

Test-I English Language

Directions (Q. 1-15): Read the passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

In the English dictionary, the word "reforms" means "to improve by alteration, correction of error, or removal of defects; put into a better form or condition." From time to time, large-scale policy changes become necessary for the betterment of the society and economy.

The last such initiative was undertaken in 1991; and, of course, before that, immediately after Independence. We seem to be at the crossroads once again.

What necessitated these changes at each juncture? In 1947, our society was predominantly rural and feudal, with a **minuscule** urban educated class. Industry was insignificant, barring jute and textiles. Income distribution was **skewed**.

During colonial rule, the economy was outward-looking, but deprivation, unequal income distribution, and lack of industrial self-sufficiency motivated post-Independence policymakers to adopt an inward-looking socialist model of development.

In an effort to equalise income distribution, the government dismantled the feudal system, and doled out subsidies in the form of cheaper fertiliser, while not taxing agricultural income. High import tariffs were put in place, shielding domestic industry from global competition.

These measures, perhaps appropriate to the specific context of post-Independent India, turned into an obstacle to growth and development in the later years. Too much government control and discretionary power for the bureaucracy led to corruption. Large industrialists, making super-normal profits in a protected market, lined the pockets of corrupt bureaucrats and pampered them.

Trade union leaders and government employees neglected performance. Large farmers cared little about increasing agriculture productivity. The result of this government largesse, which did not help enhance productivity, was a high fiscal deficit during the late Eighties.

That called for another set of reforms from 1991 onwards—the so-called 'economic reforms'.

The initial effects of reforms, in terms of the government acting more as a facilitator and allowing active private participation in the economy through liberalisation and globalisation, were beneficial. Banking sector reforms, by bringing down interest rates, led to an increase in private investment and corporate profitability. GDP growth increased to an average of over 8 per cent between 2003 and 2011.

Now, the economy has once again started slowing down. The Finance Ministry and PMO have initiated steps to bring the economy back on the fast-growth track. However, we should be able to distinguish between good and bad measures.

Take, for instance, the new Land Acquisition, Rehabilitation and Resettlement Bill, 2011.

As per this legislation, when it comes to **acquiring** land, the State has to pay two times the market price if the land is in urban areas, and four times the market price if the land is in rural areas. In addition, for rehabilitation, a sum of Rs.1.36 lakh has to be given to the displaced household. For **sustaining** livelihoods, a job has to be provided to one member in the household, or a one-time payment of Rs. 5 lakh would have to be made.

Scarcity of land not only hampers expansion of industry and tourism, but can also have other secondary effects. Take education, for instance. Despite the success in enrolling students in primary education there is still a vast pool of population stuck in the agricultural sector. In fact, 75 per cent of the unemployed are in the agriculture sector. For the government to promote public-private partnerships in vocational education, say, in the form of polytechnics in rural areas, would need land. For opening a polytechnic institute, the All India Council of Technical Education (AICTE) requires a minimum of 1.5 acres in urban municipal areas and 5 acres in rural areas.

Not all reforms measures are bad. For instance, the proposal to set up Cabinet Committee on Investment, to fast-track Rs. 1000-crore-plus projects on infrastructure, is a welcome move. Often, construction of railway tracks, roads and power transmission lines is delayed because of environment clearances. The Committee on Investment can now directly intervene with the ministry concerned (in this case Ministry of Environment) and speed up the process of obtaining clearances.

1. **Which of the following statements regarding the proposed Cabinet Committee on Investment is true? Give your answer in the context of the given passage.**

- The committee will act on behalf of the Ministry of Finance, Govt of India.
- The committee will suggest the RBI in respect of economic reforms measure.
- The committee shall have power to directly intervene with the ministry concerned, if required, for speedy disposal of work.
- The committee will be obliged to manage ₹1000 cr every year for infrastructure development.
- None of these

2. **What were the effects of the measures taken by the government to equalise income distribution?**
- There was a high fiscal deficit during the late Eighties.
 - In the earlier years of Independence, the steps taken to equalise income distribution proved appropriate but in the later years these steps turned into obstacle to growth and development.
 - Too much government control and discretionary power for bureaucracy led to corruption.
 - Only (a) and (b)
 - All (a), (b) and (c)
3. **What is/are the characteristic features of the new Land Acquisition, Rehabilitation and Resettlement Bill 2011? Give your answer in the context of the passage.**
- For sustaining livelihood, a job has to be provided to at least two members in the household.
 - For rehabilitation a sum of ₹2 lakh has to be given to the displaced household.
 - To acquire land the government has to pay two times the market price if the land is in urban areas, and four times the market price if the land is in rural areas.
 - In lieu of providing jobs the govt has to make a lumpsum payment of ₹1.36 lakh.
 - All the above
4. **Why has the author quoted the meaning of the word 'reforms' in the opening line of the passage?**
- Because this word has been wrongly used and interpreted by many who are in the profession of journalism and writing.
 - Because the author thinks that too many reforms measures taken by the government turned into obstacle to growth and development.
 - Because only the initial effects of reforms measures such as Liberalisation and Globalisation were beneficial as these led to an increase in private investment and corporate profitability.
- Only (A)
 - Only (A) and (B)
 - Only (C)
 - Only (B) and (C)
 - Only (A) and (C)
5. **Which of the following is incorrect about the distinctive features of colonial rule, as mentioned in the given passage?**
- Unequal income distribution
 - Outward-looking economy
 - Lack of industrial self-sufficiency
 - Rule of only law, no crime, no corruption
 - None of these
6. **What steps were taken by the government to equalise income distribution among the people?**
- Agricultural income was not taxed.
 - Many schemes such as Antyodaya and Annapurna were launched to bring the downtrodden to equal level.
 - The feudal system was dismantled and fertilisers at subsidised rate were made available to farmers.
- Only (A) and (C)
 - Only (B) and (C)
 - Only (C)
 - Only (A) and (B)
 - Only (A)
7. **What was the condition of India and its society immediately after its independence?**
- Very few urban people were educated.
 - Industries except jute and textiles had lost their significance.
 - The society was predominantly rural and feudal.
 - There was a wide gap between the incomes of people in the society.
 - All the above
8. **Find the statement which is not true in the context of the given passage.**
- Three-fourths of the unemployed are in the agriculture sector.
 - Many students enrolled in primary education, are stuck in the agriculture sector due to scarcity of land for school buildings.
 - The All India Council of Technical Education requires at least one-and-a-half acres of land in urban municipal areas for opening a polytechnic institute.
 - Scarcity of land does not impede the expansion of tourism industry.
 - None of these
9. **What do you think is the real intention of the author behind writing the given passage? Select the most appropriate answer.**
- The author is pessimistic about the outcomes of the reform measures taken by the government.
 - The author wants to enlighten the readers about the ins and outs of the reform measures and the existing problems.
 - The author wants to impose his own views about bureaucrats, industrialists and trade union leaders.
 - The author wants to present a true picture of pre- and post-independence India.
 - None of these
- Directions (Q. 10-12): Choose the word/group of words which is MOST SIMILAR in meaning to the word/group of words printed in bold as used in the passage.**
10. **Skewed**
- inclined
 - broken
 - stagnant
 - slow
 - distorted
11. **Sustaining**
- maintaining
 - ratifying

- (c) enduring (d) earning
(e) balancing
12. **Pampered**
(a) overlooked (b) cosseted
(c) changed (d) terminated
(e) covered

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

13. **Minuscule**
(a) diversified (b) rich
(c) huge (d) elite
(e) handful
14. **Dismantled**
(a) started (b) disbanded
(c) abolished (d) repudiated
(e) expedited
15. **Acquiring**
(a) confiscation (b) appropriation
(c) possession (d) distribution
(e) vindication

Directions (Q. 16-20): Read each sentence to find out whether there is any grammatical or idiomatic error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is 'No error', the answer is (e). (Ignore errors of punctuation, if any.)

16. (a) A marriage between any two people belonging to any religion / (b) or creed may be solemnised under the Special Marriage Act / (c) if at the time of the marriage the male / (d) has completed 21 years and the female 18. / (e) No error
17. (a) Recent focused studies by anthropologists / (b) have shown that while Muslim men have / (c) significantly greater rights than women, / (d) they are infrequently asserted. / (e) No error
18. (a) The most recent National family Health Survey in 2011 / (b) indicates that Hindu and Christian men / (c) had more than one wives / (d) as against Muslim men. / (e) No error
19. (a) Congress President Sonia Gandhi wrote to / (b) Prime Minister Manmohan Singh requested him / (c) to ensure that the officer / (d) was "not unfairly treated." / (e) No error
20. (a) The Washington Post epitomises what is wrong / (b) with the newspaper industry across the / (c) developed world, but especially / (d) in the United States. / (e) No error

Directions (Q. 21-25): In the following questions, a sentence has been given with some part of it 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 (e) as your answer (ie No correction required).

21. **Moscow pointed out that there was no extradition treaty between Russia and the US because Washington have to refuse to sign**
(a) have refused to sign (b) has refused to sign
(c) had refused to sign one
(d) had been refused to signing
(e) No correction required'
22. **The relentless pressure mounted by the US to coax Egypt's military-backed interim rulers to bring the Muslim Brotherhood back into the political mainstream has backfired resoundingly.**
(a) have fired back resoundingly
(b) has resoundingly back fire
(c) was a resound of back fire
(d) was a resound to backfire
(e) No correction required
23. **The politics of the Darjeeling Hill revolve about the demand for Gorkhaland.**
(a) Hill revolves about the
(b) Hills revolves around the
(c) Hill revolve round the
(d) Hills revolve for the (e) No correction required
24. **If separate storage and dining spaces are required for a policymaker's family of four or five persons, why equivalent facilities will be required for a School for storing materials and serving meals for school children is a moot question.**
(a) would be required for (b) would be required in
(c) would not be required in
(d) should be required in (e) No correction required
25. **The resolution passed by the Congress Working Committee for the creation of a separate State of Telangana has not had the anonymous supporters of several political parties.**
(a) anonymous supports of
(b) anonymously supporters of
(c) unanimous support by
(d) unanimous support of
(e) No correction required

Direction (Q 26-30) : In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.

The Reserve Bank of India's biannual Financial Stability Report has once again (26) the fact that risks to the banking sector remain worryingly "high". That the risks have stayed "(27) due to continuous deterioration in asset quality, low profitability and liquidity," in the central bank's assessment, is cause for concern. Given the central role commercial lenders have in the financial system — serving to (28) public (29) and direct the flow of crucial credit to the most productive industrial and infrastructure sectors — any systemic risk to the banking industry has the potential to (30) across the entire economy.

26. (a) abated (b) gesture (c) indicate (d) flagged

27. (a) exalted (b) elevated
(c) lessened (d) decreased
28. (a) handle (b) manipulate
(c) harness (d) utilize
29. (a) fund (b) investment
(c) money (d) savings
30. (a) ripple (b) fluctuate
(c) vacillate (d) flow

Test-II Reasoning Ability

Directions (Q. 31-3(e): In these questions the symbols #, ©, , \$ and % are used with different meanings as given below:

'A # B' means 'A is smaller than B'

'A © B' means 'A is greater than B'

'A B' means 'A is either smaller than or equal to B'

'A \$ B' means 'A is either greater than or equal to B'

'A % B' means 'A is neither smaller nor greater than B'

In each of the following questions, assuming the given statements to be true, find out which of the two conclusions I and II given below them is/are definitely true. Give answer

- (a) if only conclusion I is true.
(b) if only conclusion II is true.
(c) if either conclusion I or II is true.
(d) if neither conclusion I nor II is true.
(e) if both conclusions I and II are true.
31. **Statement:** L \$ M % Q © S # T P
Conclusions: I. T © L
II. L © S
32. **Statement:** W # H I % C \$ H © S
Conclusions: I. C \$ W
II. I © S
33. **Statement:** W % X © Y Z © R % L
Conclusions: I. Z © L
II. Y # W
34. **Statement:** A # N % O T H # E
Conclusions: I. E \$ O
II. H © N
35. **Statement:** P © V % T # D # M \$ F
Conclusions: I. M © V
II. P # F

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

In a certain code language 'score the maximum marks' is written as 'pan cha ga mo', 'marks are less than' is written as 'ta ha cum pan', 'score the highest marks' is

written as 'ga cha she pan' and 'less than you' is written as 'ha cum va'.

36. **What is the code for 'highest'?**
(a) she (b) cha (c) ha (d) pan
(e) None of these
37. **Which of the following can be the code for 'you score maximum'?**
(a) va mo cha (b) cha ga mo
(c) mo ga va (d) Either (a) or (c)
(e) None of these
38. **'cum' is the code for**
(a) less (b) are (c) Either 'less' or 'than'
(d) marks (e) None of these
39. **Which of the following is the code for 'marks'?**
(a) che (b) pan (c) cum (d) ga
(e) None of these
40. **'than score the less' can be coded as**
(a) cha ga ha cum (b) ha cum ga she
(c) cha ha ga mo (d) Can't be determined
(e) None of these

Directions (Q. 41-45): Study the following information carefully and answer the given questions:

A, C, E, I, O, N, P and S are eight persons working in an MNC. They are sitting around a circular table in a meeting but not necessarily in the same order. All of them hold a different post, viz President, MD, GM, CA, HR, Vice President, Chairman and Vice Chairman, but not necessarily in the same order. C sits third to the right of the Vice President. Only two persons sit between Vice President and S. The GM and the MD are immediate neighbours.

Neither C nor S is a GM or an MD. The GM is not an immediate neighbour of the Vice President. The CA sits third to the right of O, who is not the GM. N sits on the immediate right of the Chairman. The Vice Chairman sits second to the left of A, who is not an immediate neighbour of S. The Vice Chairman is an immediate neighbour of both the HR and the CA. C is not the Chairman. I is not an

immediate neighbour of C. E is not an immediate neighbour of the Vice Chairman.

41. **Who among the following is the Chairman of the company?**
 (a) E (b) A (c) I (d) P
 (e) None of these
42. **O holds which of the following posts in the company?**
 (a) Chairman (b) HR (c) MD
 (d) Vice Chairman (e) None of these
43. **How many persons sit between the Chairman and the President?**
 (a) None (b) One (c) Two (d) Three
 (e) None of these
44. **Which of the following pairs is an immediate neighbour I?**
 (a) Vice Chairman, CA
 (b) Chairman, Vice President
 (c) Chairman, HR
 (d) Vice Chairman, Chairman
 (e) Can't be determined
45. **Which of the following statements is true?**
 (a) A is the Chairman and sits on the immediate right of N.
 (b) The President and the HR are immediate neighbours of P.
 (c) N is the Vice President and sits second to the left of E.
 (d) None is true (e) All are true

Directions (Q. 46-48): Study the following information carefully and answer the given questions.

There are seven friends X, W, Y, V, Z, U and R. All of them want to enjoy a boat trip but there are only two boats. Each boat has a capacity for four persons only. More people are travelling in Boat I than in Boat II.

Z does not want to go in the boat in which Y is travelling unless V is also with them. Neither W nor Y goes with R in the same boat. X always wants to go with Z in Boat I. U can't go with Y

46. **Which of the following groups travels in Boat I?**
 (a) U, R, Z, Y (b) X, Z, U, R
 (c) V, Y, X, Z (d) W, Y, V
 (e) None of these
47. **U is travelling with which of the following groups?**
 (a) Z, R, Y (b) V, Y, W (c) X, Y, Z (d) X, Z, R
 (e) Can't be determined
48. **If the last condition is waived off and V is travelling in Boat I then who among the following will go in Boat II?**
 (a) X (b) R (c) U (d) Z
 (e) None of these

Directions (Q. 49-54): 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: 70 family 53 parents 77 mother 60 father

Step I: 70 family 53 parents 60 father 77 mother

Step II: 70 family 53 parents 77 mother 60 father

Step III: 53 parents 77 mother 60 father 70 family

Step IV: 77 mother 60 father 70 family 53 parents

Step IV is the last step of the above input as the desired arrangement is obtained. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input.

Input: 50 rule 98 audi 56 octavia 78 jaguar 85 pascal
81 renault

49. **What is the position of '78' in Step IV?**
 (a) Eighth from the left (b) Sixth from the right
 (c) Second from the right (d) Fifth from the left
 (e) None of these
50. **Which of the following steps would be the last but one?**
 (a) Step III (b) Step V (c) Step VI (d) Step VII
 (e) None of these
51. **If in Step V '81' is related to '98' and 'renault' is related to 'audi' in certain way. Following the same rule 'octavia' is related to which of the following?**
 (a) jaguar (b) 78 (c) rule (d) 98
 (e) None of these
52. **Which step number is the following output? 98 audi 78 jaguar 81 renault 56 octavia 85 pascal 50 rule**
 (a) Step IV (b) Step II (c) Step V (d) Step III
 (e) There is no such step
53. **How many words/numbers are there between 'renault' and 'rule' in Step IV?**
 (a) Two (b) None (c) Four (d) Six
 (e) None of these
54. **If '61 credit 42 gun 26 just 21 the 92 join 37 now' is Step III of an input, then which of the following would be the input?**
 (a) 37 now 61 credit 92 join 42 gun 26 just 21 the
 (b) 21 the 37 now 92 join 26 just 42 gun 61 credit
 (c) 61 credit 42 gun 21 the 26 just 92 join 37 now
 (d) Can't be determined
 (e) None of these

Directions (Q. 55-59): Study the following information carefully and answer the given questions.

Eight members L, M, N, O, P, Q, R and S belong to three different families, viz Gujarati, Punjabi and Marathi. They go for weekend outing in three different cars, viz Alto, Nano and Santro. Four out of the eight members are females. Each member of every family travels in a different car. Each car carries at least one male and one female member. Each family has at least two members. L is Marathi and he travels in Santro. O is wife of P and they travel in Alto and Nano respectively. S is son of M, who is wife of R, and they are Punjabi. N is daughter of Q, who is wife of L. N travels in Nano. R does not travel with Q.

55. **How many members are there in the Gujarati family?**
 (a) Two (b) Three (c) Four
 (d) Either (b) or (c) (e) None of these
56. **Which of the following groups travels in Alto?**
 (a) QSL (b) OPQ (c) QSO (d) SOP
 (e) None of these
57. **Which of the following groups represents the group of married females?**
 (a) OQS (b) MON (c) MNQ (d) NOQ
 (e) None of these
58. **Which of the following statements is false?**
 (a) O belongs to the Marathi family.
 (b) M and Q travel in the same car.
 (c) R and N travel in Nano.
 (d) Only (a) and (b) (e) All are false
59. **Which of the following combinations is true?**
 (a) P-Female-Gujarati -Alto
 (b) N - Female - Marathi - Nano
 (c) M - Female - Punjabi Alto
 (d) R- Male - Gujarati - Nano
 (e) S - Male - Punjabi - Santro
60. **The 2009 election was not won by the UPA because of farm loan waivers or the National Rural Employment Guarantee Act (MN REGA). Which of the following statements substantiates the view expressed in the above statement?**
 (a) Great populist sops are not announced in vote-on-account.
 (b) The major vote share of the UPA came from the farmers.
 (c) People had become weary of the NDA's "India Shining" campaign and yearned for a change in the composition of the ruling class.
 (d) UPA actually swept all the cities while faring indifferently in the backward BIMARU states where MNREG A should have had the most impact.
 (e) None of these
61. **The finance minister was afraid of any credit downgrade by international rating agencies. Which of the following inferences cannot be drawn from the above statement! (An inference is something which is not directly stated but can be inferred from the given facts.)**
 (a) This would tarnish the country's image.
 (b) The rupee would go crashing.
 (c) There would be a rise in inflation.
 (d) The voters would give his party a raw deal.
 (e) All the above inferences can be drawn
62. **The segment of cars using Automated Manual Transmission (AMT) technology has not taken off. Which of the following can be a probable cause(s) of the above phenomenon!**
 (A) There is a price gap of at least a lakh rupees between automatic and manual cars.
 (B) The fuel efficiency in existing automatic cars is 25-30 per cent lower than in manual ones.
 (C) Their maintenance cost is exorbitant.
 (a) Only B (b) Only A (c) Only A and B
 (d) Only B and C (e) All A, B and C
63. **Sony India has decided to sell off the Vaio brand and laptop business. Which of the following can be a proper course(s) of action?**
 (A) Sony India should put more resources in developing the mobile business, which is the future growth area.
 (B) The employees in laptop business should be moved to mobile division.
 (C) People should sell their Vaio laptops.
 (a) Only A (b) Only B (c) Only A and B
 (d) Only B and C (e) All A, B and C
64. **An exceptional monsoon will raise food grain production to a record 263.2 million this year. Which of the following substantially weakens the argument given in the above statement?**
 (a) Farm sector growth would be 4.6 per cent compared to 1.9 per cent last year.
 (b) Most of the land in India has proper irrigation facilities.
 (c) A rise in the production of pulses, whose global supplies are limited, will help tame prices.
 (d) India mostly produces cash crops.
 (e) None of these
65. **The rise of global CEOs who spent their formative years in India is acknowledgement that the country is doing at least some things right. Which of the following assumptions is implicit in the above statement? (An assumption is something supposed or taken for granted.)**
 (a) India has produced a large number of CEOs.
 (b) India is not known for right policies.
 (c) Some of the qualities these leaders possess — humility, modesty and a strong work ethic — were acquired well before they left the territorial frontiers of India.

(d) The stability of family upbringing is a major advantage Indians have.

(e) None of these

Test-III Quantitative Aptitude

Directions (Q. 66-70): In every questions one or more equations are given on the basis of which you have to find out about p and q .

Mark answer:

- (a) if $p > q$ (b) if $p < q$ (c) if $q > p$
 (d) if $p < q$ and (e) if $p < q$
66. I. $2p = 5/2$ $p = 3$ II. $a = 5/2$ 1
 67. I. $p^2 = 3$ 12 II. $3q = 5$ 1 q
 68. I. $7p^2 = 8p$ $1 = 0$ II. $\frac{5q}{2} = \frac{3q}{4} = \frac{1}{8}$
 69. I. $\frac{p}{2} = \frac{p}{3} = 1$ II. $q^2 = 36$ $12q$
 70. I. $\frac{p}{5} = \frac{2}{7} = 0$ II. $p^2 = 2q$ 1

Directions (Q. 71-75): In the following questions a number series has been given. In this series there is the letter A in place of a number. You have to find out the number in place of 'A' and using this number you have to identify on the basis of the given series, the number that will come in place of question mark (?).

71. 168 A 167 151 166 152 165
 75% of A ?
 (a) 112.5 (b) 120.0 (c) 23.76 (d) 111.75
 (e) None of these
72. 26 52 104 208 A 832 1664
 $\sqrt{A - 4^2} = ?$
 (a) 10.0 (b) 20.29 (c) 123.0 (d) 19.62
 (e) 20.0
73. 6 7 11 20 36 61 A
 12% of 2A ?
 (a) 21.60 (b) 23.28 (c) 23.04 (d) 22.56
 (e) 23.52
74. 18 6 A $\frac{2}{3}$ $\frac{2}{9}$ $\frac{2}{27}$ $\frac{2}{81}$
 A 2 1 ?
 (a) 1 (b) 2 (c) 0 (d) $\frac{1}{3}$
 (e) $1\frac{1}{3}$
75. 6 8.5 7 9.5 A 10.5 9
 $A^2 = 2A = 3A = ?$
 (a) 1485 (b) 3645 (c) 2560 (d) 1048
 (e) 4120

76. There is a water tank of capacity 500 litres which is connected with two filling pipes P_1 and P_2 , which can fill the tank in $37\frac{1}{2}$ hours and 60 hours respectively. The rate at which P_2 fills the tanks is less than that of P_1 by what per cent?
 (a) 60% (b) 37.5% (c) 25% (d) 30.5%
 (e) None of these
77. 300 apples are distributed equally among a certain number of students. Had there been 10 more students, each student would have received one apple less. Find the number of students.
 (a) 70 (b) 40 (c) 55 (d) 50
 (e) None of these
78. In a 30-litre mixture of milk and water, the ratio of milk to water is 7 : 3. How much quantity of water should be added to the mixture to make the ratio of milk to water 1 : 2 ?
 (a) 30 litres (b) 32 litres (c) 33 litres (d) 35 litres
 (e) None of these
79. If 3 pumps can empty a tank in 2 days by working 8 hours a day, how many hours a day must 4 pumps work to empty the tank in one day?
 (a) 12 hours (b) 15 hours
 (c) 18 hours (d) 9 hours
 (e) None of these
80. Anish spends 25% of his salary on house rent, 5% on food, 15% on travel, 10% on clothes, and thus he saves Rs. 22,500. What is Anish's salary?
 (a) Rs. 40000 (b) Rs. 40500
 (c) Rs. 45500 (d) Rs. 50000
 (e) None of these
81. What is the probability that a card drawn at random from a well-shuffled pack of 52 cards is either a king or a diamond?
 (a) $\frac{11}{52}$ (b) $\frac{4}{13}$ (c) $\frac{3}{13}$ (d) $\frac{13}{52}$
 (e) None of these
82. Clock A loses 1 minute a day and clock B gains $1\frac{1}{2}$ minutes a day. If clock B is 30 minutes ahead of clock A, how many days will clock B take to be 45 minutes ahead of clock A?
 (a) 10 (b) 6 (c) 18 (d) 8
 (e) None of these

83. Which of the following equations are equivalent?
 (A) $2p^2(3p^2 - 5) - 9 - 2p^2(p^2 - 1)$
 (B) $(2p^2 - 3)^2$ (C) $(2p^2 - 3)^2$
 (D) $4p^4 - 12p^2 - 9$
 (a) Only A and B (b) Only B and C
 (c) Only B and D (d) All except
 (e) All except c
84. A certain tank can be filled by pipes A and B separately in 4 and 5 minutes respectively. Whereas, pipe C can empty it in 3 minutes. How long will it take to fill or empty the $\frac{4}{5}$ th full tank. It all the three pipes start together?
 (a) $1\frac{5}{7}$ minutes to fill (b) $6\frac{6}{7}$ minutes of empty
 (c) $1\frac{5}{7}$ minutes to fill (d) $6\frac{6}{7}$ minutes to fill
 (e) None of these
85. What will be the value of $16x^2y - 40xy + 25y$, If $x = 2$ and $y = 1$?
 (a) -32 (b) 9 (c) 49 (d) 25
 (e) None of these

Directions (Q. 86-90): 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:

- (a) 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.
 (b) 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.
 (c) if the data either in statement I alone or in statement II alone are sufficient to answer the question.
 (d) if the data even in both the statements I and II together are not sufficient to answer the question.
 (e) if the data in both the statements I and II together are necessary to answer the question.

86. A number is divisible by 3. Find the number.
 I. Square of the number is divided by 9.
 II. 40% of the number is $\frac{2}{5}$ th of that number.
87. What is the ratio of investments of A, B and C?
 I. Total investment is Rs. 12000 in which A's contribution is Rs. 6000.
 II. Ratio of investment of A to B is 3 : 2 and that of B to C is 2 : 1.
88. The marked price of a TV set is Rs. 20,000. At what price a customer buys this TV set?
 I. The shopkeeper allows successive discounts of 25% and 5%.
 II. The shopkeeper allows successive discounts of 20% and Rs. 1750.
89. The average salary of 15 teachers of a school is Rs. 5000 p.m. A group of 4 teachers whose average salary is Rs. 6000 pm leave the school and new teacher joins. What is the average salary of new group of teachers in the school?
 I. Total investments is Rs. 20,000
 II. Ratio of the interests earned is 300 : 331

Direction (Q 91-95) : What should come in place of question mark (?) in the following questions?

91. $\sqrt{24} \sqrt{96} \sqrt{216} \sqrt{384} 5\sqrt{2} ?$
 (a) $6\sqrt{3}$ (b) $4\sqrt{3}$ (c) $2\sqrt{3}$ (d) $5\sqrt{3}$
 (e) $3\sqrt{3}$
92. $189\frac{2}{9} 189\frac{3}{9} 189\frac{4}{9} 189\frac{5}{9} 189\frac{6}{9} 189\frac{7}{9} ?$
 (a) 1138 (b) 1037 (c) 1237 (d) 1238
 (e) 1137
93. $\sqrt{1369} \sqrt{1444} \sqrt{?} 1420$
 (a) 14 (b) 196 (c) 198 (d) 194
 (e) 16
94. $\sqrt{6889} \sqrt{3721} \sqrt{1024} \sqrt{2401} ?$
 (a) 129 (b) 128 (c) 127 (d) 124
 (e) 123
95. $3001 99 11 6001 8 401 11 (303)^2 ?$
 (a) 76125 (b) 78129 (c) 75000 (d) 75221
 (e) 74532

Directions (Q. 96-100) : Study the following table carefully to answer the question given below it:

Number of candidates appeared, qualified and selected in a competitive examination from five states A, B, C, D, and E over the years 1994 to 1998

State	A			B			C			D			E		
	A	Q	S	A	Q	S	A	Q	S	A	Q	S	A	Q	S
1994	4500	600	75	6400	540	60	5200	350	55	7100	650	75	6400	700	75
1995	5700	485	60	7800	720	84	6500	525	65	6800	600	70	7200	680	85
1996	8500	950	80	7000	650	70	4800	400	48	5600	620	85	7500	720	78
1997	7200	850	75	8800	920	86	7400	560	70	7500	800	65	7800	810	82
1998	9000	800	70	9500	850	90	7500	640	82	4800	500	48	8000	850	94

A = Appeared; Q = Qualified ; S = Selected

96. What is the average number of candidates appeared over the years for State B?
(a) 8900 (b) 7900 (c) 7400 (d) 8100
(e) None of these
97. What approximately in the percentage of total number of candidates selected to the total number of candidates qualified for all the five states together during the year 1996 ?
(a) 11% (b) 15% (c) 12% (d) 16%
(e) 14%
98. For which of the following years is the percentage of candidates selected over the number of candidates qualified the highest for state C ?
(a) 1997 (b) 1995 (c) 1996 (d) 1994
(e) 1998
99. For which of the following states the average number of candidates selected over the years is the maximum?
(a) A (b) E (c) C (d) D (e) B
100. For which of the following states in the percentage of candidates qualified to appeared the highest during the year 1997 ?
(a) A (b) B (c) C (d) D (e) E

- Answer key

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

Hint & Solutions

(31-35) : Given,

, © > , \$ and %

31. Given statement : L \$ M % Q © S # T P

Now, L M Q S T P

Thus, we can't compare L and T.

Hence conclusion I is not true. Again, L > S. Hence, conclusion II is true.

32. Give statement : W # H I % C \$ H © S

Now, W H I C H S

Thus, W C is true. But conclusion C W is not true.

Hence conclusion I is not true.

Again, I S is true. Hence conclusion II is true.

33. Given statement : W % X © Y Z © R % L

Now, W X Y Z R L

Thus, Z L is true. Hence conclusion I is true.

Again, W Y or Y W. Hence conclusion II is also true.

34. Given statement : A # N % O T H # E

Now, A N O T H E

Thus, O E is true. But (E O) is not true. Hence conclusion I is not true.

Again, N H is true. But (H N) is not true. Hence conclusion II is not true.

35. Given statement : P © V % T # D # M \$ F

Now, P V T D M F

Thus, V M or M V is true. Hence conclusion I is true.

But, we can't compare P and F. Hence conclusion II is not true.

(36-40) :

score the maximum marks pan cha ga mo ... (i)

marks are less than ta ha cum pan ... (ii)

score the highest marks ga cha she pan ... (iii)

less than you ha cum va ... (iv)

From (i), (ii) and (iii), marks pan ... (v)

From (i), (iii) and (v), maximum mo ... (vi)

From (i), (v) and (iii), score/the ga/cha ... (vii)

From (ii), (iv) and (v) are ta ... (viii)

From (ii) and (iv), less than ha/cum ... (ix)

From (iii), (v) and (vii), highest she ... (x)

From (iv) and (ix), you va ... (xi)

(46-48) :

Boat I Boat II

X, Z, U, R V, Y, W

(49-54): The machine arranges the numbers according to digit-sum of each number in ascending order, and the arrangement starts from the right end. Also, the word on the immediate right of the number remains with it and after each rearrangement the number and word both move one place left.

Input : 50 rule 98 audi 56 octavia 78 jaguar 85 pascal 81 renault

Step I: 50 rule 98 audi 78 jaguar 81 renault 56 octavia 85 pascal

Step II: 50 rule 98 audi 78 jaguar 81 renault 56 octavia 85 pascal

Step III: 98 audi 78 jaguar 81 renault 56 octavia 85 pascal 50 rule

Step IV: 98 audi 81 renault 56 octavia 85 pascal 50 rule 78 jaguar

Step V: 81 renault 56 octavia 85 pascal 50 rule 78 jaguar 98 audi

Step VI: 56 octavia 85 pascal 50 rule 78 jaguar 98 audi 81 renault.

53. Five

Person	Family	Car
L (+)	Marathi	Santro
O (-)	Gujarati	Alto
P (+)	Gujarati	Nano
M (-)	Punjabi	Santro
R (+)	Punjabi	Nano
S (+)	Punjabi	Alto
N (-)	Marathi	Nano
Q (-)	Marathi	Alto

57. **MQO**
 60. **It's more than obvious.**
 61. **Credit downgrade leads to all of these.**
 62. **All the three reasons go against the popularity of AMT cars.**
 63. **Alternatives have to be explored. Hence (A) and (B) follow. But C is a panic reaction.**
 64. **Choices (1) and (3) are obviously irrelevant. Choice (4) too does not make sense even if it were true. All we are concerned about is the food grain component; cash crops do not concern the statement irrespective of what their contribution is. choice (2) may be a googly. If irrigation facilities are there, we are not dependent on rainfall! Well, that may be true if only certain areas have deficit rainfall. But in general, you do need a good rainfall to have a good water level and to keep your canals functioning.**
 65. **This is implicit in the last part of the statement—"the country is doing at least some things right".**

66. $2p \frac{5}{2} p 3$

or, $p 3 \frac{5}{2} \frac{1}{2}$
 II. $q \frac{5}{2} 1$
 or, $q 1 \frac{5}{2} \frac{7}{2} 3\frac{1}{2}$
 $q q$

Therefore, the required answer is option (c).

67. **I. $p^2 3 12$**

or, $p^2 9$
 or, $p \sqrt{9} 3$
 II. $3q 5 1 q$
 or, $2q 6$
 or, $q 3$
 $q p$

Therefore, the required option is (e).

68. **I. $7p^2 8p 1 0$**

or, $7p^2 7p p 1 0$
 $7p(p-1) 1(p-1) 0$
 or, $(p-1)(7p-1) 0$
 $p 1$ and $\frac{1}{7}$

II. $\frac{5q}{2} \frac{3q}{4} \frac{1}{8}$

or, $\frac{5q}{1} \frac{3q}{2} \frac{1}{4}$
 or, $\frac{10q}{2} \frac{3q}{4} \frac{1}{4}$

or, $7q \frac{1}{2}$
 or, $q \frac{1}{14}$
 $p q$

Therefore, the required answer is option (b).

69. **I. $\frac{p}{2} \frac{p}{3} 1$**

or, $p \frac{1}{2} \frac{1}{3} 1$
 or, $p \frac{3}{6} \frac{2}{6} 1$
 or, $p 6$
 II. $q^2 36 12q$
 or, $q^2 12q 36 0$
 or, $(q-6)^2 0$
 or, $q 6 0$
 $q 6$
 $q q$

Therefore, the required answer is option (a).

70. **I. $\frac{p}{5} \frac{2}{7} 0$**

or, $\frac{p}{5} \frac{2}{7}$
 or, $p \frac{10}{7} 1\frac{3}{7}$
 II. $q^2 2q 1$
 or, $q^2 2q 1$
 or, $q^2 2q 1 0$
 or, $(q-1)^2 0$
 or, $q 1 0$
 $q 1$
 $p q$

Therefore, the required answer is option (b).

71. **The series is based on the following pattern :**

168	18	150
150	17	167
167	16	151
151	15	166
166	14	152
152	13	165

Therefore, the value of A $\frac{150}{75\% \text{ of } A} = \frac{150 \cdot 75}{100} = 112.5$

72. **The series is based on the following pattern :**

26	2	52
52	2	104
104	2	208
208	2	416
416	2	832
832	2	1664

Therefore, the value of A is 416

$$\sqrt{A} \quad (4)^2 \quad \sqrt{416} \quad 16 \quad \sqrt{400} \quad 20$$

73. The series is based on the following pattern :

$$\begin{array}{ccc} 6 & 1^2 & 7 \\ 7 & 2^2 & 11 \\ 11 & 3^2 & 20 \\ 20 & 4^2 & 36 \\ 36 & 5^2 & 61 \\ 61 & 6^2 & 97 \end{array}$$

Therefore, the value of A is 97.

$$\begin{array}{r} 12\% \text{ of } 2A \quad \frac{12 \quad 2 \quad 97}{100} \\ \frac{2328}{100} \quad 23.28 \end{array}$$

74. The series is based on the following pattern :

$$\begin{array}{ccc} 18 & \frac{1}{3} & 6 \\ 6 & \frac{1}{3} & 2 \\ 2 & \frac{1}{3} & \frac{2}{3} \\ \frac{2}{3} & \frac{1}{3} & \frac{2}{9} \\ \frac{2}{9} & \frac{1}{3} & \frac{2}{27} \\ \frac{2}{27} & \frac{1}{3} & \frac{2}{81} \end{array}$$

Therefore, the value of A is 2.

$$A \quad 2 \quad 1 \quad 2 \quad 2 \quad 1 \quad 1 \quad 1 \quad 0$$

75. The series is based on the following pattern :

$$\begin{array}{ccc} 6 & 2.5 & 8.5 \\ 8.5 & 1.5 & 7 \\ 7 & 2.5 & 9.5 \\ 9.5 & 1.5 & 8 \\ 8 & 2.5 & 10.5 \\ 10.5 & 1.5 & 9 \end{array}$$

Therefore, the value of A is 8.

$$\begin{array}{ccccccc} A^2 & 2A & 3A & 2A^3 & 3A & & \\ & & & A(2A^2 \quad 3) & 8(2 \quad 64 \quad 3) & & \\ & & & 8(128 \quad 3) & 8 \quad 131 \quad 1048 & & \end{array}$$

76. The rate of filling water by the two pipes are as follows :

$$\begin{array}{l} \text{Rate of } P_1 \quad \frac{500 \quad 2}{75} \\ \quad \quad \quad 13\frac{1}{3} \text{ litres per hour} \end{array}$$

$$\text{Now, Rate of Filling by } P_2 \quad \frac{500}{60} \quad 8\frac{1}{3}$$

The rate at which P_2 fills the tank is less than that of P_1

by

$$\frac{13\frac{1}{3} \quad 8\frac{1}{3}}{13\frac{1}{3}} \quad 100 \quad \frac{15}{40} \quad 100 \quad 37.5\%$$

77. Let the number of students be x .

$$\begin{array}{l} \text{Then,} \quad \frac{300}{x} \quad \frac{300}{x \quad 10} \quad 1 \\ \text{or,} \quad \frac{300x \quad 3000 \quad 300x}{x(x \quad 10)} \quad 1 \end{array}$$

$$\begin{array}{l} \text{or,} \quad x^2 \quad 10x \quad 3000 \quad 0 \\ \text{or,} \quad x^2 \quad 60x \quad 50x \quad 3000 \quad 0 \\ \text{or,} \quad x(x \quad 60) \quad 50(x \quad 60) \quad 0 \\ \text{or,} \quad (x \quad 50)(x \quad 60) \quad 0 \\ \text{or,} \quad (x \quad 50) \quad 0 \end{array}$$

$$\begin{array}{l} x \quad 50 \text{ and } (x \quad 60) \quad 0 \\ x \quad 60 \end{array}$$

(neglect the negative value)

78. Let the water be $3x$ and milk be $7x$ in the mixture.

$$\begin{array}{l} \text{Then,} \\ \quad \quad \quad 7x \quad 3x \quad 30 \\ \quad \quad \quad \quad \quad x \quad 3 \end{array}$$

Again, let x litre be added,

$$\begin{array}{l} \text{Milk} \quad : \quad \text{water} \\ 21 \quad \quad \quad 9 \end{array}$$

$$\text{Now,} \quad \frac{21}{9} \quad \frac{1}{x} \quad \frac{1}{2}$$

$$\text{or,} \quad \frac{9}{9} \quad \frac{x}{x} \quad \frac{42}{42}$$

$$\text{or,} \quad \quad \quad x \quad 33 \text{ litres}$$

79. Let the pumps be P_1 and P_2 ,

the days be D_1 and D_2

and the hours be h_1 and h_2

$$\begin{array}{l} \text{Then,} \quad \frac{P_1 D_1 h_1}{3 \quad 8 \quad 2} \quad \frac{P_2 D_2 h_2}{4 \quad 1 \quad h_2} \\ \text{or,} \end{array}$$

$$\frac{h_2 \quad \frac{3 \quad 8 \quad 2}{4 \quad 1}}{12 \text{ hours}}$$

80. Let Anish's salary be x .

$$\text{Then, Anish's spend on house rent} \quad \frac{x \quad 25}{100}$$

$$\text{Rs.} \quad \frac{x}{4}$$

$$\text{food} \quad \frac{x \quad 5}{100} \quad \text{Rs.} \quad \frac{x}{20}$$

$$\text{travel} \quad \frac{x \quad 15}{100} \quad \text{Rs.} \quad \frac{3x}{20}$$

$$\text{clothe} \quad \frac{x \quad 10}{100} \quad \text{Rs.} \quad \frac{x}{10}$$

Remaining amount

$$x \quad \frac{x}{4} \quad \frac{x}{20} \quad \frac{3x}{20} \quad \frac{x}{10} \quad 22500$$

$$\text{or,} \quad \frac{20x \quad (5x \quad x \quad 3x \quad 2x)}{20} \quad 22500$$

$$x \quad \frac{20x \quad (5x \quad x \quad 3x \quad 2x)}{20}$$

$$\text{Rs.} \quad 50000$$

81. Let E and F be the event of getting diamond and a king respectively.

Then, $E \cap F$ is the event of getting a king of diamond.

$$\begin{aligned} n(E) &= 13, n(F) = 4 \\ \text{and } n(E \cap F) &= 1 \\ \text{So, } P(E) &= \frac{13}{52}, P(F) = \frac{4}{52} \\ \text{and } P(E \cap F) &= \frac{1}{52} \end{aligned}$$

P (a diamond or king)

$$\frac{\frac{1}{4} + \frac{1}{13} - \frac{1}{52}}{\frac{13}{52} + \frac{4}{52} - \frac{1}{52}} = \frac{\frac{13 + 13 - 1}{52}}{\frac{16}{52}} = \frac{25}{16}$$

82. According to question,

Clock B gains per hour to

$$A \quad \frac{1}{24} - \frac{1}{16} = \frac{2}{48} - \frac{3}{48} = -\frac{1}{48} \text{ min}$$

Now,

Clock B gains $\frac{5}{48}$ min in an hour

$$\begin{aligned} \text{Clock B gains 15 min in } \frac{48}{5} \times 15 \text{ hour} \\ = \frac{48 \times 15}{5} \text{ days} = 144 \text{ days} = 6 \text{ days.} \end{aligned}$$

83. $2p^2(3p^2 - 5) - 9 - 2p^2(p^2 - 1)$

$$\begin{aligned} 6p^4 - 10p^2 - 9 - 2p^4 + 2p^2 \\ = 4p^2 - 12p^2 - 9 + 2p^2 = -8p^2 - 9 \end{aligned}$$

- (b) $(2p^2 - 3)^2$
 (c) $(2p^2 + 3)^2$
 (d) $4p^2 - 12p^2 - 9$
 $(2p^2 - 3)^2$

(a) (b) (d)

Therefore, the required answer is option (e).

84. A's work in one minute $\frac{1}{4}$

B's work in one minute $\frac{1}{5}$

C's work in one minute $\frac{1}{3}$

(A + B + C)'s work in minute

$$\frac{\frac{1}{4} + \frac{1}{5} + \frac{1}{3}}{\frac{15}{60} + \frac{12}{60} + \frac{20}{60}} = \frac{\frac{15 + 12 + 20}{60}}{\frac{47}{60}} = \frac{47}{47} = 1$$

Time taken to fill 1 $\frac{4}{5}$

i.e., $\frac{1}{5}$ part of tank $\frac{60}{7} \times \frac{1}{5} = \frac{12}{7} = 1\frac{5}{7}$ min

85. Given expression $16x^2y - 40xy + 25y$

$$\begin{aligned} 16x^2 - 40x + 25 \\ = (4x)^2 - 2 \times 4x \times 5 + 5^2 \\ = (4x - 5)^2 \end{aligned}$$

86. If a number is divisible by 3 it can be written as $3x$ square of the number $(3x)^2 = 9x^2$

Hence square of the number is divisible by 9.

Thus, statement I does not yield any additional information.

$$40\% \text{ of } x = \frac{40}{100}(3x) = \frac{2}{5}(3x)$$

Thus, statement II too does not given any additional information.

We can also see that even both statements I and II together can't give the solution.

$$\begin{aligned} 91. \sqrt{24} \sqrt{96} \sqrt{216} \sqrt{384} 5\sqrt{2} \text{ ?} \\ \text{or, } \sqrt{6} \times 4 \sqrt{6} \times 16 \sqrt{6} \times 36 \sqrt{6} \times 64 5\sqrt{2} \text{ ?} \\ \text{or, } 2\sqrt{6} \times 4\sqrt{6} \times 6\sqrt{6} \times 8\sqrt{6} \times 5\sqrt{2} \text{ ?} \\ \text{or, } \sqrt{6}(2 \times 4 \times 6 \times 8) \times 5\sqrt{2} \text{ ?} \\ \text{? } \frac{20\sqrt{6}}{5\sqrt{2}} \times 4\sqrt{3} \end{aligned}$$

$$92. \text{ ? } 189 \frac{2}{9} 189 \frac{3}{9} 189 \frac{4}{9} 189 \frac{5}{9} 189 \frac{6}{9} 189 \frac{7}{9}$$

$$(189 \times 6) \times \frac{2}{9} \times \frac{3}{9} \times \frac{4}{9} \times \frac{5}{9} \times \frac{6}{9} \times \frac{7}{9}$$

$$1134 \times \frac{2 \times 3 \times 4 \times 5 \times 6 \times 7}{9} = 1134 \times \frac{27}{9}$$

$$1134 \times 3 = 1137$$

$$93. \sqrt{1369} \sqrt{1444} \sqrt{?} 1420$$

$$\text{or, } \sqrt{37^2} \sqrt{(38)^2} \sqrt{?} = 1420$$

$$\text{or, } 37 \times 38 \times \sqrt{?} = 1420$$

$$\text{or, } 1406 \times \sqrt{?} = 1420$$

$$\text{or, } \sqrt{?} \times 1420 = 1406 \Rightarrow \sqrt{?} = \frac{1406}{1420} = \frac{703}{710}$$

$$\text{? } = \left(\frac{703}{710}\right)^2 \times 1420 = 196$$

$$94. \sqrt{6889} \sqrt{3721} \sqrt{1024} \sqrt{2401} \text{ ?}$$

$$\text{or, } ? \sqrt{(83)^2} \sqrt{(61)^2} \sqrt{(32)^2} \sqrt{(49)^2}$$

$$83 \times 61 \times 32 \times 49 \times 127$$

$$95. \text{ ? } 3976 \frac{38}{100} 1024 8271 \frac{13}{100} \frac{7}{6} 3400$$

$$1510.88 \times 1024 \times 1075.23 \times 3966.66$$

$$= 5426.31 \times 5427$$