2) Both A and B
   (3) Only C (4) Only B
   (5) None of these
10. There is a growing influence of the Indian Diaspora on Capitol Hill. Trump will certainly see the advantages of doing business with India.
    A. As there is a growing influence of .....
    B. The growing influence of the Indian .....
    C. With the growing influence of the Indian .....
    (1) Only A is correct
    (2) Only C is correct
    (3) Both A and B are correct
    (4) Both A and C are correct
    (5) All are correct
11. We see ourselves repeating our ordinary routine. We realize how much wealth surrounds our life.
    A. When we see ourselves .....
    B. Our ordinary routine .....
    C. Realizing how much wealth .....
    (1) Only A (2) Both B and C
    (3) Only C (4) Only B
    (5) None of these
12. India has climbed rapidly up the ladder of growth rates. It has fallen relatively behind in the scale of social indicators of living standards.
    A. Though India has
    B. Although India has
    C. Despite falling behind
    (1) Only A is correct
    (2) Only C is correct
    (3) Both A and B are correct
    (4) Both B and C are correct
    (5) All are correct

13. There was no democracy in British India. The rulers could take bold decisions fearlessly without bothering about repercussions.
A. As there was no democracy in British India .....
B. Since there was no democracy in British .....
C. With the rulers taking bold decisions .....
(1) Only A is correct
(2) Only B is correct
(3) Both A and B are correct
(4) Both B and C are correct
(5) All are correct

Directions (14-18) : *Given below the sentences each of which has been divided into five parts out of which the first part has been marked* ***bold.*** *Each of the questions is then followed by the five options which give the sequence of the rearranged parts. You must choose the option which gives the correct sequence of the parts. If the sentence is already arranged or the correct sequence doesn't match any of the given sequence, mark (5), i.e., "None of these" as your answer.*

14. **Madhya Pradesh tried an alternative/** the difference between the market price (A)/ and the MSP, but traders took advantage by artificially depressing prices (B)/ to state procurement: paying the farmer (C)/ so that the state would pick up the tab (D).
(1) ACDB (2) DBAC
(3) CABD (4) BACD
(5) None of these

15. **While the lieutenant governor/** unless faced with an emergency (A)/ any decision of the government he finds problematic, (B)/ has the power to refer to the President (C)/ the court is clear that the lieutenant governor has no powers himself, (D)
(1) DABC (2) ABDC
(3) CBDA (4) BDAC
(5) None of these

16. **The need is to create market linkages,/** free farmers from the stranglehold of middlemen, (A)/ and institute organised retail to raise competition. (B)/ India also needs a robust futures market for (C)/ better price discovery to raise farm incomes (D)
(1) BDAC (2) ACBD
(3) BACD (4) CDAB
(5) None of these

17. **The proposal entails/** so that they can provide for the haircuts they take, (A)/ which has started showing signs of strengthening (B)/ immediate recapitalisation of the banks, (C)/ and regain the capacity to lend, to finance growth, (D)
(1) BCDA (2) DABC
(3) CADB (4) ADBC
(5) None of these

18. **It is neither necessary nor desirable/** But the Station House Officer (SHO) (A)/ in its administrative territory (B)/ should have a current list of all Whats App admins in his area (C)/ for every police station to know all the Whats App messages being shared (D)
(1) ACBD (2) BACD
(3) BDCA (4) DBAC
(5) None of these

Directions (19-25) : *Read the given passage carefully and answer the given questions. Some words have been given in* ***bold*** *to help you locate them while answering some questions.*

Poor and rural people around the world rely on plants and animals for shelter, food, income, and medicine. In fact, the United Nations Sustainable Development Goal (SDG15) on sustainable ecosystems acknowledges many developing societies' close relationship with nature when it calls for increased "capacity of local communities to **pursue** sustainable livelihood opportunities". But how is this to be achieved ?

The 1975 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) provides a viable framework for reducing poverty while also conserving nature. It regulates the harvesting and exchange of more than 35,000 wildlife species across a range of locales.

Nature has been described as the "GDP of the poor". The CITES framework, combined with strong national conservation policies, can simultaneously protect wild species and benefit poor, rural, and indigenous people, by encouraging countries and communities to adopt sound environmental management plans.

For example, under CITES, Andes communities shear the vicuña for its fine wool, which they sell to the luxury fashion industry in other parts of the world. Cameroonians collect African cherry bark for export to European pharmaceutical companies. And people on the Tibetan Plateau in Bhutan make a living selling caterpillar fungus to the traditional-medicine industry. However, outside of CITES, limited guidance is available to ensure that legal trade is sustainable and beneficial to the poor. Sustainable trade often depends on poor and rural communities conserving their own resources at the local level. To see what that looks like, the International Trade Center (ITC) recently examined how people in Southeast Asia sustainably manage the CITES-listed python trade Python skins are commonly used as raw material in the luxury fashion industry, and ITC surveys of python-skin harvesters, farmers, processors, and exporters in Vitenam and Malasia found that the trade reinforces livelihood resilience by providing an additional source of income.

In Vietnam, an estimated 1,000 households farm and trade pythons, and python harvesting in Malaysia provides incomes for low-skilled, low-income workers during periods when other employment opportunities are either out of season, or simply **scarce** because of larger economic factors. Researchers found that most of those harvesting pythons implement simple and effective sustainable-management plans, and that this has reduced pressure on wild populations.

However, python skins, like many wildlife products, are a commodity, so communities harvesting them are limited in

terms of how they can add value to increase returns. Women in the Peruvian Andes may clean vicuña wool by hand to increase the price it fetches per kilogram by $50, whereas selling a wool-scarf could yield them $150-200; a Malaysian python skin sells for $200, while a python-skin bag could sell for $2,000.

Still, some emerging countries are moving up the value chain and retaining a greater share of returns, as demonstrated by local brands such as Kuna, which markets alpaca and vicuña wool in Peru, and Natura, a Brazilian natural-cosmetic brand.

The biggest threats to the legal wildlife trade are poaching, smuggling, improper trade permitting, and animal abuse, all of which must be addressed by regulators and rural community stakeholders at the local level. Fortunately, rural communities are already in the best position to protect wildlife, so long as they are motivated to do so. In the right circumstances, a virtuous cycle, whereby local producers have a direct interest in protecting wildlife (because they are benefiting from its legal trade) is the best - and sometimes the only - long-term solution to the problem of sustainability.

To help with this, governments can increase rural communities' resource- and wildlife-use rights so that they can manage and protect their natural resources sustainably. For example, in the 1970s when Peru granted Andean communities the right to use vicuña wool, it saved the vicuña from extinction and created new, long-term income streams for the community. Because legal and natural circumstances vary by country and community, we will need similar policy innovations across different sectors.

19. What are the biggest threats to the legal wildlife trade ?
(1) Outside of CITES, limited guidance is available to ensure that legal trade is sustainable and beneficial to the poor.
(2) Legal and natural circumstances vary by country and community, we will need similar policy innovations across different sectors.
(3) The UN passed an historic resolution to tackle illicit wildlife trafficking, recognizing the effectiveness of the CITES legal framework.
(4) Poaching, smuggling, improper trade permitting, and animal abuse, all of which must be addressed by regulators and rural community stakeholders at the local level
(5) None of the above

20. Which among the following is provides a viable framework for reducing poverty while also conserving nature ?
(1) Fauna and Flora
(2) Sustainable ecosystems
(3) Wildlife species
(4) Both A and B
(5) None of the above

21. What according to the passage is commonly used as raw material in the luxury fashion industry ?
(1) Vicuña
(2) African cherry bark
(3) Python skins
(4) Caterpillar fungus
(5) All of the above

22. What governments can do to protect natural resources and wildlife sustainably ?
(1) It can increase rural communities' resource- and wildlife-use rights so that they can manage and protect their natural resources sustainably
(2) Legal and natural circumstances vary by country and community, we will need similar policy innovations across different sectors
(3) We should be supporting scientists working on new adaptive-management methods
(4) The private sector should be given incentives to invest in greater sustainable sourcing and increased supply- and production-chain transparency
(5) All of the above

23. Which of the following would be a suitable title of the passage ?
(1) Several advanced economies
(2) Biggest threats of the legal wildlife trade
(3) Resolution to tackle illicit wildlife trafficking, recognizing the effectiveness of the CITES legal framework
(4) A Virtuous Cycle for Conservation
(5) None of the above

24. Which among the following is MOST SIMILAR in meaning to the word "Pursue" ?
(1) Badger (2) Turmoil
(3) Eminent (4) Fragile
(5) Reverence

25. Which among the following is MOST OPPOSITE in meaning to the word "Scarce" ?
(1) Deficient (2) Sporadic
(3) Sparse (4) Abundant
(5) Premium

Directions (26-30) : *In the following questions, two columns are given containing three sentences/phrases each. In column-1, sentences/phrases are A, B and C and in the column-2 the sentences/phrases are D, E and F. A sentence/ phrase from the column-1 may or may not connect with another sentence/phrase from the column-2 to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (5), i.e., "None of these" as your answer.*

26.

Column-1
A. As the head of the family, he ensures that
B. Ravi is such a disorganized fellow that
C. The boy next door nags his parents because

Column-2
D. he runs around like a headless chicken
E. he succeeds to make everyone laugh
F. he goes out and earns a living for his family

(1) C-E and B-F (2) A-F
(3) B-E (4) A-D
(5) None of these

27.

Column-1

A. Some rich guy from Boston
B. People tend to raise their voices when they
C. As soon as the herd heard the gunshots, they

Column-2

D. are losing an argument
E. all were fatally injured
F. just bought the house next to mine

(1) C-F (2) A-D (3) B-E
(4) B-D (5) None of these

28.

Column-1

A. It seems like yesterday, but it's actually
B. I can't believe Vijay is still talking about
C. The only thing that really matters is

Column-2

D. whether or not you are happy.
E. nearly ten years since we first met.
F. what happens two years ago.

(1) A-D (2) B-E (3) C-E
(4) A-F (5) None of these

29.

Column-1

A. Tom always drinks at least
B. If he had taken his doctor's advice
C. I can still remember the time when

Column-2

D. he might still be alive.
E. went on a picnic together.
F. three cups of coffee in the morning.

(1) C-E (2) B-F (3) A-D
(4) C-F (5) None of these

30.

Column-1

A. After school, Jack usually sticks around as long as
B. We're planning on doing the sights
C. Even the repairman couldn't figure out what

Column-2

D. had gone wrong with the microwave.
E. he can because he doesn't want to go home.
F. of the city tomorrow morning.

(1) A-F and B-D (2) B-E and C-F
(3) B-F and C-D (4) A-D and C-E
(5) None of these

PART – II : REASONING

Directions (31-35) : *Read the given information carefully and answer the given questions.*

Seven boxes–A, B, C, D, E, F and G are kept one above the other, but not necessarily in the same order. Each Box has a different number viz. 11, 14, 15, 17, 18, 19 and 22 but not necessarily in the same order.

Only. three boxes are kept between G and box number 19. Only two boxes are kept between G and B. B is kept at one of the positions below box number 19. Only one box is kept between B and box number 14. E is kept immediately below box number 22. E is kept at one of the places above box number 19. There is only one box between E and the box having number less than E. E's box number is neither 17 or 18. Only two boxes are kept between box number 15 and F. The difference between F and the box immediately below it is less than four. C is not the topmost box. C's box number is not 14. Only two boxes are kept between C and A.

31. What is the number of box C ?

(1) 15 (2) 19 (3) 22
(4) 18 (5) 11

32. How many boxes are kept between E and box number 14 ?

(1) 3 (2) 1 (3) 2
(4) More than 4 (5) 5

33. What is the position of D in the given stack of boxes ?

(1) Third form the top (2) Fifth from the top
(3) First from the top (4) Third from the bottom
(5) Fourth from the bottom

34. Which of the following boxes is kept immediately above A ?

(1) B (2) Box number 15
(3) Box number 17 (4) G
(5) Box number 14

35. Four of the following five are alike in a certain way and hence form a group. Which of the following does not belong to the group ?

(1) B-14 (2) E-11 (3) C-17
(4) D- 19 (5) A-18

Directions (36-40) : *Study the given information and answer the 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 an input and rearrangement.

Input : 19 ear 24 an 18 nose 25 our 32 mind 9 box
Step I : 10 19 ear 24 18 nose 25 our 32 mind box an
Step II : box 10 ear 24 18 nose 25 our 32 mind an 20
Step III : 26 box 10 24 18 nose our 32 mind an 20 ear
Step IV : mind 26 box 10 24 nose our 32 an 20 ear 17
Step V : 23 mind 26 box 10 our 32 an 20 ear 17 nose
Step VI : our 23 mind 26 box 10 an 20 ear 17 nose 31

And Step VI is the last step of the rearrangement 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.

Input : 17 and 32 on 12 never 29 time 7 put 4 fix

36. In which step the elements '32 12 time' found in the same order ?

(1) Step I (2) Step II (3) Step III
(4) Step IV (5) Step VI

37. In step III, which of the following element would be at 2nd to the left of 5th from the right end ?

(1) 12 (2) time (3) put
(4) 4 (5) and

38. How many step required completing the above arrangement ?

(1) Three (2) Four (3) Five
(4) Seven (5) None of these.

39. Which of the following would be the step V after arrangement ?
(1) 11 on 30 fix 8 32 time 18 and never 3 put
(2) on 11 30 fix 8 32 time and 18 never 3 put
(3) 11 on 30 fix 8 32 time and 18 never put 3
(4) 11 on 30 fix 8 32 time and 18 never 3 put
(5) None of the above

40. In step VI, 'time' is related to 'on' and 'never' is related to 'put'. In the same way 'fix' is related to ?
(1) time (2) 11 (3) on
(4) and (5) None of these

Directions (41-43) : *Study the given information carefully to answer the given questions.*
There are 5 friends A, B, C, D and E standing randomly. B is to the northeast of E. D is 2 km to the east of E, who is 6km to the west of A. C is to the northwest of D and in the line of EB. D is 4 km the south of B.

41. In which direction is C with respect to A ?
(1) South west (2) South east (3) Northeast
(4) Northwest (5) None of these

42. In which direction is A with respect to B ?
(1) Southeast (2) Southwest (3) Northwest
(4) Northeast (5) None of these

43. What is the distance between D and A ?
(1) 5 km (2) 4 km (3) 6 km
(4) 3 km (5) None of these

44. P is the brother of Q and R. S is R's mother. T is P's father. Which of the following statements cannot be definitely true ?
(1) T is Q's father (2) S is P's mother
(3) P is S's son (4) Q is T's son
(5) None of these

Directions (45-47) : *Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and*
Give answer :
(1) If the data in statement **I alone** are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(2) If the data in statement **II alone** are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(3) If the data in **both** statements I and II **together** are necessary to answer the question.
(4) If the data in both statements I and II together are **not** sufficient to answer the question.
(5) If the data **either** in statement I alone **or** in statement II alone are sufficient to answer the question.

45. **Statement :** Six boys J, K, L, M, N, O are there in a classroom each of them is of different heights. Who among the following is the tallest ?
I. M is taller than N and K. J is taller than M but not as tall as O. L is taller than K.
II. M is taller than only three boys. J is taller than K.

46. **Statement :** Six persons R, S, T, U, V, W lives on a six storey building such as ground floor is numbered as 1 and above it 2 floor and so on ... upto top floor numbered as 6. How many persons live between R and T ?
I. T lives on an even numbered floor but not on top floor. Only two persons live between W and T. R lives below W.
II. Four persons live between S and U. No one lives between S and T. V lives immediately above R.

47. **Statement :** Six persons A, B, C, D, E, F are sitting in row. All of them are facing north direction. Who among the following sits second from the right end ?
I. B sits at end extreme end of the row. A sits second to the right of B. Only one person sits between A and C. E sits immediate right of C.
II. E sits third to the right of D. Only one person sits between E and A. F sits to the right to E. C is an immediate neighbour of E.

Directions (48-52) : *In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and*
Give answer :
(1) If **only** conclusion **I** is true
(2) If **only** conclusion **II** is true
(3) If **both** conclusions I and II are true
(4) If **neither** conclusion I **nor** II is true
(5) If **either** conclusion I **or** II is true

48. **Statements :** $P < Q \leq S = T$, $R = Q < U$, $V > U$
Conclusions I. $P > V$; **II.** $V > T$

49. **Statements :** $U \geq X = Y$, $Y \leq Z \leq S$, $T = W > Z$
Conclusions I. $T \leq U$; **II.** $S > U$

50. **Statements :** $A \geq P = S > T$, $V < B = T \geq X$
Conclusions I. $A > X$; **II.** $P < B$

51. **Statements :** $S > U > V$, $Y < U < Z$, $Z < X > W$
Conclusions I. $S < Z$; **II.** $X > Y$

52. **Statements :** $P < X \leq Y < Q$, $S > Y < T$, $P = V > R$
Conclusions I. $V < S$; **II.** $T > R$

53. In the given coding system 'Now they live for' is coded as 'gn mu sy fd' and 'go now run for' is coded as "gn sy mo lt". Which of the following statement among the given is required to code 'go there now' ?
I. 'Give it for' is coded as 'la sa sy'.
II. 'Go there get ready' is coded as 'ht mo ga sx'
III. 'Now there fall' is coded as ' za ga gn'
(1) Only I (2) Both II and III
(3) Only II (4) Both I and II
(5) Either I or II

Directions (54-58) : *Study the given information carefully to answer the given questions.*
Eight friends–A, B, C, D, E, F, G, and H were born on in March, June, September and December on either 3rd or 8th (all born on different dates). The ones who were born in a month having 30 days like different fruits - Banana, Apple, Mango and Litchi not necessarily in the same order. The ones who were born in a month having 31 days like different colours - Red, Yellow, Blue and Green not necessarily in the same order.

E was born in June. 1 person was born between E and D. D does not like any colour. B likes red colour. Same number of people were born before A as after D. No person was born between the ones who like yellow colour and mango. The one who likes yellow colour was not born on 8th of any month. No person was born between E and one who likes litchi. One person was born between B and one who likes Banana. A does not like Banana. The ones who like apple and banana were born either on same date or in same month. One person was born between A and H. F does not like any fruit. No person was born between C and one who likes blue colour, H does not like fruit. Same number of persons were born between the ones who like green colour and apple and who like blue colour and mango.

54. Who likes Green Colour ?
(1) C (2) F (3) G
(4) H (5) E

55. How many people were born between B and the one who likes Litchi ?
(1) Four (2) Two (3) Three
(4) None (5) One

56. Four of the following five are alike in a certain way and hence form a group based on a certain pattern. Which one of the following does not belong to that group ?
(1) A (2) G (3) D
(4) C (5) E

57. Who was born on 3rd September ?
(1) The one who likes Mango
(2) E
(3) C
(4) D
(5) The one who likes Litchi

58. C likes which of the following fruit or colour ?
(1) Yellow (2) Mango (3) Litchi
(4) Blue (5) Banana

Directions (59-61) : *Study the information and answer the following questions.*
In a certain code language
"Entire Money Board Perfect" is written as "Q7 N5 F6 C5 ",
"Sleeve Washing World Stories" is written as "X7 T6 T7 X5",
"Moving Partly Falls Objects" is written as "N6 P7 G5 Q6",

59. What is the code for 'Radio' in the given code language ?
(1) S5 (2) R5 (3) S4
(4) R6 (5) None of these

60. What is the code for the word 'Rising Normal' in the given code language ?
(1) S5 O6 (2) O5 S6 (3) O6 S6
(4) O5 S5 (5) None of these

61. If the code for the words 'they forward .....' is coded as 'U4 G7 T5' in the coded language then what will be the missing word ?
(1) South (2) Mount (3) Stone
(4) Climb (5) Both A and C

Directions (62-65) : *Study the given information carefully to answer the given questions.*
Twelve people are sitting in two parallel rows containing six people each in such a way that there is an equal distance between adjacent persons. In row-1, P, Q, R, S, T and V are seated and all of them facing south. In row-2, A, B, C, D, E and F are seated and all of them are facing north. Therefore, in the given seating arrangement each member seated in a row faces another member of the row.
A sits third to right of D, Neither A nor D sits at extreme ends. T faces D. V does not face A and V does not sit at any of the extreme ends. V is not an immediate neighbour of T. B sits at one of the extreme ends. Only two persons sit between B and E. E does not face V. Two persons sit between R and Q. R is not an immediate neighbour of T. C does not face V. P is not an immediate neighbour of R.

62. Who amongst the following sits at an extreme end of the row ?
(1) B, E (2) S, T (3) P, R
(4) B, F (5) None of these

63. Who amongst the following faces A ?
(1) R (2) T (3) P
(4) Q (5) S

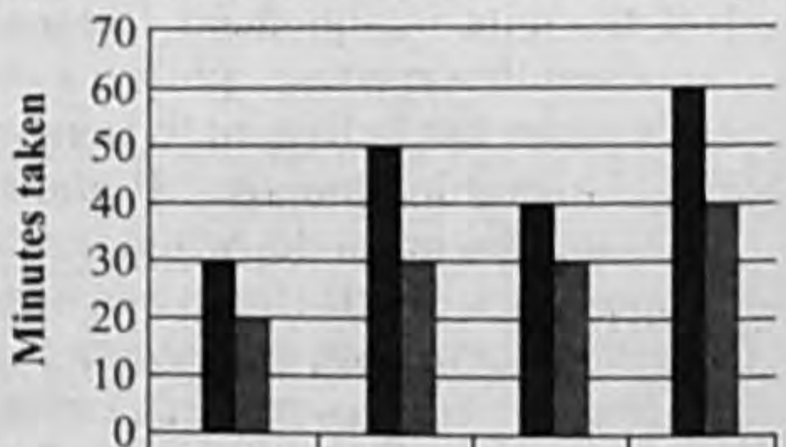
64. How many persons are seated between T and S ?
(1) 1 (2) 2 (3) 3
(4) 4 (5) 5

65. P is related to V in the same way as C is related to F. To which of the following is E related to following the same pattern ?
(1) B (2) D (3) C
(4) A (5) None of these

PART – III : QUANTITATIVE APTITUDE

Directions (66-70) : *Study the following graph carefully and answer the given questions.*

There is two students A and B study in a school and home work of four different subjects are done by them



	English	Maths	Physics	Biology
Minutes taken by A	30	50	40	60
Minutes taken by B	20	30	30	40

66. How much time taken by A and B to complete physics home work together ?
(1) 20 min (2) $\frac{120}{7}$ min
(3) $\frac{40}{3}$ min (4) 48 min
(5) None of these

67. What is the average number of minutes taken by A and B together to complete English and Biology home work together ?
(1) 18 min (2) 24 min
(3) 36 min (4) 40 min
(5) None of these

68. If A and B start working on Math subject on alternate basis. Start with B, how much time will be taken to finish the work ?
(1) 30 min (2) $44\frac{1}{6}$ min
(3) $\frac{420}{19}$ min (4) 45 min
(5) None of these

69. What is the ratio between the time taken by A and B together to finish English and Physics home work together ?
(1) 5 : 7 (2) 7 : 5
(3) 3 : 5 (4) 7 : 10
(5) None of these

70. Average number of minutes taken by B to complete the home work of all the subjects.
(1) 25 min
(2) 28 min
(3) 31 min
(4) 36 min
(5) None of the above

Directions (71-75) : *In the given questions, two quantities are given, one as Quantity I and another as Quantity II. You have to determine relationship between two quantities and*

Give answer :
(1) Quantity I ≥ Quantity II
(2) Quantity I > Quantity II
(3) Quantity I ≤ Quantity II
(4) Quantity I < Quantity II
(5) Quantity I = Quantity II or Relation cannot be established

71. **Quantity I.** '*x*': X, Y and Z can finish a work alone in 12, 18 and 9 days respectively. X started the work and Y and Z assisted him on every 3 days. '*x*' is total days in which work is completed.
Quantity II. '*y*': A, B and C can finish a work alone in 20, 12 and 15 days respectively. All three starts working together. After 2 days B left the work, after 4 more days C left and remaining work is completed by A alone. A worked for '*y*' days is total.

72. **Quantity I.** What is area of rectangular sheet (in cm^2) having length 25% more than the side of square having perimeter 960 cm and perimeter of rectangle equals to 1500 m ?
Quantity II. What is the initial population of a city whose population becomes 172500 at the end of two years increasing at the rate of 15% and 20% respectively for the first and second year ?

73. **Quantity I.** An ore contains 24%, 40% and 36% of copper, Zinc and Tin respectively. Then how many kg of ore is required to extract 260 kg of Zinc ?
Quantity II. What is difference between compound interest and simple interest for an amount of 15000 at the rate of 8% for two years ?

74. **Quantity I.** The age of teacher, if the average age of 36 students is 14. When teacher's age is included the average increases by 1.
Quantity II. The age of teacher, if the average age of 19 students is 35. When teacher's age is included the average increases by 0.5.

75. **Quantity I.** Profit percentage, if some articles were bought at 6 articles for ₹ 5/- and sold at 5 articles for ₹ 6/-.
Quantity II. Profit percentage, if 100 toys are bought at the rate of ₹ 350/- and sold at the rate of ₹ 48 per dozen.

Directions (76-80) : *In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.*

76. 3 9 23 99 479 2881 20159
(1) 9 (2) 23
(3) 99 (4) 479
(5) 2881

77. 7 4 6 9 20 52.5 160.5
(1) 6 (2) 4
(3) 20 (4) 9
(5) 5

78. 2 13 27 113 561 3369 23581
(1) 27 (2) 13
(3) 113 (4) 561
(5) 3369

79. 1 3 6 11 20 39 70
(1) 3 (2) 39
(3) 11 (4) 20
(5) 6

80. 50 51 47 56 42 65 29
(1) 51 (2) 47
(3) 56 (4) 42
(5) 65

81. Sum of volume of cylinder (S) and volume off cone (C) is 2190π cm^2 & height of both cylinder and cone is same, *i.e.*, 10 cm. If radius of cone is 15 cm, then find the ratio of radius of S to radius of C.
(1) 1 : 2 (2) 3 : 4
(3) 2 : 5 (4) 4 : 5
(5) 3 : 5

82. In a box there are 6 blue ball, X red balls and 10 green balls. Probability of choosing one red ball from the given box is $\frac{1}{3}$. Then find the sum of red and blue balls in the box.
(1) 20 (2) 12
(3) 14 (4) 18
(5) 16

83. Sum of A's and B's age 6 years ago is 88. A's age 18 years ago is equal to B's age 6 years ago. Find the age of A two year hence.
(1) 58 years (2) 64 years
(3) 42 years (4) 52 years
(5) 48 years

84. Train A of length 120 m can cross a platform of length 240 m in 18 second the ratio of speed of train A and Train B is 4 : 5. Then find the length of Train B if Train B can cross a pole in 12 seconds.
(1) 280 m (2) 300 m
(3) 320 m (4) 250 m
(5) 240 m

85. One bag contains 4 white balls and 2 black balls. Another bag contains 3 white balls and 5 black balls. If one ball is drawn from each bag, what is the probability that one ball is white and another is black ?
(1) $\frac{6}{24}$ (2) $\frac{5}{24}$
(3) $\frac{7}{24}$ (4) $\frac{13}{24}$
(5) $\frac{14}{24}$

Directions (86-90) : *What approximate value will come in place of question mark (?) in the given questions ? (You are not expected to calculate the exact value)*

86. $38.98 \times (195.98)^{\frac{1}{2}} + 41.87 = ?^{\frac{1}{2}} - 84.03 \times 7.06 \div (441.02)^{\frac{1}{2}}$

(1) 1520 (2) 1590 (3) 1681
(4) 1630 (5) 1600

87. $18.006 \times ? \times 27.987 + 28\%$ of $640 + 25\%$ of $830 = 8954.784$

(1) 17 (2) 18 (3) 19
(4) 20 (5) 21

88. $9723.88 \div 67.94 + 47.08 \times 4.02/6.13 = ?^2 - 22$

(1) 10 (2) 25 (3) 6
(4) 14 (5) 20

89. $(1611.23 + 2113.03 - 923.98) \div 3.98 \times 2 = ? + 99$

(1) 1300 (2) 1500 (3) 1400
(4) 1100 (5) 1200

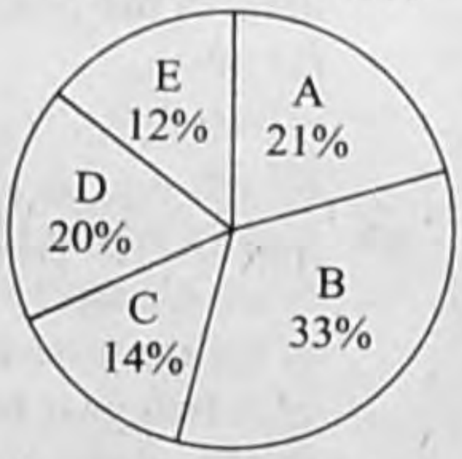
90. $(14.98)^2 + (12.01)^2 - (10.98)^2 = ? + 95 + 5$

(1) 219 (2) 210 (3) 200
(4) 180 (5) 229

Directions (91-95) : *Refer to the pie-charts and answer the given questions.*

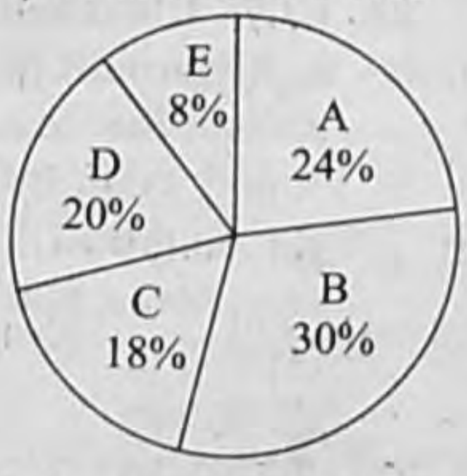
Distribution of total number of members (both male and female) in 5 health clubs in 2011

Total number : 6300



Distribution of total number of male members in 5 health clubs in 2011

Total number : 3600



91. Only 25% of the members (both male & female) in health club D have lifetime membership. If the number of females in health club D who have lifetime membership is 126, what percent of male members in health club D have lifetime membership ?

(1) $30\frac{1}{2}$ (2) $28\frac{3}{4}$ (3) $20\frac{3}{4}$
(4) $26\frac{1}{4}$ (5) $24\frac{1}{2}$

92. What is the average number of female members in health clubs A, B and C ?

(1) 564 (2) 572 (3) 568
(4) 548 (5) 588

93. Number of male members in health clubs A and C increased by equal number from 2011 to 2012. If the respective ratio between number of male numbers in health club A and that in C in 2012 is 13 : 10, what is the number of male members in health club C in 2012 ?

(1) 690 (2) 750 (3) 720
(4) 740 (5) 760

94. What is the central angle corresponding to number of (both male and female) in health club B ?

(1) 118.8° (2) 112.6° (3) 124.8°
(4) 116.4° (5) 128.4°

95. Number of female members in health club E is what percent less than number of male members in health club B ?

(1) $56\frac{2}{3}$ (2) $54\frac{1}{3}$ (3) $60\frac{2}{3}$
(4) $64\frac{1}{3}$ (5) $48\frac{2}{3}$

Directions (96-100) : *Study the given information carefully and answer the given questions.*

There are three persons A, B and C who each invested in two different scheme S_1 and S_2. A invested ₹ 80,000 for 2 years in scheme S_1 and 30,000 for 4 years in scheme S_2. B invested ₹ 30,000 for 3 years in S_1 and he did not invest in scheme S_2. B also obtained a profit of 10,000 by selling his car. C invested ₹ 50000 for 5 years in scheme S_1 and 10000 for 3 years in scheme S_2. Total profit obtained from scheme S_1 is 2 lakh and scheme S_2 is 90,000.

96. What is the ratio of total profit obtained by B and profit obtained by C from scheme S_1 ?

(1) 23 : 47 (2) 54 : 47 (3) 36 : 43
(4) 23 : 50 (5) 27 : 50

97. Profit obtained by A from scheme S_1 is what percent of profit obtained by C from scheme S_2 ?

(1) $346\frac{7}{9}\%$ (2) $347\frac{8}{9}\%$ (3) $356\frac{7}{9}\%$
(4) $345\frac{4}{9}\%$ (5) $355\frac{5}{9}\%$

98. If sum of investment of A in both schemes and total profit obtained by A from both scheme is invested at compound Interest at the rate of 20% p.a. then find the total compound interest obtained in 2 years.

(1) 108240 (2) 104206 (3) 105208
(4) 109280 (5) 106220

99. What is the average of profit attained by A from scheme S_1 and profit of C obtained from scheme S_2 ?

(1) 41000 (2) 42000 (3) 44000
(4) 55000 (5) 40000

100. If A had invested his sum at Simple Interest for 3 years at the rate of R% p.a. instead in scheme S_1 and B has invested his sum at compound Interest at (R + 5%) p.a. for 1 year and difference in interest obtained is 30,000 then find value of R%.

(1) 10% (2) 9% (3) 15%
(4) 18% (5) 12%