

PART-I : ENGLISH LANGUAGE

Directions (1-10) : Read the following passage and answer the given questions. Certain words or phrases are given in **bold** to help you while answering some of the questions.

Power corrupts, so too does a resource-rich economy, like Nigeria's, where easy access to oil revenues opens the door to palm-greasing. Of 168 countries surveyed by Transparency International, an anti-corruption group in Germany, in its annual Corruption Perception Index, Nigeria ranks 32nd from the bottom.

Whistle-blowers sometimes try to estimate how much cash has gone missing from Nigeria's public purse. In 2014, a respected former central-bank governor lost his job after claiming that \$20 billion had been stolen. But this captures only a small share of the damage done by corruption. The much bigger question is where Nigeria could be if its politicians and officials were a little more honest. One answer comes from economists at PricewaterhouseCoopers (PwC). They compared Nigeria to three other resource-producing countries that are somewhat less corrupt than it, though by no means squeaky clean: Ghana, Malaysia and Colombia. PwC concluded that Nigeria's economy, which was worth \$513 billion in 2014, might have been 22% bigger if its level of corruption were closer to

Ghana's, a nearby West African country. By 2030, the size of Africa's biggest economy should triple in real terms come what may. Yet if Nigeria manages to reduce corruption to levels comparable to Malaysia (itself hardly above suspicion), its economy could be some 37% bigger still. The additional gain would be worth some \$534 billion (adjusted for inflation), or about as much as the economy is currently worth. If it does nothing to change then the cost of corruption in Nigeria would amount to almost \$2,000 per person a year by 2030, PwC reckons. Some of this damage is visible. When public cash—most of which comes from oil pumped in the southern Niger delta—is siphoned off, investment in health, education and roads **suffers**. But corruption also affects the economy in more **surreptitious** ways. Public institutions often hire the family and friends of the boss rather than the best candidates. In turn those institutions become more inefficient and deliver less of what they are meant to, whether it is education or roads. In addition countries where corruption is high attract less foreign investment. Given rampant theft, many people are reluctant to pay their taxes on the ground that the money will just be squandered. This may in part explain why, despite its oil wealth, there is a rising **share** of Nigerians who are classified as

below the poverty line. A survey of living standards (using data from 2010, the most recent figures available) suggested that 61.2% of the population lives in absolute poverty, an increase of over six percentage points on the previous figures from 2004. At least 25 million people who should have been lifted into low- or middle-income still reside below the breadline thanks to "excess corruption", says PwC's chief economist in Nigeria. Last year, the president, swept to power on the votes of Nigerians who have had enough. Since then, anti-fraud agencies have arrested senior politicians and sidekicks accused of embezzlement, and new corruption bills have been put before parliament. Such measures to **clean** up Nigeria will be a Herculean task. But the rewards are equally fabulous.

1. Which of the following is the **same** in meaning as the word **SUFFERS** as used in the passage ?
 - (1) Cries
 - (2) Diagnosed with
 - (3) Is impaired
 - (4) Endures
 - (5) Grived
2. Which of the following is the **opposite** of the word **SURREPTITIOUS** as used in the passage ?
 - (1) Open
 - (2) Devious
 - (3) Mean
 - (4) Vulnerable
 - (5) Hidden

3. What can be concluded from the PwC statistics cited in the passage ?
- (1) Corruption has had a tremendous economic cost on Nigeria.
 - (2) Despite heavy investment in education and healthcare, these facilities are poor in Nigeria.
 - (3) Nigeria is the worst corrupt out of 168 countries.
 - (4) Half of Nigeria's population is poor.
 - (5) Nigeria has the largest economy in Africa.
4. Which of the following is the **opposite** of the word **CLEAN** as used in the passage ?
- (1) Hygienic (2) Dull
 - (3) Nasty (4) Dishonest
 - (5) Fair
5. Which of the following is the author's view about Nigeria's efforts to clean up corruption ?
- A. It will be difficult.
 - B. The steps taken in recent times are a step in the right direction.
 - C. More reforms should be implemented.
- (1) Only A
 - (2) Only B
 - (3) All A, B and C
 - (4) B and C
 - (5) A and B
6. Which of the following is the central idea of the passage ?
- (1) Nigeria has been badly affected by corruption.
 - (2) Nigeria is the poorest of African countries and in dire need of aid.
 - (3) Nigeria's economy is tremendously dependent on oil.
 - (4) The standard of living is improving in Nigeria's cities.
 - (5) Cutting subsidies and raising taxes will benefit Nigeria.
7. Which of the following is **same** in meaning as the word **SHARE** as used in the passage ?
- (1) Divide (2) Allocate
 - (3) Segment (4) Contribute
 - (5) Reveal
8. Which of the following has/have been the impact(s) of corruption in Nigeria ?
- A. Poverty has been exacerbated.
 - B. Foreign investment deferred.

- C. Organisations have become inefficient.
- (1) Only A (2) Only B
 - (3) A and B (4) B and C
 - (5) All A, B and C
9. Which of the following conveys the meaning of the phrase 'Some of this damage is visible' ?
- (1) Exploitation of Nigeria's resources has damaged the environment irreparably.
 - (2) Damage to the economy, after the recession is yet to be lift.
 - (3) The arrest of government officers has hampered the economy.
 - (4) Resources in countries in Africa have been excessively exploited by Asian countries.
 - (5) None of the given options
10. Which of the following is true in the context of the passage ?
- (1) Over 25 million Nigerians have risen out of poverty.
 - (2) Nigeria has tremendous potential which is not being appropriately.
 - (3) Nigeria's banking system is on the verge of collapse.
 - (4) There has been tremendous protest against the current President and his government.
 - (5) None of the given options is true in the context of the passage.
- Directions (11-20) :** Read each sentence to find out whether there is any grammatical error/inappropriate usage in it. The error, if any, will be in one part of the sentence. Mark the part with the error as your answer. If there is no error, mark 'No error' as your answer. Ignore the error of punctuation, if any.
11. The Principal of the college was arrested by the police yesterday evening on charging fraud.
- (1) The Principal of the
 - (2) college was arrested by the
 - (3) police yesterday evening on
 - (4) charging fraud
 - (5) No error
12. Recently, the Railways has devised a technique that enable trains to move safely through fog and will soon commercialise it.
- (1) Recently, the Railways has devised
 - (2) a technique that enable trains to

- (3) move safely through fog
 - (4) and will soon commercialise it
 - (5) No error
13. E-commerce has huge growth potential in India, given the current's demographics and the country's diversity.
- (1) E-commerce has huge growth
 - (2) potential in India, given the
 - (3) current's demographics and
 - (4) the country's diversity
 - (5) No error
14. If not properly deal with, termites can be a menace as these can reduce wooden furniture to dust.
- (1) If not properly deal
 - (2) with, termites can be a menace
 - (3) as these can reduce
 - (4) wooden furniture to dust
 - (5) No error
15. As per an amendment in the law, the salaries of all employee of any firm are supposed to be paid by digital means.
- (1) As per an amendment in the
 - (2) law, the salaries of all employee
 - (3) of any firm are supposed to be
 - (4) paid by digital means
 - (5) No error
16. The cricket stadium in our city was renovated a few years ago and made complaint with international sporting standards.
- (1) The cricket stadium in our city
 - (2) was renovated a few
 - (3) years ago and made complaint
 - (4) with international sporting standards
 - (5) No error
17. As per a report from WHO, the number of cases of HIV among the lower class has reduced drastically.
- (1) As per a report from
 - (2) WHO, the number of cases
 - (3) of HIV among the lower
 - (4) class has reduced drastically
 - (5) No error
18. A probe has been ordered to look in the accident that occurred at the dockyard yesterday.
- (1) A probe has been
 - (2) ordered to look in the
 - (3) accident that occurred at
 - (4) the dockyard yesterday
 - (5) No error

19. It seems, the next food tend would be not only about the ingredients, but also the cutlery used to serve it.

- (1) It seems, the next food
- (2) tend would be not only
- (3) about the ingredients, but also
- (4) the cutlery used to serve it
- (5) No error

20. Using LPG as a fuel for automobiles is not that beneficial, as using the same increases the levels of carbon monoxides to the air.

- (1) Using LPG as a fuel for automobiles
- (2) is not that beneficial, as using
- (3) the same increases the levels
- (4) of carbon monoxides to the air
- (5) No error

Directions (21-30) : In the given passage, there are blanks, each of which has been numbered. Against each, five words are suggested, one of which fits the blank appropriately. Find the appropriate word in each case.

Fast trains in Europe ended 2014 with a flourish. In December Eurostar, which connects London, Paris and Brussels, started selling tickets for a new, year-round service to the Mediterranean, starting this May. Poland ...(21)... its first high-speed service, between Warsaw and Krakow; Serbia signed an agreement with China to build a fast line from Belgrade to Budapest; and Turkey inaugurated a line from Istanbul to Konya, having opened one between Istanbul and Ankara in July. High-speed rail is controversial. This week, as work began on California's "bullet train" project, taxpayer groups ...(22)... it as a monstrous waste of money. Indeed, high-speed trains usually ...(23)... on public subsidy, yet their tickets are often ...(24)... for many potential users, so they may not fill enough seats to avoid ...(25)... . The counter-argument is that over distances of 300-800km, fast trains between big population centres are quicker and less polluting than most forms of transport. No one is keener on them ...(26)... the European Commission. ...(27)... by the EU and national subsidies, Europe

has added more than 6000 km of high-speed track on which trains travel at least some of the time at 250 kph (155 mph) or more to the 1000km or so it had in 1990. Much more is under construction or planned. In 2015 a new line opened from Leipzig to Erfurt. A Milan-Brescia service may ...(28)... in 2016. By 2017 no fewer than four new French lines will ...(29)... into service. The EU, which is itching to ...(30)... more on infrastructure, plans to finance a €4.5 billion (\$5.3 billion) fast-rail link between Estonia, Latvia, Lithuania and Poland.

- 21. (1) receive (2) starting
(3) begun (4) acquainted
(5) introduced
- 22. (1) colluded (2) toadied
(3) condemned (4) saddened
(5) hurried
- 23. (1) allow (2) independent
(3) outside (4) depend
(5) inside
- 24. (1) affordable (2) unaffordable
(3) inaccessible (4) accessible
(5) excessive
- 25. (1) casualty (2) errors
(3) fortune (4) losses
(5) disaster
- 26. (1) then (2) as of
(3) that (4) their
(5) than
- 27. (1) supported (2) growth
(3) measure (4) case
(5) spend
- 28. (1) hung (2) stopped
(3) begin (4) introduced
(5) impulse
- 29. (1) fall (2) under
(3) come (4) shed
(5) handled
- 30. (1) get (2) earn
(3) begin (d) spend
(5) heal

PART - II : REASONING

Directions (31-35) : Study the following information to answer the given questions.

Eight people— R, S, T, U, V, W, X and Y are sitting around a square table (but not necessarily in the same order), in such a way that four of them sit at four corners while four sit in the middle of each of the four sides. The ones sitting in the middle of the sides are facing outside (i.e. opposite to the centre) and the ones sitting in the corners are facing the centre.

T sits in the middle of one of the sides. Only two persons sit between T and Y. V sits second to the left of X. X faces same direction as Y (i.e. if Y faces the centre then X also faces the centre and vice-versa). Only three persons sit between X and U. R is an immediate neighbour of U but not Y. Only one person sits between R and S.

- 31. Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which one of the following does not belong to that group ?
(1) U (2) R
(3) Y (4) V
(5) X
- 32. What is the position of S with respect to R ?
(1) Second to the right
(2) Fourth to the right
(3) Third to the left
(4) Third to the right
(5) Second to the left
- 33. Who sit exactly between T and Y when counted from the left of T ?
(1) R, S (2) V, W
(3) W, X (4) R, V
(5) U, V
- 34. Which of the following is true regarding W as per the given arrangement ?
(1) W sits at one of the corners of the table.
(2) W sits second to the left of S.
(3) W is an immediate neighbour of both V and T.
(4) None of the given options are true
(5) Only three people sit between W and Y.
- 35. How many people sit between U and V when counted from the left of V ?
(1) One
(2) Three
(3) More than three
(4) None
(5) Two
- 36. In a certain code language, 'give your book' is coded as 'sk dg ap' and 'book my tickets' is coded as 'dg le nb'. What is the code for 'give' in the given code language ?
(1) dg
(2) nb
(3) Either 'ap' or 'sk'
(4) Either 'dg' or 'nb'
(5) lp

Directions (37-41) : Study the following information carefully and answer the given questions.

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement.

(All the numbers are two digit numbers)

Input : 49 78 risen zebra 56 casio 26 house

Step I : casio 49 78 risen zebra 56 26 house

Step II : casio 49 78 risen zebra 56 house 26

Step III : house casio 49 78 risen zebra 56 26

Step IV : house casio 78 risen zebra 56 26 49

Step V : risen house casio 78 zebra 56 26 49

Step VI : risen house casio 78 zebra 26 49 56

Step VII : zebra risen house casio 78 26 49 56

Step VII is the last step of the given arrangement as the intended output of the arrangement is obtained.

As per the rules followed in the given steps find the appropriate steps, for the given input.

Input : 36 15 queen grams tiger 84 yatch 67

37. What is the fourth element to the left of the seventh element from the left end in step VI of the given arrangement ?

- (1) queen (2) 67
(3) grams (4) yatch
(5) 15

38. In which of the following steps of the given arrangement is '36 queen tiger' found consecutively in the same order ?

- (1) Step IV (2) Step VI
(3) Step II (4) Both steps VII and VI
(5) Both steps II and V

39. How many elements are there between 'gram' and '15' in step VII ?

- (1) One (2) Three
(3) None (4) More than three
(5) Two

40. How many elements are there between 'queen' and '67' in step V ?

- (1) Two (2) Three
(3) One (4) More than three
(5) None

41. In step I, 'grams' is related to '15' following a certain pattern. Following the same pattern, '84' is related to '67' in step IV. In step VIII, to which of the following is 'queen' related to following the same pattern ?

- (1) 36 (2) 15
(3) yatch (4) 84
(5) 67

Directions (42-44) : In each question, relationship between different elements is shown in the statements. The statements are followed by conclusions. Study the conclusions based on the given statements and select the appropriate answer.

Give answer :

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

42. **Statements :** $D < E \leq F < G$; $R < F \leq C$

Conclusions : I. $G < C$
II. $R \leq D$

43. **Statements :** $D < E \leq F < G$; $R < F \leq C$

Conclusions : I. $C \geq D$
II. $R < G$

44. **Statements :** $I \geq M = A \leq W < V$; $A \geq E$

Conclusions : I. $I \geq E$
II. $V = E$

Directions (45-49) : Study the following information carefully to answer the given questions.

Seven people— J, K, L, M, N, O and P have to attend a seminar on seven different days of the same week starting from Monday and ending on Sunday, but not necessarily in the same order.

K has to attend a seminar on Wednesday. Only one person has to attend a seminar between K and P. J attends a seminar immediately after P. The number of people who have to attend a seminar before J is same as who have to attend a seminar after L. Only one person has to attend a seminar between L and M. O has to attend a seminar immediately after M.

45. On which of the following days does N have to attend a seminar ?

- (1) Sunday (2) Thursday
(3) Saturday (4) Wednesday
(5) Tuesday

46. If all the people are made to attend a seminar in alphabetical order from Monday to Sunday, the day of attending a seminar of how many people will remain unchanged ?

- (1) More than three (2) Three
(3) One (4) Two
(5) None

47. As per the given arrangement, four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group ?

- (1) M-Friday (2) M-Wednesday
(3) O-Sunday (4) O-Thursday
(5) J-Wednesday

48. Who amongst the following has to attend a seminar on Friday ?

- (1) N (2) O
(3) P (4) J
(5) Other than those given as options

49. How many people have to attend a seminar after J ?

- (1) One (2) Two
(3) More than three (4) Three
(5) None

Directions (50-52) : Study the given information carefully to answer the given questions.

D is the son of P. P is the daughter of M. S is married to M. R and H are the children of S. W is the husband of H. K is the son of W.

50. If M does not have any son, then how is R related to D ?

- (1) Uncle (2) Son-in-law
(3) Sister (4) Brother
(5) Aunt

51. How is D related to K ?
 (1) Father-in-law
 (2) Cousin
 (3) Grandfather
 (4) Uncle
 (5) Brother-in-law

52. How is W related to P ?
 (1) Brother-in-law
 (2) Uncle
 (3) Father
 (4) Father-in-law
 (5) Grandfather

Directions (53-57) : Study the following information to answer the given questions.

Eight friends— A, B, C, D, E, F, G and H are seated in a straight line with equal distance between each other but not necessarily in the same order. Some of them are facing north while some of them are facing South.

- C sits fourth to the left of B. B faces north. G sits fourth to the right of D.
- H sits third to the left of C. Immediate neighbours of H face opposite directions (i.e. if one neighbour faces north then the other faces south and vice-versa.)
- A sits to the immediate left of D.
- F sits second to the right of E. E does not sit at an extreme end of the line.
- Immediate neighbours of E face the same direction (i.e. if one neighbour faces north then the other also faces north and vice-versa.)
- Persons sitting at the extreme ends face the same direction (i.e. if one person faces north then the other also faces north and vice-versa.)
- H faces a direction opposite to that of F (i.e. if F faces north then H faces south and vice-versa.)

53. How many persons sit between B and A ?
 (1) One
 (2) More than three
 (3) Three
 (4) None
 (5) Two

54. Which of the following represents the persons sitting at the extreme ends of the line ?

- (1) F, G
 (2) A, F
 (3) C, F
 (4) A, C
 (5) A, B

55. What is the position of H with respect to E ?
 (1) Immediate left
 (2) Second to the right
 (3) Immediate right
 (4) Third to the right
 (5) Second to the left

56. Four of the given five are alike in a certain way based on the given arrangement and hence form a group. Which one of them does not belong to that group ?

- (1) F (2) D
 (3) C (4) A

- (5) Other than those given as options

57. Which of the following is true with respect to the given arrangement ?

- (1) Only two people sit between G and E.
 (2) D sits second to the left of C.
 (3) D and E face the same direction.
 (4) H is an immediate neighbour of A.
 (5) None of the given statements is true

Directions (58-61) : In these questions, three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer :

- (1) If **only** conclusion I is true.
 (2) If **both** conclusions I and II are true.
 (3) If **either** conclusion I **or** II is true.
 (4) If **only** conclusion II is true.
 (5) If **neither** conclusion I **nor** II is true

(58-59) : Statements :

All shows are movies.
 All plays are shows.
 All movies are theatres.

58. Conclusions :

- I. All plays are theatres.
 II. Some shows are definitely not theatres.

59. Conclusions :

- I. Atleast some theatres are shows.
 II. No movie is a play.

(60-61) : Statements :

Some jerks are scratches.
 No pain is a scratch.
 Some marks are jerks.

60. Conclusions :

- I. All scratches can never be jerks.
 II. All pains being marks is a possibility.

61. Conclusions :

- I. No pain is a jerk.
 II. Atleast some pains are jerks.
Directions (62-64) : Study the given information carefully to answer the given questions.

Among six persons— J, K, L, M, N and O, each having a different score in an exam, K scored less than only M. J scored more than L and O but less than N. O did not score the lowest. The person who scored second highest scored 85 marks. The person who scored second lowest scored 50 marks.

62. How many persons scored more than O ?

- (1) More than three
 (2) None
 (3) One
 (4) Three
 (5) Two

63. With respect to the score of the persons, if $K + M = 179$, then $M + O = \dots\dots\dots$

- (1) 121
 (2) 135
 (3) Other than those given as options
 (4) 150
 (5) 144

64. If N's score is 21 more than that of O's score, then which of the following is true about N ?

- (1) N's score is 28 marks less than that of K's score.
 (2) None of the given statements is true.
 (3) The sum of N's and L's score is more than 130 marks.

- (4) N scored 69 marks.
 (5) N's score is an odd number.

65. How many such pairs of letter are there in the word BORINGLY each of which has as many letters between them in the word in both directions (forward and backward directions) in the English alphabetical series ?

- (1) More than three
 (2) None
 (3) Three
 (4) Two
 (5) One

PART-III : QUANTITATIVE APTITUDE

66. The sum of five consecutive odd numbers of Set-A is 125. What will be the sum of Set-B containing four consecutive odd numbers, if the smallest odd number of Set-B is 16 more than the highest odd number of Set-A ?

- (1) 156 (2) 184
(3) 192 (4) 202
(5) 198

67. Perimeter of a square, whose diagonal is $34\sqrt{2}$ m, is equal to the perimeter of a rectangle. If the difference between length and breadth of the rectangle is 12 m, what is the area of the rectangle ? (in m^2)

- (1) 1120 (2) 1080
(3) 840 (4) 1840
(5) Other than those given as options

68. Rimi and Simi spend 60% and 75% of their respective monthly salaries in monthly expenditures. Simi kept 60% of the monthly expenditure as savings and has given the remaining ₹ 2,100/- to his sister. What was Simi's monthly expenditure if his monthly salary is 25% less than that of Simi ?

- (1) ₹ 3,150/- (2) ₹ 1,880/-
(3) ₹ 2,070/- (4) ₹ 2,120/-
(5) ₹ 1,890/-

69. A jar contains a mixture of mango juice and water in the ratio of 12 : 13 respectively. 50 litre of mixture was taken out and 25 litre of water was added to it. If water was 34% in the resultant mixture, what was the initial quantity of mixture in the jar ? (in litre)

- (1) 175 litre (2) 125 litre
(3) 150 litre (4) 75 litre
(5) 100 litre

70. Train A running at 108 km/h takes 15 sec to cross a pole. How much time will Train B take running at 54 km/h to cross the pole, if length is one-third that of Train A ? (in sec)

- (1) 12 sec (2) 10 sec
(3) 15 sec (4) 18 sec
(5) 20 sec

71. A trader sold an article at 12% loss. Had he sold the article for ₹ 109.20 more, he would have earned a profit of 30%. What would be the selling price of the article if the article is sold at 40% profit ?

- (1) ₹ 364/- (2) ₹ 392/-
(3) ₹ 350/- (4) ₹ 332/-
(5) Other than those given as options

72. A boat can travel 6.4 km downstream in 16 min and 8.7 km in 29 min. What is the total time taken by the boat to travel 36 km upstream and the same distance downstream together ?

- (1) 3 hours 45 min
(2) 4 hours 11 min
(3) 4 hours
(4) 3 hours 30 min
(5) 3 hours

Directions (73-77) : Refer to the table and answer the given questions.

Data related to number of visitors in two museums (A and B) during 4 days

Day	Museum-A		Museum-B	
	Number of visitors (Male + Female)	% male visitors out of number of visitors	Number of visitors (Male + Female)	% male visitors out of number of visitors
Monday	190	30%	480	40%
Tuesday	280	40%	188	50%
Wednesday	350	60%	200	60%
Thursday	400	35%	120	75%

73. In Museum A, during Wednesday 30% of male visitors and 70% of female visitors were from school X. What was the number of visitors (male + female) in Museum A from school X during Wednesday ?

- (1) 165 (2) 183
(3) 161 (4) 153
(5) 157

74. Number of visitors (male + female) in museums A and B increased by 5% and 15% respectively from Thursday to Saturday. If the total number of female visitors in Museums A and B together was equal during Thursday and Saturday, what was the total number of male visitors in museums A and B together on Saturday ?

- (1) 268 (2) 238
(3) 242 (4) 248
(5) 252

75. In Museum B, the respective ratio of female visitors during Tuesday and Friday was 2 : 3. If female visitors constituted 50% of the number of visitors (male + female) during Friday, what was the number of visitors (male + female) in Museum B on Friday ?

- (1) 288 (2) 296
(3) 294 (4) 282
(5) 276

76. In Museum A, what is the difference between the total number of male visitors during Monday and Tuesday together and that during Wednesday and Thursday together ?

- (1) 183 (2) 177
(3) 185 (4) 187
(5) 181

77. What is the average number of male visitors in museum B during Monday, Wednesday and Thursday ?

- (1) 134 (2) 188
(3) 185 (4) 175
(5) 184

78. A's age eight years ago was equal to twice of B's age two years ago. C is six years older than B. If the respective ratio between present ages of A and C is 8 : 5, what is B's present age ? (in years)

- (1) 18 years (2) 12 years
(3) 15 years (4) 20 years
(5) 14 years

79. A and B started a business. B's investment was ₹ 4,000/- more than that of A. At the end of 3 months from the start of the business, B left and C joined with an investment which was ₹ 6,000/- more than that of A. If the respective ratio between total annual profit and C's share in profit was 12 : 5, what was the investment made by A ?

- (1) ₹ 4,000/- (2) ₹ 6,000/-
 (3) ₹ 12,000 (4) ₹ 8,000/-
 (5) None of these

80. A can finish a piece of work in 40 days. He worked alone for 15 days and then B joined him. Together they could finish the remaining work in 15 days, in how many days B alone can finish the same work ?

- (1) 58 (2) 45 (3) 60
 (4) 75 (5) 80

Directions (81-85) : What will come in place of question mark (?) in the given number series ?

81. 3 72 129 173 203 ?

- (1) 248 (2) 227 (3) 254
 (4) 252 (5) 218

82. 4 3 5 14 55 ?

- (1) 285 (2) 274 (3) 319
 (4) 315 (5) 265

83. 3 3 12 108 ? 43200

- (1) 2700 (2) 1728 (3) 972
 (4) 432 (5) 650

84. 24 12 12 18 36 ?

- (1) 92 (2) 90 (3) 94.5
 (4) 81.5 (5) 108

85. 126 64 34 20 ? 12

- (1) 18 (2) 12 (3) 14
 (4) 16 (5) 15

Directions (86-90) : In these questions, two equations numbered I and II are given. You have to solve both the equations and mark the appropriate answer.

Give answer :

- (1) If $x < y$
 (2) If $x > y$
 (3) If $x \leq y$
 (4) If $x \geq y$
 (5) If relationship between x and y cannot be determined

86. I. $x^2 + 11x + 18 = 0$ II. $y^2 + 16y + 48 = 0$

87. I. $3x^2 + 10x + 7 = 0$ II. $3y^2 + 4y + 1 = 0$

88. I. $5x^2 - 7x + 2 = 0$ II. $2y^2 - 7y + 3 = 0$

89. I. $2x^2 - 3x + 1 = 0$ II. $y^2 - 8y + 15 = 0$

90. I. $x = (-4)^2$ II. $y^2 = 256$

Directions (91-95) : What value will come in place of question mark (?) in the given questions ? (You are not expected to calculate the exact value)

91. $18.05 \times 8.99 - 52.02 = ?$

- (1) 140 (2) 75 (3) 160
 (4) 110 (5) 150

92. $149.96 \times 3.02 - 114.57 \times 1.93 = ?$

- (1) 170 (2) 220 (3) 310
 (4) 190 (5) 260

93. $45.04 + 4.97 = ? + 12.99$

- (1) 104 (2) 91 (3) 120
 (4) 117 (5) 143

94. $135.59 + 7.62 \times 2.93 = 75.01\%$ of ?

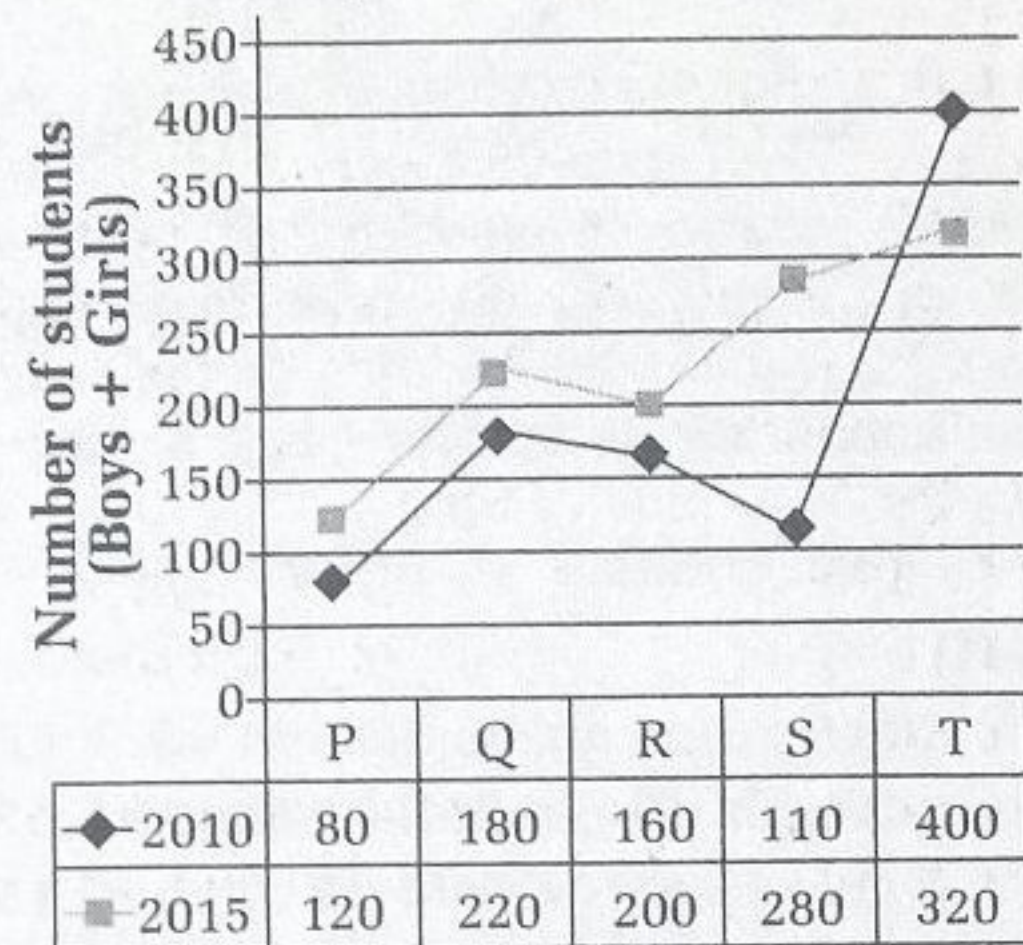
- (1) 80 (2) 60 (3) 40
 (4) 20 (5) 68

95. 75.05% of $(289.96 + 142.01) = ?^2$

- (1) 10 (2) 16 (3) 14
 (4) 18 (5) 12

Directions (96-100) : Study the following graph to answer the given questions.

Data regarding the number of students (Boys + Girls) studying management in different colleges in the years 2010 and 2015



96. Number of students in college S in 2015 is what percent of the number of students in college P in both the years together ?

- (1) 44% (2) 56% (3) 55%
 (4) 50% (5) 60%

97. What is the difference between the total number of students in colleges P and Q together in year 2015 and that in the same colleges together in 2010 ?

- (1) 80 (2) 110 (3) 90
 (4) 120 (5) 60

98. The average number of girls in colleges R and Q in year 2015 was 72. Number of boys in college S was 58 more than that in college R in the same year. Number of girls in college S was what percent more than that in college R ?

- (1) 40% (2) 50% (3) 42%
 (4) 36% (5) 20%

99. Number of students in 2015 in college T was what percent less than in year 2010 ?

- (1) 22% (2) $18\frac{1}{3}\%$ (3) 15%
 (4) 20% (5) $25\frac{1}{6}\%$

100. In the year 2016, the number of students in college R was 40% more than that in the same college in the year 2010. Number of students in college R in 2016 was how many more than that in the same college in 2015 ?

- (1) 18 (2) 12 (3) 24
 (4) 32 (5) 36