

# NICL Preliminary Grand Test 2

## TEST - I: ENGLISH LANGUAGE

**Directions (1 – 5):** In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

People are as much attuned to fairness as they are to individual self-interest. Therefore, any institution regulating human behaviour will have to **(1)** that the compromises between individual self-interest, collective interest and fairness are all within tolerable limits. These trade-offs are as important for larger institutions, including the largest of them all, i.e., the state, as they are for the smallest ones like the family. **(2)** as parents should not repeatedly favour one child over another, the state cannot repeatedly favour one community or class over another. The judgment of fairness is ingrained in our psyches. Since human beings often grab what they can, we need institutions to ensure fair outcomes. Of these institutions, the state is the most important, since it is considered to ensure that basic human needs are ensured with minimal standards of fairness. A state **(3)** of or uninterested in ensuring equity in security, education, food, health and shelter is a state whose legitimacy will be questioned.

Further, the legitimacy of the state is dependent on its being as close to a neutral umpire as possible. When the state **(4)** partisan, its legitimacy can be questioned. When the state sheds the umpire's clothes and becomes one of the players, the rules of fair play are so badly broken that we can only call such an event intolerable **(5)**.

- |    |               |              |               |                |                |
|----|---------------|--------------|---------------|----------------|----------------|
| 1. | (1) demand    | (2) ensure   | (3) consider  | (4) regulate   | (5) encompass  |
| 2. | (1) Presently | (2) Same     | (3) So        | (4) Like       | (5) Just       |
| 3. | (1) qualified | (2) riddled  | (3) powerful  | (4) incapable  | (5) shortening |
| 4. | (1) appears   | (2) allow    | (3) become    | (4) recommends | (5) visualizes |
| 5. | (1) truth     | (2) fairness | (3) injustice | (4) murder     | (5) fortune    |

**Directions (6 - 10) :** Read each sentence to find out whether there is any grammatical mistake/ error in it. The error, if any, will be in one part of the sentence. Select the part with the error as your answer. If there is no error, Select 'No error' as your answer. (Ignore the errors of punctuation, if any)

6. The rise of ATMs, telephone banking, the Internet (1)/ and now smartphones has (2) / led to a decline of 5 to 8 percent a year (3)/ in the number of visits by customers to branches.(4)/ No error (5)
7. Sporting body such as FIFA (1)/ should be run transparently and rigorous standards (2)/ should be maintained to ensure that (3)/ sports are played in the right spirit. (4)/ No error (5)
8. Owing to the frequent fluctuations in electricity, (1)/ businesses in Africa are forced to (2)/ invest in generators there-by paying (3)/ exorbitant amounts for electricity. (4)/ No error (5)
9. Without a reduction in imports, the decline (1)/ in the economy will be even great though (2)/ the central bank is positive that (3)/ the economy will recover by next year.(4)/ No error (5)
10. Changing a company's corporate culture (1)/ is difficult but not impossible (2)/ and introducing to systems such as (3)/ pay for performance' will help a company grow. (4)/ No error (5)

**Directions (11-20) :** Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in bold to help you locate them while answering some of the questions.

The price of gold has gone up from \$ 256 an ounce in 2001 to \$ 1,424. Meanwhile, price levels have struggled or crashed with respect to almost all other asset classes. Central banks have slashed interest rates. Yet gold prices, it has been predicted, may go up and up. The many reasons for this renewed love are convincing. Interestingly, not long ago pundits had predicted the end of gold as the world's default asset class and were clubbing it with commodities. It appears that the yellow metal is making a comeback to reassert the pre-eminence it has enjoyed for 5,000 years of history.

Its supply is falling. No new mines have been discovered. The existing ones are getting **exhausted**, and miners are digging as deep as 5 km. Gold content in ore has come down from almost 12 gm. a tonne to 2 gm. And it costs more and more to take that out. Environmental **concerns** have also contributed to mine-owners' problems. The wages of miners are going up; so is the cost of providing them safety and security.

Emerging economies such as China and India are accumulating gold in order to reduce their dependence on the dollar. While the U. S. has a reserve of 9,200 tonnes of gold, China has 1,054 tonnes and India 565 tonnes. No wonder, as emerging economic superpowers China and India want to add to the re-serves. Industrial use of gold is on the rise the world over. With the U. S. economy still drifting with the threat of the dollar losing its un-disputed position of reserve currency the rush to gold is increasing.

Added to all this is the rekindled investor-preference for gold. Money is moving away from mutual funds and equities and the once fashionable and often discredited hedge funds are also getting into gold, Exchange traded funds (ETFs) are channeling ever more funds to gold. Some pension funds are increasing the proportion of gold in their basket of assets. Given all this, gold can go nowhere but up. That is the consensus.

Everyone seems to be joining the new gold rush. But is everything well with gold ? Or is it a bubble building up ?

## Grand Test – NICL Prelims 2

Consider the conventional wisdom. Money generally gets **distributed**, though not in any fixed proportion, among assets such as real estate, stocks, cash, government securities, gold, commodities, and in new investments in factories and machinery. There is no state of equilibrium in a global economy. Money gets transferred across geographical boundaries and asset classes based on anticipated gains. As long as the flow is reasonable and is generally in line with the increase in returns, this works well. But **when everyone rushes to the same destination**, we are looking for trouble. Excess demand, though often artificial, creates excess supply, as in the case of real estate. Excess supply leads to price crashes.

Is something similar happening in gold? The general consensus is 'no.' Gold is different. It has never let anyone down in 5,000 years. It is indestructible. Its supply is limited. The argument in the case of gold is that excess demand cannot create excess supply as the total world supply is limited. But this time it is different. Is it really so? Gold has also gone up and down in the past. It was \$ 424 an ounce in 1990 before crashing to \$ 255 in 2001. Still, it moves only within a range and huge fluctuations are not possible in gold, argue some people. Actually, gold gave much better returns in the 1980s, only to stagnate and lose those gains in the 1990s.

A crash of gold prices could be the ultimate crash, nothing like we have seen. No one has managed to discredit the yellow metal in 5,000 years. But it appears that for the first time in history the ETFs, the hedge funds and the governments are about to do the undoable. The fact that it has not already happened is no guarantee that it will not happen. Look at all the easy money coming into gold. All those who have shifted money from real estate, mutual funds, pension funds, hedge funds and stocks are pouring it into gold. Gold ETFs are the fastest growing investment vehicles today. This is all real quick money, but can evaporate at the click of a key. Of course, governments such as China and India are also betting on gold and increasing their reserves. But then, whoever said governments can make no mistakes?

The intrinsic value of gold has not gone up from \$ 255 to \$ 1,424 in 10 years. Gold is not consumed heavily like oil or grain. Industrial use of gold is limited. Gold is the most recycled commodity. Of the annual production of 2,500 tonnes, about 50 per cent goes to make jewellery and it is almost entirely recycled. The rest goes to industrial and other uses, and even here the recycling rate is high. In other words, all that demand is artificial and can be deflated in no time. There is no need to have excess supply to lead to a price crash, unlike other products. The sheer fact that gold is only a hedge instrument and does not serve any practical use by itself, will negate the 'there-is-no-new-supply' theory. Someone somewhere is watching for the perfect moment to disgorge the hoard, to create sudden panic and buy up following a crash.

There is no sign that a crash is going to come tomorrow, or for that matter next year or the year after. It may still go up for two or five or even 10 years. But crash it will, if we are to go by the economic history of boom and bust. Also, the higher it goes and the longer it stays there, the more painful the crash is going to be, especially for India, Indians sit on an estimated 18,000 tonnes. India has always had the largest gold reserve with individuals. Imagine what will happen to millions of Indians if gold were to crash. A crash of gold will be the crash of the Indian economy.

That should make us more responsible. That makes it imperative for our economists to track gold movement. That makes it important for our financial wizards to prevent a bubble in gold, That should force us to act before it happens. Never in history have we had so much idle money chasing so little gold. Gold is losing its respect as the default and fail-safe asset class and becoming a speculative instrument. This shift of gold from being an item of passive wealth to an instrument of speculation is dangerous. Gold is being talked up by crafty speculators and unsuspecting governments. And these predictions are being made by those sitting on gold worth billion's of dollars bought at yesterday's prices.

11. Which of the following best explains '**when everyone rushes to the same destination**' in the context of the passage?
  - (1) Only real estate is invested in by a majority.
  - (2) A majority invests in every-thing else except for gold.
  - (3) Everyone wants to become rich at the same time.
  - (4) Everyone rushes to the same place in order to buy gold.
  - (5) Nothing else but gold is invested in by a majority.
12. Which of the following is/are the general opinions about gold?
  - (A) Its supply, although limited, will be able to meet its demand.
  - (B) The price of gold will keep on increasing.
  - (C) It is the best investment at present.

(1) Only (A) and (C)                      (2) Only (A) and (B)                      (3) Only (A)                      (4) Only (B) and (C) (5) All (A), (B) and (C)
13. Which of the following is true, in the context of the passage?
  - (A) Gold is being increasingly used for industrial purposes the world over.
  - (B) India has lesser gold reserve as compared to US and China.
  - (C) Countries like US and China have now stopped investing in gold for fear of its prices crashing.

(1) Only (A) and (C)                      (2) Only (A) and (B)                      (3) Only (A)                      (4) Only (B) and (C) (5) All (A), (B) and (C)
14. What is the author's fear with regard to gold?
  - (1) Its limited supply will affect the operations of most industries in India.
  - (2) Its surging demand will not be met with an adequate supply and will bring about a downturn in the Indian economy.
  - (3) Its prices will suddenly dip which in turn will adversely affect many people in India.
  - (4) It will become a commodity so highly priced that no Indian will be able to buy it.
  - (5) None of these
15. Which of the following, according to the passage, is/are the reason/s for the increase in gold prices?
  - (A) Failure in discovering new mines.
  - (B) Depleting content of gold in ores.
  - (C) Increase in the remuneration of miners.

(1) Only (B)                      (2) Only (A) and (C)                      (3) Only (C)                      (4) Only (B) and (C) (5) All (A), (B) and (C)
16. Why, according to the author, is the demand for gold artificial?
  - (1) Most gold that is used is also recycled and there is no need for fresh supply.
  - (2) Industries demand gold for the purpose of stocking and do not actually use it for any process.
  - (3) The supply of gold is too little as compared to its demand thereby making it artificial.
  - (4) The amount of gold actually needed by industries and others is much lower and the amount quoted has been hyped by the government.
  - (5) None of these

## Grand Test – NICL Prelims 2

**Directions (17-18) :** 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.

17. **Concerns**  
(1) relations (2) distracters (3) apprehensions (4) organizations (5) institutes
18. **Consumed**  
(1) eaten (2) used (3) cleared-up (4) put-away (5) devoured

**Directions (19-20) :** Choose the word/group of words which is most opposite in meaning to the word/group of words printed in bold as used in the passage.

19. **Exhausted**  
(1) started (2) revitalize (3) fresh (4) replenished (5) tired
20. **Distributed**  
(1) assembled (2) dispersed (3) disbanded (4) gets-together (5) concentrated

**Directions (21-25) :** Rearrange the following five sentences (A), (B), (C), (D) and (E) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

- (A) For almost two months now, the struggle to cap the oil well and protect large sections of the country's coastline from being devastated has been the top story in the news and the major concern of the US administration.
- (B) At present, though, one finds little expression of this in the discussions around the oil spill.
- (C) In these months it has been realized that this is an environmental crisis of gigantic proportions, and is purely man-made.
- (D) Oil and water do not mix, as the Americans are being forced to accept with the tragic oil spill from a British Petroleum oil rig in the Gulf of Mexico.
- (E) Whether in the long-term this will compel Americans to think again about their dependence on fossil fuels and seriously embark on the path of scaling it down and encouraging alternatives remains to be seen .
21. Which of the following should be the **FIRST** sentence after rearrangement ?  
(1) A (2) B (3) C (4) D (5) E
22. Which of the following should be the **FIFTH** sentence after rearrangement ?  
(1) E (2) D (3) C (4) B (5) A
23. Which of the following should be the **SECOND** sentence after rearrangement ?  
(1) E (2) D (3) C (4) B (5) A
24. Which of the following should be the **THIRD** sentence after rearrangement ?  
(1) A (2) B (3) C (4) D (5) E
25. Which of the following should be the **FOURTH** sentence after rearrangement ?  
(1) A (2) B (3) C (4) D (5) E

**Directions (26-30) :** In each question below, a theme is partially presented in two sentences. The complete theme comprises four logically arranged sentences. Out of these four the middle two sentences are not given. Three possible fillers denoted by (A), (B) and (C) are given below the partially provided theme. You have to find out which two or none can fill the gap between the two given sentences in the proper order to make the theme complete. Study the five alternatives (answer choices) carefully and select one of them.

26. All our diverse experiences are manifestations of the mind. (\_\_\_\_). (\_\_\_\_). The quality of that action depends on whether your mind is disciplined or not.  
(A) The internal environment, the individual's physical body, and the place where it abides, the external environment, arise through the force of action.  
(B) Depending on whether our mind is pacified or unruly, positive or negative; actions are committed.  
(C) This is why advice about readings some body Language is so important.  
(1) Only (B) and (A) respectively (2) Only (C) and (A) respectively (3) Only (B) and (C) respectively  
(4) Only (A) and (B) respectively (5) Only (A) and (B) or (C) respectively
27. People of India want more implementation, not more promises and plans. (\_\_\_\_). (\_\_\_\_). This is because the approach to implementation and skills required must suit what has to be done.  
(A) They want executives who can implement and institutions that can get things done.  
(B) Aligned plans are required to accelerate progress on many fronts in India.  
(C) But first we must understand what is to be implemented.  
(1) Only (A) and (C) respectively (2) Only (B) and (C) respectively (3) Only (C) and (B) respectively  
(4) Only (B) and (A) respectively (5) Only (A) and (B) respectively
28. The low and declining share of agriculture in the economy means a drought in nearly a third of the country would not have a significant impact on GDP growth. (\_\_\_\_). (\_\_\_\_). A big reversal in agriculture this year would therefore, only knock off about half a percentage point from the GDP growth.  
(A) Human suffering is also going to be more.  
(B) The higher prices of farm produce will partly make up for the lower production of farmers.  
(C) Agriculture and allied activities have only a 17% share in GDP.  
(1) Only (A) and (B) respectively (2) Only (A) and (B) or (C) respectively (3) Only (A) and (C) respectively  
(4) Only (C) and (B) respectively (5) Only (B) and (A) respectively

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29. Information sharing plays a critical role in facilitating industrial processes. ( ). ( ). A strong distribution network in FMCG sector is essential to ensure that supplies reach retailers on time and in the right quantities, avoiding either over supply or under supply.  
 (A) This sharing is the first step towards developing a high efficiency supply chain.  
 (B) In the fast moving consumer goods (FMCO) sector, a company's operations depend largely on the effectiveness and efficiency of its supply chain.  
 (C) However, this is often one of the most focused industrial aspects, leading to demand forecasting and losses for the company.  
 (1) Only (A) and (B) respectively (2) Only (C) and (A) respectively  
 (3) Only (B) and (A) or (C) respectively (4) Only (A) and (B) respectively (5) None
30. Buying a new car is just like a dream come true. ( ). ( ). Timely maintenance increases its life dependability and value.  
 (A) A car depicts the personality of its owner.  
 (B) Once bought, though, a car involves high investment.  
 (C) Expenditure on car maintenance becomes imperative  
 (1) Only (B) and (A) respectively (2) Only (B) and (C) respectively  
 (3) Only (C) and (B) respectively (4) Only (C) and (A) respectively (5) None

### TEST - II: QUANTITATIVE APTITUDE

**Directions (31-35):** In the following number series only one number is wrong. Find out the wrong number.

31. 5 348 564 689 716 780 788  
 (1) 716 (2) 788 (3) 348 (4) 689 (5) 780
32. 4444 2224 1114 556 281.5 142.75 73.375  
 (1) 2224 (2) 281.5 (3) 1114 (4) 556 (5) 142.75
33. 4.5 16 25 33 38.5 42 43.5  
 (1) 33 (2) 38.5 (3) 42 (4) 43.5 (5) 25
34. 6 49 305 1545 6196 18603 37218  
 (1) 6196 (2) 49 (3) 305 (4) 1545 (5) 18603
35. 8 5 6.5 11 26 68 207.5  
 (1) 68 (2) 6.5 (3) 11 (4) 26 (5) 207.5

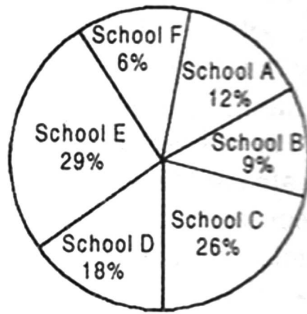
**Directions (36-40) :** In each of these questions, one question is given followed by data in three Statements I, II and III. You have to study the question and the data in statements and decide the question can be answered with data in which of the Statements and mark your answer accordingly.

36. What is the rate of interest p.c.p.a. ?  
**Statements :**  
 I. Difference between the compound interest and simple interest earned in two years on the amount invested is Rs.100.  
 II. The amount becomes Rs. 19,500 in three years on simple interest.  
 III. Simple interest accrued in two years on the same amount at the same rate of interest is Rs. 3,000  
 (1) Only I and II (2) Only I and III (3) Only II and III (4) Only I and either II or III  
 (5) None of these
37. What is the speed of the train in kmph ?  
**Statements**  
 I. The train crosses an 'x' metre long platform in 'n' seconds.  
 II. Length of the train is 'y' metres.  
 III. The train crosses a signal pole in 'm' seconds.  
 (1) Any two of the three (2) Only II and III (3) Only I and III (4) All I, II and III  
 (5) Question cannot be answered even with information in all three statements.
38. How many students passed in first class ?  
**Statements**  
 I. 85% of the students who appeared in examination have passed either in first class or in second class or in pass class.  
 II. 750 students have passed in second class.  
 III. Number of students passed in pass class is 28% of those passed in second class.  
 (1) All I, II and III (2) Only I and III (3) Only II and III  
 (4) Question cannot be answered even with information in all three statements (5) None of these
39. The sum of two numbers is 583. If second number is  $\frac{3}{8}$ th of the first number, what is the difference between  $\frac{1}{4}$ th of the first number and  $\frac{1}{3}$ rd of the second number?  
 (1) 58 (2) 41 (3) 53 (4) 49 (5) 62
40. A and B started a business by investing Rs. 22400 and Rs. 18200 respectively. After 4 months, C joined them by investing Rs.. 12600. If the annual profit earned by them is Rs. 12670, what is C's share of profit ? (in Rupees)  
 (1) Rs. 2,232 (2) Rs. 2,364 (3) Rs. 2,148 (4) Rs. 2,244 (5) Rs. 2,172

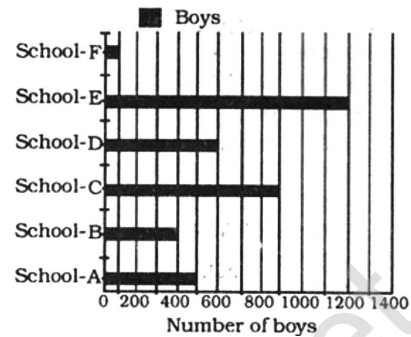
## Grand Test – NICL Prelims 2

Directions (41- 45) : Study the following pie-chart and bar chart and answer the following questions.

Percentage-wise Distribution of students in six different Schools Total number of Students = 6000 Percentage of students



Number of boys out of 6000 students in each school separately



41. What is the total number of girls in School-C, number of girls in School-E and the number of boys in School-D together ?  
 (1) 1700 (2) 1900 (3) 1600 (4) 1800 (5) None of these
42. What is the respective ratio between the number of boys in School-C, number of girls in School-B and total number of students in School-E ?  
 (1) 45 : 7 : 97 (2) 43 : 9 : 97 (3) 45 : 7 : 87 (4) 43 : 9 : 87 (5) None of these
43. What is the difference between the total number of students in School-F and the number of boys in School-E?  
 (1) 820 (2) 860 (3) 880 (4) 900 (5) None of these
44. In which school the total number of students (both boys and girls) together are equal to the number of girls in School-E ?  
 (1) A (2) B (3) C (4) D (5) F
45. Number of girls School-A is approximately what percent of total number of students in School-B?  
 (1) 55 (2) 50 (3) 35 (4) 45 (5) 41

Directions (46-50) : Study the following table and answer the given questions.

Number of employees who joined five companies during 5 years

Company	P	Q	R	S	T
2004	176	187	289	133	160
2005	213	204	283	156	177
2006	255	132	242	171	189
2007	123	139	189	185	234
2008	165	219	137	141	188

46. What is the difference between total number of employees who joined company Q in 2005 and 2008 together and total number of employees who joined company S in 2004 and 2006 together ?  
 (1) 113 (2) 133 (3) 127 (4) 121 (5) 119
47. Number of employees who joined company R in 2006 is by what percent more than the total number of employees who joined company T in 2004 ?  
 (1)  $48\frac{1}{2}$  (2)  $55\frac{3}{4}$  (3)  $52\frac{1}{4}$  (4)  $51\frac{1}{4}$  (5)  $53\frac{3}{4}$
48. What is the average number of employees who joined all the given companies in 2007?  
 (1) 168 (2) 182 (3) 184 (4) 174 (5) 178
49. What is the respective ratio between total number of employees who joined company P in 2005 and 2006 together and total number of employees who joined company R in 2004 and 2005 together ?  
 (1) 9 : 11 (2) 11 : 13 (3) 7 : 9 (4) 9 : 13 (5) 7 : 11
50. Total number of employees who joined all the given companies together in 2009 were 12% more than total number of employees who joined all the given companies together in 2008. What was the total number of employees who joined all the given companies in 2009 ?  
 (1) 978 (2) 948 (3) 962 (4) 944 (5) 952

Directions (51 - 55) : Study the information carefully to answer the questions that follow.

In a ship there are 1200 passengers. 18 percent of the total number of passengers is from Britain. Two-fifth of the total number of passengers is from South Africa. 6 percent of the total number of passengers is from Madagascar. Remaining number of passengers is from India. 25 percent of the number of passengers from Britain is female. Half the number of passengers from South Africa are male. There is no female passenger from Madagascar. Two-third of the number of passengers from India is females.

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51. What is the respective ratio between the number of passengers from Madagascar, number of female passengers from South Africa and the total number of passengers from India ?  
 (1) 2 : 5 : 18 (2) 3 : 10 : 18 (3) 3 : 11 : 18 (4) 2 : 18 : 5 (5) None of these
52. Number of male passengers from South Africa is **approximately** what percentage of the total number of passengers from Britain ?  
 (1) 111 (2) 115 (3) 120 (4) 125 (5) 131
53. What is the average number of male passengers from all the four countries ?  
 (1) 154.5 (2) 164.5 (3) 145 (4) 164 (5) None of these
54. What is the difference between the number of male passengers from Madagascar and the number of male passengers from India ?  
 (1) 64 (2) 82 (3) 74 (4) 72 (5) None of these
55. What is the total number of male passengers from Britain and female passengers from India together ?  
 (1) 340 (2) 420 (3) 350 (4) 460 (5) None of these

**Directions (56-58) :** In the following questions three squares A, B and C are given which contain four figures/numbers related to each other. The figures/numbers in the first two squares are given as examples and bear a certain relationship to each other within the square. This relationship can be established/calculated vertically, horizon-tally or diagonally. Depending on this relationship between the figures/numbers in the first two squares, find out what should come in place of the question mark in the third square - C.

56. 

32	72
92	52

16.5	56.5
76.5	36.5

?	13
33	-7

  
 A B C  
 (1) 27 (2) -13 (3) 6 (4) 13 (5) -27
57. 

9	540
45	180

5	300
25	100

2.4	144
12	?

  
 A B C  
 (1) 48 (2) 36 (3) 24 (4) 52 (5) 64
58. 

6	12
48	24

4	8
32	16

2.5	?
20	10

  
 A B C  
 (1) 4 (2) 5 (3) 5.5 (4) 6.5 (5) 9
59. The speed of a car increases by 4 kmph after every one hour. If the distance travelled in the first one hour is 32 km, what was the total distance travelled by the car in 11 hours? (in km)  
 (1) 596 (2) 584 (3) 564 (4) 612 (5) 572
60. The simple interest obtained after certain years at 24% p. a. on a sum of money is double of the simple interest that would have been obtained if the same sum of money is invested for 2 years more than the original time at a rate of 10% p. a. What is the original time for which the sum was invested? (in years)  
 (1) 20 (2) 8 (3) 10 (4) 14 (5) 12

**Directions (61-65) :** What approximate value will come in place of the question mark (?) in the following questions ? (You are not expected to calculate the exact value.)

61.  $\sqrt{3100} \times \sqrt{567} \div \sqrt{250} = ? \div 8$   
 (1) 620 (2) 670 (3) 770 (4) 750 (5) 700
62.  $89.988\% \text{ of } 699.9 + 50.002\% \text{ of } 999.99 - 170.015 = ?$   
 (1) 990 (2) 900 (3) 920 (4) 960 (5) 860
63.  $\frac{340}{20.002} \div \frac{29.997}{510} \times \frac{179.909}{59.919} = ?$   
 (1) 760 (2) 800 (3) 690 (4) 870 (5) 780
64.  $6999 \div 70.005 \times 94.998 = ? \times 19.999$   
 (1) 475 (2) 420 (3) 320 (4) 540 (5) 525
65.  $(49.99)^2 - (8.9)^2 - (15.9)^2$   
 (1) 2165 (2) 2000 (3) 1965 (4) 1920 (5) 1885

### TEST - III: REASONING ABILITY

**Directions (66 – 70):** In each of the following questions, relationship between different elements is shown in the question. The statements are followed by conclusions. Study the Conclusions based on the given statements and select the appropriate answer.

Give answer (1) if both the Conclusions I and II are true

Give answer (3) if only Conclusion I is true

Give answer (5) if neither Conclusion I nor Conclusion II is true

Give answer (2) if either Conclusion I or Conclusion II is true

Give answer (4) if only Conclusion II is true

(66-67): Statements:  $P \leq U = R \geq T$ ;  $R < A$ ;  $P \geq M$

## Grand Test – NICL Prelims 2

66. **Conclusions:** I.  $M \leq T$  II.  $T < A$   
67. **Conclusions:** I.  $A > P$  II.  $P \leq T$   
(68-69): **Statements:**  $A \geq B = C \leq S$ ;  $Q \geq C > R$   
68. **Conclusions:** I.  $Q \geq B$  II.  $S > R$   
69. **Conclusions:** I.  $R < A$  II.  $Q \geq S$   
70. **Statements:**  $K < I \leq H > D \geq R$ ;  $Z \leq H$   
**Conclusions:** I.  $Z \leq K$  II.  $Z > R$

**Directions (71-75) :** In each group of questions, below are four statements followed by two conclusions numbered I and II. You have to take the four 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 four statements disregarding commonly known facts.

**Give answer (1)** if only conclusion I follows.

**Give answer (2)** if only conclusion II follows.

**Give answer (3)** if either conclusion I or conclusion II follows.

**Give answer (4)** if neither conclusion I nor conclusion II follows.

**Give answer (5)** if both conclusion I and conclusion II follow.

- (71 – 73): **Statements:** Some paints are brushes. All brushes are varnishes.  
All colours are varnishes. No varnish is a canvas.
71. **Conclusions:** I. No canvas is a brush. II. Some paints are varnishes.  
72. **Conclusions:** I. No paint is canvas. II. No colour is canvas.  
73. **Conclusions:** I. All varnishes are colours. II. Some brushes are canvases.
- (74-75): **Statements :** All rivers are winds. All clouds are rivers.  
All oceans are rivers. All winds are breeze
74. **Conclusions:** I. Some oceans are not breeze. II. No cloud is an ocean.  
75. **Conclusions:** I. All rivers are breeze. II. Some winds are not clouds.

**Directions (76-80):** 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 pro-vided 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.

**Give answer (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.

**Give answer (3)** if the data in statement I alone or in statement II alone are sufficient to answer the question.

**Give answer (4)** if the data in both the statements I and II are not sufficient to answer the question

**Give answer (5)** if the data in both the statements I and II together are necessary to answer the question.

76. How is 'letter' written in the code language?  
I. 'please write a letter' is written as '7218', 'received a Greek letter is written as '7513'.  
II. 'write in English please' is written as '2084', and 'a letter in Greek' is written as '5714'.
77. Among A, B, C, D and E, seated in a straight line; facing North, who sits exactly in the middle, of the line?  
I. A sits third to left of D. B sits to the immediate right of C.  
II. B sits second to right of A. E is not an immediate neighbour of D.
78. A six storey building (consisting of an **unoccupied ground floor** and five floors on top of the ground floor numbered 1, 2, 3, 4 and 5) houses different people viz. A, B, C, D and E. Who lives on the third floor ?  
I. C lives on an even numbered floor. A lives immediately above D. B lives immediately above A. E does not live on the topmost floor.  
II. D lives on an odd numbered floor. A and B are immediate neighbours of each other. Similarly, C and E are immediate neighbours of each other. C does not live on an odd numbered floor.
79. Are all the four friends Abhay, Kavita, Prashant and Yasir who are sitting around a circular table facing the centre?  
I. Kavita sits second to left of Abhay. Abhay faces the centre. Yasir sits to the immediate right of Abhay as well as Kavita.  
II. Prashant sits third to the right of Kavita. Abhay sits to immediate right of Prashant as well as Yasir.
80. Is R the granddaughter of C ?  
I. The only sister of A is the mother of R's brother, B II. C, the mother of A has only one grandson, B.

**Directions (81-85):** Study the following information carefully and answer the questions given below :

Eight persons — M, N, O, P, Q, R, S and T — are sitting around a circular table at equal distance between each other, but not necessarily in the same order. Some of them are facing the centre while some others are facing outside (i.e., in a direction opposite to the centre)

**Note :** Facing the same direction means if one faces the centre then the other also faces the centre and vice-versa. Facing opposite directions means if one person faces the centre then the other person faces outside and vice-versa.

R is sitting second to the right of Q. Only three persons are sitting between R and S. T is sitting second to the right of R. T faces the centre. R and S face opposite directions. P and S face opposite directions. N is sitting second to the left of P. P is not an immediate neighbour of Q. Only one person is sitting between P and O. O is not an immediate neighbour of Q. M is sitting third to the left of T. The immediate neighbours of T face opposite directions. M and R face opposite directions. N faces the same direction as that of O.

81. Which of the following statements is true regarding T according to the given seating arrangement?  
(1) T is sitting second to the left of S. (2) T is sitting exactly between O and P.

## Grand Test – NICL Prelims 2

- (3) T is sitting just opposite to N. (4) There are four persons between T and Q.  
(5) T faces the opposite direction as that of M.
82. How many persons in the given seating arrangement face outside?  
(1) Three (2) Four (3) Five (4) Six (5) Two
83. Four of the following five are alike in a certain way based on the given seating arrangement and hence they form a group. Which is the one that does not belong to that group?  
(1) O (2) S (3) M (4) Q (5) N
84. Who among the following sits exactly between S and Q when counted from the left of S?  
(1) None (2) O (3) M (4) N (5) T
85. What is the position of M with respect to R?  
(1) Other than those given as options (2) Third to the right  
(3) Second to the left (4) Second to the right (5) Third to the left

**Directions (86-90): Study the following information carefully and answer the questions given below:**

A, B, C, D, E, F and G are travelling in three different vehicles. There are at least two passengers in each vehicle – I, II and III and each vehicle has passengers of both the sexes. There are two engineers, two doctors and three teachers among them. C is a lady doctor and she does not travel with the pair of sisters A and F. B a male engineer, travels with only G, a teacher in vehicle I. D is a male doctor. Two persons belonging to same profession do not travel in the same vehicle. A is not an engineer and travels in vehicle II.

86. In which vehicle does C travel?  
(1) I (2) II (3) III (4) II or III (5) None of these
87. How many lady members are there among them?  
(1) Three (2) Four (3) Three or Four (4) Data inadequate (5) None of these
88. What is F's profession?  
(1) Doctor (2) Engineer (3) Teacher (4) Data inadequate (5) None of these
89. Which of the following is not correct?  
(1) A – Female – Teacher (2) B – Male – Engineer (3) E – Male – Teacher (4) F – Female – Teacher  
(5) G – Female – Teacher
90. Which of the following represents the three teachers?  
(1) A E G (2) E F G (3) A E G or E F G (4) Data inadequate (5) None of these

**Directions (91-95): Study the following information to answer the given questions :**

In a certain code 'her idea has merit' is written as 'fo la 'bu na', 'merit list has been displayed' is written as 'Jo ke la si na' and 'her name displayed there' is written as 'ya si bu zo', 'name in merit list' is written as 'na ya go ke'.

91. What does 'ke' stand for?  
(1) been (2) has (3) merit (4) name (5) list
92. What is the code for 'idea' ?  
(1) fo (2) la (3) bu (4) na (5) Either bu or na
93. Which of the following represents 'name has been displayed' ?  
(1) ya la ke si (2) jo si ya la (3) si jo ke na (4) bu ya ke la (5) ya si jo zo
94. What does 'zo' stand for?  
(1) there (2) displayed (3) name (4) her (5) Can't be determined
95. Which of the following may represent 'her name is there' ?  
(1) zo ya go wo (2) bu ya zo go (3) zoya bu ke (4) ya zo wo bu (5) wo go zo ya

**Directions (96-97): Study the following information carefully and answer the questions given below:**

Point A is 5 m to the North of point B. Point B is 8 m to the West of point C. Point D is 4 m to the south of point C. Point E is 4 m to the East of point A. Point F is exactly midway between Points B and C in such a way that Points B, C and F form a straight line.

96. Towards which direction is Point D with respect to Point A?  
(1) South (2) North-west (3) South-east (4) East (5) South-west
97. Which of the following points is/are exactly 5 metre away from point E?  
(1) B (2) Both F and D (3) C (4) F (5) D

**Directions (98-100): Read the following information carefully and answer the questions which follow :**

- (i) A is mother of B (ii) C is sister of A (iii) D is father of C (iv) B is son of E.
98. Which of the following statements are required to establish that E is a male?  
(1) Only (iv) (2) Both (ii) and (iv) (3) Both (i) and (iv) (4) Both (ii) and (iii) (5) Both (i) and (iii)
99. How is D related to E ?  
(1) Father (2) Grandfather (3) Son-in-law (4) Grandson (5) Father-in-law
100. How many such pairs of letters are there in the word FANCIER each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in the English alphabetical series ?  
(1) One (2) Two (3) None (4) More than three (5) Three



**ANSWER KEY**

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



## Grand Test – NICL Prelims-2

$$\Rightarrow R = \frac{20}{3} \text{ p.c.p.a}$$

37.(1) From statements I and II.

$$\text{Speed of train} = \frac{x+y}{n} \text{ m/sec}$$

$$[1 \text{ kmph} = \frac{5}{18} \text{ m/sec.}]$$

From statements II and III,

$$\text{Speed of train} = \frac{y}{m} \text{ m/sec.}$$

From statements III and I,

If the length of train be  $z$  metre, then

$$\text{Speed of train} = \frac{z+x}{n} = \frac{z}{m}$$

After determining the value of  $z$ , speed can be determined.

38.(4) As we don't know total number of students, the answer cannot be determined even with information in all three statements.

39.(3) First number =  $x$  (let)

$$\therefore \text{Second number} = \frac{3x}{8}$$

According to the question,

$$x + \frac{3x}{8} = 583$$

$$\Rightarrow \frac{8x+3x}{8} = 583$$

$$\Rightarrow 11x = 583 \times 8$$

$$\Rightarrow x = \frac{583 \times 8}{11} = 424$$

$\therefore$  Second number

$$= 583 - 424 = 159$$

$\therefore$  Required difference

$$= \frac{1}{4} \times 424 - \frac{159}{3} = 106 - 53 = 53$$

40.(5) Ratio of the equivalent capitals of A, B and C for 1 month

$$= (22400 \times 12) : (18200 \times 12) : (12600 \times 8)$$

$$= 224 \times 3 : 182 \times 3 : 126 \times 2 = 16 : 13 : 6$$

$$\text{Sum of ratios} = 16 + 13 + 6 = 35$$

$$\text{Total annual profit} = \text{Rs. } 12670$$

$$\text{C's share} = \text{Rs. } \left( \frac{6}{35} \times 12670 \right)$$

$$= \text{Rs. } 2172$$

41.(4) Number of girls : School - C

$$\Rightarrow \frac{600 \times 26}{100} - 900$$

$$= 1560 - 900 = 660$$

School - E

$$\Rightarrow \frac{600 \times 29}{100} - 1200$$

$$= 1740 - 1200 = 540$$

$\therefore$  Required answer

$$= 660 + 540 + 600 = 1800$$

42.(3) Number of girls in School - B

$$= \frac{6000 \times 9}{100} - 400$$

$$= 540 - 400 = 140$$

Number of students in School - E

$$= \frac{6000 \times 29}{100} = 1740$$

$$\therefore \text{Required ratio} = 900 : 140$$

$$1740 = 45 : 7 : 87$$

43.(5) Required difference

$$= 1200 - \frac{6000 \times 6}{100}$$

$$= 1200 - 360 = 840$$

44.(2) Number of students in School B

$$= \frac{6000 \times 9}{100} = 540$$

= Number of girls in School - E

45.(5) Number of girls in School - A

$$\frac{6000 \times 12}{100} - 500$$

$$= 720 - 500 = 220$$

$\therefore$  Required percentage

$$= \frac{220}{540} \times 100 = 41$$

46.(5) Required difference =  $(204 + 219) - (133 + 171)$

$$= 423 - 304 = 119$$

47.(4) Required percent

$$\left( \frac{242 - 160}{160} \right) \times 100$$

$$= \frac{82}{160} \times 100 = 51.25\%$$

48.(4) Required average

$$= \frac{1}{5} (123 + 139 + 189 + 185 + 234)$$

$$= \frac{870}{5} = 174$$

49.(1) Required ratio =  $(213 + 255) : (289 + 283)$

$$= 468 : 572 = 9 : 11$$

50.(5) Total employees joining all companies in the year 2008

$$= 165 + 219 + 137 + 141 + 188 = 850$$

$\therefore$  Number of such employees in 2009 =

$$\frac{850 \times 112}{100} = 952$$

51 - 55. British passengers

$$\Rightarrow \frac{1200 \times 18}{100} = 216$$

$$\text{Females} \Rightarrow \frac{216}{4} = 54;$$

$$\text{Males} \Rightarrow 216 - 54 = 162$$

Passengers from Madagascar

$$\Rightarrow \frac{1200 \times 6}{100} = 72 = \text{Males}$$

Passengers from South Africa

## Grand Test – NICL Prelims-2

$$\Rightarrow 1200 \times \frac{2}{5} = 480$$

Males  $\Rightarrow$  240;

Females  $\Rightarrow$  240

Indian passengers

$$\Rightarrow 1200 - 216 - 72 - 480 = 432$$

$$\text{Females} \Rightarrow 432 \times \frac{2}{3} = 288;$$

$$\text{Males} \Rightarrow 432 \times \frac{2}{3} = 288;$$

$$\text{Males} \Rightarrow 432 - 288 = 144$$

51.(2) Required ratio  
 $= 72 : 240 : 432 = 3 : 10 : 18$

52.(1) Required Percentage  
 $= \frac{240}{216} \times 100 = 111$

53.(1) Average number of male passengers  
 $\frac{162+72+240+144}{4} = \frac{618}{4} = 154.5$

54.(4) Required difference  
 $= 144 - 72 = 72$

55.(5) Total number of male passengers from Britain and female passengers from India together  
 $= 162 + 288 = 450$

56.(5) Square A  $\Rightarrow 92 - 32 = 60$ ;  $72 - 52 = 20$   
 Square B  $\Rightarrow 76.5 - 16.5 = 60$ ;  $56.5 - 36.5 = 20$

Square C  $\Rightarrow ? = 33 - 60 = \boxed{-27}$

57.(1) Square A  $\Rightarrow 9 \times 5 = 45$ ;  $180 \times 3 = 540$   
 Square B  $\Rightarrow 5 \times 5 = 25$ ;  $100 \times 3 = 300$   
 Square C  $\Rightarrow 2.4 \times 5 = 12$

$$? = \frac{144}{3} = \boxed{48}$$

58.(2) Square A  $\Rightarrow 6 \times 8 = 48$ ;  $12 \times 2 = 24$   
 Square B  $\Rightarrow 4 \times 8 = 32$ ;  $8 \times 2 = 16$   
 Square C  $\Rightarrow 2.5 \times 8 = 20$

$$? = \frac{10}{2} = \boxed{5}$$

59.(5) Speed for first hour = 32 kmph  
 Distance covered in 11 hours =  $(32 + 36 + 40 + 44 + 48 + \dots + 72)$  km.  
 $= 572$  km.

60.(3) Let the principal be Rs. x and time be t years.

$$\text{S.I.} = \frac{\text{Principal} \times \text{Time} \times \text{Rate}}{100}$$

According to the question,

$$\therefore \frac{x \times t \times 24}{100} = \frac{2x \times (t+2) \times 10}{100}$$

$$\Rightarrow 12t = (t+2) \times 10$$

$$\Rightarrow 12t = 10t + 20$$

$$\Rightarrow 12t - 10t = 20 \Rightarrow 2t = 20$$

$$\Rightarrow t = \frac{20}{2} = 10 \text{ years}$$

61.(2)  $\sqrt{3100} \times \sqrt{567} \div \sqrt{250} = ? \div 8$

$$\Rightarrow 56 \times 24 \div 16 = ? \div 8$$

$$\Rightarrow \frac{56 \times 24}{16} = \frac{?}{8} \Rightarrow 84 = \frac{?}{8}$$

$$\Rightarrow ? = 8 \times 84 = 672$$

Required answer = 670

62.(4)  $? = \frac{700 \times 90}{100} + \frac{1000 \times 50}{100} - 170$   
 $= 630 + 500 - 170 = 960$

63.(4)  $? = \frac{340}{20} \div \frac{30}{510} \times \frac{180}{60}$   
 $= \frac{340}{20} \times \frac{510}{30} \times \frac{180}{60} = 867$

$\therefore$  Required answer = 870

64.(1)  $7000 \div 70 \times 95 = ? \times 20$

$$\Rightarrow ? = \frac{7000 \times 95}{70 \times 20} = 475$$

65.(1)  $? = (50)^2 - (9)^2 - (16)^2$   
 $= 2500 - 81 - 256 = 2163$   
 $\therefore$  Required answer = 2165

66-67.  $P \leq U = R \geq T$   
 $R < A$   
 $P \geq M$   
 $M \leq P \leq U = R \geq T$   
 $A > R \geq T$   
 $P \leq U = R < A$

66.(4) **Conclusions :**  
 I.  $M \leq T$  : Not True  
 II.  $T < A$  : True

67.(3) **Conclusions :**  
 I.  $A > P$  : True  
 II.  $P \leq T$  : Not True

(68 - 69) :  
 $A \geq B = C \leq S$   
 $Q \geq C > R$   
 $A \geq B = C \leq Q$   
 $R < C \leq S$   
 $A \geq B = C > R$   
 $Q \geq C \leq S$

68.(1) **Conclusions :**  
 I.  $Q \geq B$  : True  
 II.  $S > R$  : True

69.(3) **Conclusions :**  
 I.  $R < A$  : True  
 II.  $Q \geq S$  : Not True

70.(5)  $K < I \leq H > D \geq R$   
 $Z \leq H$   
 $K < I \leq H \geq Z$   
 $Z \leq H > D \geq R$

**Conclusions :**  
 I.  $Z \leq K$  : True  
 II.  $Z > R$  : Not True

71-75. (i) All brushes are varnishes  $\Rightarrow$  Universal Affirmative (A-type)

# Grand Test – NICL Prelims-2

- (ii) Some paints are brushes  $\Rightarrow$  Particular Affirmative (I-type)
- (iii) No varnish is a canvas  $\Rightarrow$  Universal Negative (E-type).
- (iv) Some varnishes are not canvases  $\Rightarrow$  Particular Negative (O-type).

(71-73) : Some paints are brushes.

↔

All brushes are varnishes  
 $I + A \Rightarrow$  I-type of Conclusion  
 "Some paints are varnishes." (A)  
 All brushes are varnishes.

↔

No varnish is a canvas.  
 $A + E \Rightarrow$  E-type of Conclusion  
 "No brush is a canvas." (B)  
 All colours are varnishes.

↔

No varnish is a canvas.  
 $A + E \Rightarrow$  E-type of Conclusion  
 "No colour is a canvas". (C)

71.(5) Conclusion I is Converse of Conclusion (B).

Conclusion II is Conclusion (A).

72.(2) Conclusion II is Conclusion (C).

73.(4) None follows.

(74-75) :

All rivers are winds.

↔

All winds are breeze.  
 $A + A \Rightarrow$  A-type of Conclusion  
 "All rivers are breeze". (A)  
 All clouds are rivers.

↔

All rivers are winds.  
 $A + A \Rightarrow$  A-type of Conclusion.  
 "All clouds are winds". (B)  
 All oceans are rivers.

↔

All rivers are winds.  
 $A + A \Rightarrow$  A-type of Conclusion.  
 "All oceans are winds". (C)  
 All clouds are winds.

↔

All winds are breeze.  
 $A + A \Rightarrow$  A-type of Conclusion.  
 "All clouds are breeze". (D)  
 All oceans are winds.

↔

All winds are breeze.  
 $A + A \Rightarrow$  A-type of Conclusion.  
 "All oceans are breeze". (E)

74.(4) None follows.

75.(1) Conclusion I is Conclusion (A).

76.(4) From both the statements

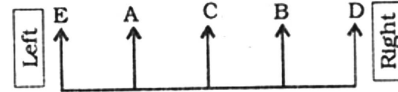
please write a letter  $\rightarrow$  7 2 1 8

received a Greek letter  $\rightarrow$  7 5 1 3

write in English please  $\rightarrow$  2 0 8 4

a letter in Greek  $\rightarrow$  5 7 1 4

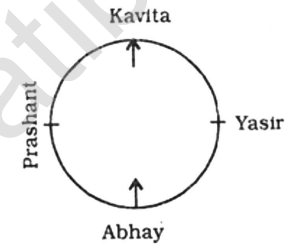
77. (5) From both the statements



78. (1) From statement I

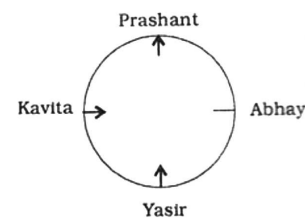
Fifth Floor	B
Fourth Floor	A
Third Floor	D
Second Floor	C
First Floor	E
Ground Floor	

79.(1) From statement I



Kavita is facing outward.

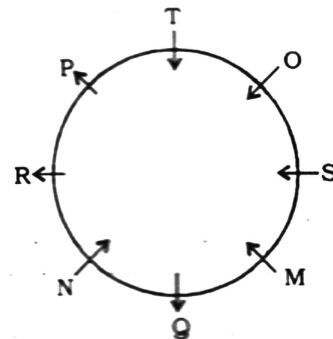
**From statement II**



Prashant is facing outward.

80.(5) From both the statement C is grandmother of B and R is granddaughter of C.

(81-85):



81.(2) S faces the centre. T is sitting second to the right of S.

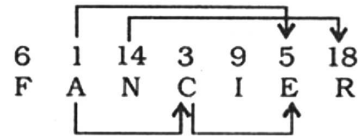
T is sitting just opposite to Q. That me only three persons between T and Q

T and M face the same direction. i.e. towards the centre

## Grand Test – NICL Prelims-2

- 82.(1) Three persons - P, Q and R - face outside i.e., opposite to the centre  
 83.(4) Except Q all others face towards the centre.  
 84.(3) M sits exactly between S and Q when counted from the left of S.  
 85.(5) R faces outside, i.e., opposite to the centre. M is sitting third to the left of R.

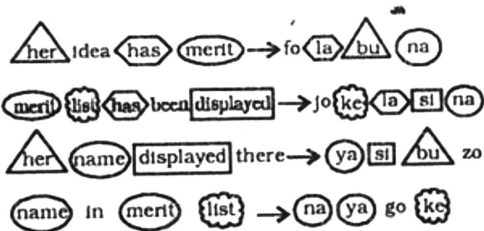
100.(4)



86-90.

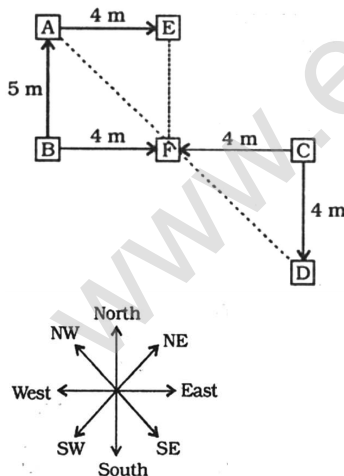
Person	Vehicle	Profession	Sex
A	II	Teacher	F
B	I	Engineer	M
C	III	Doctor	F
D	II	Doctor	M
E	III	Teacher	M
F	II	Engineer	F
G	I	Teacher	F

- 86.(3) 87.(2)  
 88.(2) 89.(4)  
 90.(1)  
 91-95 :



- 91.(5) 'ke' stands for 'list'.  
 92.(1) The code for 'idea' is 'fo'.  
 93.(2) name  $\Rightarrow$  ya; has  $\Rightarrow$  la; been  $\Rightarrow$  Jo; displayed  $\Rightarrow$  si  
 94.(1) 'zo' stands for 'there'.  
 95.(4) her  $\Rightarrow$  bu; name  $\Rightarrow$  ya; there  $\Rightarrow$  zo.  
 The code for 'is' may be 'wo'

96-97.



- 96.(3) It is clear from the diagram that point D is in South-East direction with respect to point A.  
 97. (4) Clearly, point F is exactly 5metre away from point E.  
 98.(3) A is mother of B. B is son of E. Therefore, E is husband of A.  
 99.(5) D is father of A and C.  
 E is husband of A.  
 Therefore, D is father-in-law of E.

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