

# Indian Bank Probationary Officers Recruitment

No. of Questions: 100

Maximum Marks: 100

Time: 1 Hr.

## Indian Bank POs- Preliminary Model Paper

### English Language

**Directions (Q. 1 to 5):** Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph. Then answer the questions given below.

- A) With all the bid information being available and tracked online, corruption has considerably reduced.
- B) Today, most i.e., over ninety-five percent household, in the city enjoy broad band connection.
- C) All city contracts are now bid online.
- D) Over twenty years ago the city government, central government and the private sector made a concerned effort to shift the economy to include IT.
- E) As our cities expand and become more complex, such a system will make governance more manageable.
- F) This level of connectedness has changed not only the city's economy but also how it is governed and how business is conducted.

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

**Directions (Q. 6 to 15):** Read the given passage carefully and answer the questions that follow.

*(The following passage was excerpted from a book called 'The Extraordinary Origins of Everyday Things' which was published in 1987.)*

Because early man viewed illness as divine punishment and healing as purification, medicine and religion were inextricably linked for centuries. This notion is apparent in the origin of word 'pharmacy', which comes from the Greek pharmakon, meaning 'purification through purging'.

By 3500 B.C., the Sumerians in the Tigris - Euphrates Valley had developed virtually all of our modern methods of administering drugs. They used gargles, inhalations, pills, lotions, ointments, and plasters. The first drug catalogue, or pharmacopoeia, was written at that time by an unknown Sumerian physician. Preserved in cuneiform script on a single clay tablet are the names of dozens of drugs to treat ailments that still afflict us today.

The Egyptians added to the ancient medicine chest, the Ebers Papyrus, a scroll dating from 1900 B.C. and named after the German Egyptologist George Ebers. The scroll reveals the trial and error know-how acquired by early Egyptian physicians. To relieve indigestion, a chew of peppermint leaves and carbonates (known today as antacids) was prescribed, and

to numb the pain of tooth extraction, Egyptian doctors temporarily stupefied a patient with ethyl alcohol.

The scroll also provides a rare glimpse into the hierarchy of ancient drug preparation. The 'chief of the preparers of drugs' was the equivalent of a head pharmacist, who supervised the 'collectors of drugs', field workers who gathered essential minerals and herbs. The 'preparers' aides' (technicians) dried and pulverized ingredients, which were blended according to certain formulas by the 'preparers'. And the 'conservator of drugs' oversaw the storehouse where local and imported mineral, herb, and animal-organ ingredients were kept.

By the seventh century B.C., the Greeks had adopted a **sophisticated** mind-body view of medicine. They believed that a physician must pursue the diagnosis and treatment of the physical (body) causes of disease within a scientific framework, as well as cure the supernatural (mind) components involved. Thus, the early Greek physician emphasized something of a holistic approach to health, even if the suspected mental causes of disease were not recognized as stress and depression but interpreted as curses from displeased deities.

The modern era of pharmacology began in the sixteenth century, ushered in by the first major discoveries in chemistry. The understanding of how chemicals interact to produce certain effect within the body would eventually remove much of the guesswork and magic from medicine.

Drugs had been launched on a scientific course, but centuries would pass before superstition was displaced by scientific fact. One major reason was that physicians, unaware of the existence of disease-causing pathogens such as bacteria and viruses, continued to dream up imaginary causative evils. And though new chemical compounds emerged, their effectiveness in treating disease was still based largely on trial-and-error.

Many standard, common drugs in the field of medicine developed in this trial-and-error environment. Such is the complexity of disease and human biochemistry that even today, despite enormous strides in medical science, many of the latest sophisticated additions to our medicine shelves were accidental finds.

6. It can be inferred from the passage that the author cites the literal definition of the Greek word 'pharmakon' in the first paragraph in order to .....

- 1) show that ancient civilizations had an advanced form of medical science.
- 2) point out that many of the beliefs of ancient civilizations are still held today.
- 3) illustrate that early man thought recovery from illness was linked to internal cleansing.
- 4) stress the mental and physical causes of disease.
- 5) show that Greeks introduced medicine to the world.
7. The passage infers that there is a similarity between ancient Sumerian drugs and modern drugs. Which of the following supports the statement?
- 1) Ancient Sumerian drugs were made of the same chemicals as modern drugs.
- 2) Like modern drugs, ancient Sumerian drugs were used for both mental and

physical disorders.

- 3) The different ways by which patients could take ancient Sumerian drugs are similar to the ways modern drugs are taken.
- 4) Both ancient Sumerian drugs and modern drugs are products of sophisticated chemical research.
- 5) Like modern drugs, ancient Sumerian drugs were used only for physical disorders.
8. Which of the following statements is true according to the given passage?
- 1) The Greeks discovered more advanced chemical applications of drugs.
- 2) The Greeks did not acknowledge both the mental and physical roots of illness.
- 3) The seventh-century Greeks believed in curing the body and the mind.
- 4) The Greeks developed most of the precursors of modern drugs.
- 5) None of the above
9. The 'hierarchy' referred to in the fourth paragraph is an example of
- 1) a superstitious practice
- 2) the relative severity of ancient diseases
- 3) the role of physicians in Egyptian society
- 4) a complex division of labour
- 5) the status of physicians
10. In the final paragraph, the author makes which of the following observations about scientific discovery?
- 1) Human biochemistry is such a complex science that important discoveries are uncommon.
- 2) Chance events have led to the discovery of many modern drugs.
- 3) Many cures for common diseases are yet to be discovered.
- 4) Trial and error is the best avenue for scientific discovery.
- 5) Chemistry is a difficult subject.
11. Which of the following is NOT cited in the passage as a characteristic of ancient Egyptian medicine?
- 1) Anesthesia 2) Ointments
- 3) Ingredients derived from animals
- 4) Use of trial-and-error 5) Herbs
12. Choose the word, which is most opposite in meaning of 'sophisticated', as used in the passage.
- 1) simple 2) clumsy 3) sharp
- 4) smooth 5) smart
13. Which of the following documents from seventh-century Greece, if discovered, would most support the author's characterization of ancient Greek medicine?
- 1) A sophisticated formula for an antacid
- 2) A scientific paper theorizing that stress causes disease
- 3) A doctor's prescription that urges the patient to pray to Asclepiads, the Greek God of healing
- 4) An essay that details the ancient Egyptian influence upon Greek medicine
- 5) None of the above
14. Which of the following statements can be inferred from the passage?
- 1) Ancient Greek medicine was superior to ancient Egyptian medicine.
- 2) Some maladies have supernatural causes.

3) A modern head pharmacist is analogous to an ancient Egyptian conservator of drugs.

4) The ancient Egyptians were not a part of the major discoveries in the field of chemistry.

5) None of the above

15. The passage indicates that advances in medical science during the modern era of pharmacology may have been delayed by
- 1) the lack of a clear understanding of the origins of disease.
- 2) primitive surgical methods.
- 3) a shortage of chemical treatments for disease.
- 4) an inaccuracy in pharmaceutical preparation.
- 5) magic's influence on medicine.

**Directions (Q. 16 to 20):** Read each sentence to find out whether there is any grammatical error in it. The error if any will be in one part of the sentence, the number of that part will be the answer. If there is no error, mark (5) as the answer. (Ignore errors of punctuation, if any).

16. Sheela had to travel all the way back (1)/ when she remembered that (2)/ she had forgot to take (3)/ an important document with her (4)/. No error (5).

17. The party is holding a meeting (1)/ in order to begin the (2)/ painful and difficult process (3)/ of rethink its political strategy (4)/. No error (5).

18. The only bad thing about (1)/ these flowers are the (2)/ pollen which causes (3)/ allergy in many people (4)/. No error (5).

19. Nobody in the bus (1)/ offered to give their seat (2)/ to the elderly lady who had to (3)/ travel a long distance (4)/. No error (5).

20. This is the only organization (1)/ which could somehow continue (2)/ to making profits (3)/ in the face of recession (4)/. No error (5).

**Directions (Q. 21 to 25):** In each of the following questions, a sentence / passage is given with two blank spaces. Three phrases / sentences are given below, two of which can be placed in blank spaces to make a meaningful sentence / passage. If none of the phrases / sentences is appropriate, mark (5) as the answer.

21. The Central Bureau of Investigation on Thursday ..... a charge sheet against former ISRO Chairman G. Madhavan Nair and other senior officials in the Antrix-Devas deal case for allegedly ..... a wrongful gain of Rs.578 crore to Devas Multimedia Private Limited.

- A) filed B) approval C) facilitating
- 1) A and B 2) A and C
- 3) B and C 4) C and B
- 5) None of these

22. This was ..... as the last showdown between two of America's greatest swimmers, though there's never been any question about which one had the .....

- A) touted B) taut C) upper
- 1) A and B 2) A and C
- 3) B and C 4) C and B
- 5) None of these

23. The agency also alleges that Bengaluru-based Devas siphoned ..... and transferred a large part of the "wrongful gain" to a U.S. based .....

- A) of B) off C) subsidiary  
 1) A and B 2) A and C  
 3) B and C 4) C and B  
 5) None of these

24. Growing up in golf-starved Brazil with little ..... Da Silva used to make golf clubs out of tree ..... as a child.

- A) machines B) equipment C) branches  
 1) A and B 2) A and C  
 3) B and C 4) C and B  
 5) None of these

25. The Brazilian football confederation said ..... conducted on the star striker's right foot on Thursday showed no serious .....

- A) tests B) injuries C) blood  
 1) A and B 2) A and C  
 3) B and C 4) C and B  
 5) None of these

**Directions (Q. 26 to 30):** In the following passage, there are blanks, each of which has been numbered. These numbers are given 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.

Recently the World Bank and the Asian Development Bank (ADB) released separate reports on poverty. The World Bank report ..(26).. its benchmark of extreme poverty by 25 cents from \$1 per person per day to \$ 1.25 per person a day. The ADB announced an even higher benchmark of \$1.35 per person a day. These new benchmarks are based on surveys in the world's poorest countries.

Experts often like to ..(27).. that poverty has declined because of economic growth in India and China. This is wrong and ..(28)... In the past twenty-five years the poverty rate in India has declined by less than one percentage point a year. ..(29).. we use a poverty line of \$1 per person per day or \$ 1.25 per person per day makes little difference. The number of poor in India is large. The purpose of these statistics is not to dispute them but to ..(30).. whether the benefits of economic growth are being shared with the poor.

26. 1) heightened 2) announced  
 3) raised 4) maintained  
 5) notified
27. 1) realise 2) claim 3) discover  
 4) recommend 5) criticise
28. 1) adverse 2) opposing 3) corrupt  
 4) rejected 5) misleading
29. 1) Unless 2) Despite 3) Instead  
 4) Whether 5) Regardless
30. 1) acknowledge 2) suggest 3) care  
 4) inspire 5) study

### Quantitative Aptitude

**Directions (Q.31 to 35):** Answer the questions on the basis of the information given below.

The table I given below shows the expenditure incurred (in Rs.thousand) by Kendriya Vidyalaya on different heads during the five different years from 2011 to 2015.

The table II given below shows the revenue generated (in Rs.thousand) by Kendriya Vidyalaya from different sources during the five

different years from 2011 to 2015.

Years	2011	2012	2013	2014	2015
Infrastructure	200	225	180	210	160
Food and Transport	1065	1345	987	1103	1050
Electricity	556	614	587	493	697
Salary	888	768	624	648	810
Other Activities	691	848	922	1246	483

Years	2011	2012	2013	2014	2015
Tuition Fees	999	785	1016	765	985
Admission Fees	1200	960	720	800	1080
Examination Fees	778	864	1100	1132	646
Funds and Donations	1032	593	942	607	856
Other Sources	891	798	1122	1096	733

31. From which of the following sources, the total revenue generated during the given period, is the highest?  
 1) Tuition Fees 2) Admission Fees  
 3) Examination Fees 4) Funds and Donations 5) Other Sources

32. Profit (in Rs.thousand) obtained by Kendriya Vidyalaya is highest in which of the following years?  
 1) 2011 2) 2012 3) 2013  
 4) 2014 5) 2015

33. If tax, as a component of other activities, which was charged at the rate of 15% earlier, is now charged at the rate of 10% in the year 2012, then what will be the percentage change in the profit obtained in year 2012?  
 1) 100% 2) 95% 3) 90%  
 4) 85% 5) 80%

34. If the expenditure on other activities and revenue from other sources are not included, then the increase or decrease in profit is highest in which of the following years?  
 1) 2011 2) 2012 3) 2013  
 4) 2014 5) 2015

35. Ratio of the expenditure on salary to the revenue generated from admission fees is lowest in which of the following years?  
 1) 2011 2) 2012 3) 2013  
 4) 2014 5) 2015

36. The simple interest and compound interest (annual) on a certain sum of money at R% rate of interest per annum, for a period of two years are Rs.900 and Rs.954 respectively. What is the sum of money?  
 1) Rs.3,000 2) Rs.3,500  
 3) Rs.4,500 4) Rs.3,750 5) Rs.4,250

37. Asha starts from her house towards her music class. She rides her bicycle at 8 km/hr and reaches her music class 2.5 minutes late. The next day she increases her speed to 10 km/hr and reaches her music class 5 minutes early. How far is the music class from her house?

- 1) 5.8 km 2) 5 km 3) 6.2 km  
 4) 8 km 5) 10 km

38. The average age of a father, mother and son was 42 years when the son got married. One year after marriage a baby was born to the son and his wife. Five years later the average age of the family was calculated to be 36 years. What was the age of the daughter-in-law at the time of marriage?

- 1) 26 years 2) 25 years  
 3) 27 years 4) 23 years  
 5) 22 years

39. A vessel is filled with liquid, 3 parts of which are kerosene and 5 parts are diesel. What fraction of the mixture must be drawn off and replaced with kerosene so that the mixture may be half diesel and half kerosene?

- 1)  $\frac{1}{3}$  2)  $\frac{1}{4}$  3)  $\frac{1}{5}$  4)  $\frac{1}{7}$  5)  $\frac{1}{6}$

40. The percentage loss when an article is sold at Rs.540 is the same as the percentage profit when it is sold at Rs.720. What is the above mentioned profit or loss percentage?  
 1) 14.28% 2) 21.34% 3) 12.45%  
 4) 13.67% 5) 17.43%

**Directions (Q.41 to 45):** What should come in place of the question mark (?) in the following number series?

41. 55, 56, 85, 171, ?, 1286.5  
 1) 453 2) 428.5 3) 452.5  
 4) 429.5 5) None of these

42. 74, 64, 79, 59, 84, 54, ?  
 1) 89 2) 69 3) 59 4) 99  
 5) None of these

43. 8000, 4008, 2012, ?, 515  
 1) 1007 2) 1014 3) 512  
 4) 1012 5) None of these

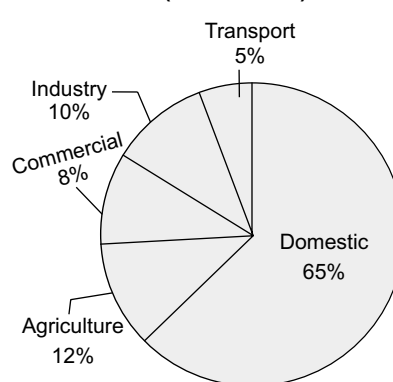
44. 5, 5, 15, 75, ?, 4725, 51975  
 1) 520 2) 450 3) 525  
 4) 300 5) None of these

45. 72, 36, 36, 54, 108, ?, 810  
 1) 270 2) 405 3) 234 4) 217  
 5) None of these

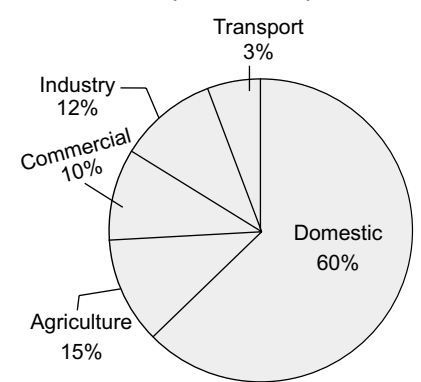
**Directions (Q.46 to 50):** Answer the questions on the basis of the information given below.

The given pie charts represent the percentage distribution of electricity consumption in five different areas agriculture, industry, domestic, commercial and transport, in the years 2013-14 and 2014-15.

**Electricity Consumption 35400 MW (Year 2013-14)**



**Electricity Consumption 42500 MW (Year 2014-15)**



46. What is the approximate percentage increase in electricity consumption in agriculture from the year 2013-14 to the year 2014-15?  
 1) 45.05% 2) 50.07% 3) 54.06%  
 4) 40.8% 5) 60.04%

47. What is the total electricity consumption (in MW) in the commercial & transport areas in the year 2014-15?  
 1) 5950 2) 6375 3) 5100  
 4) 5525 5) None of these

48. What is the difference in electricity consumption (in MW) in domestic area in the years 2013-14 and 2014-15?  
 1) 2490 2) 2280 3) 6385  
 4) 2690 5) None of these

49. What is the ratio of electricity consumption in the industry area in the year 2013-14 to electricity consumption in the industry area in the year 2014-15?  
 1) 5 : 6 2) 57 : 83 3) 59 : 85  
 4) 7 : 10 5) None of these

50. For how many of the five different areas absolute consumption of electricity has increased from the year 2013-14 to 2014-15?  
 1) Two 2) Three 3) Four  
 4) Five 5) None of these

51. A boat can travel with a speed of 13 km/hr in still water. If the speed of the stream is 5 km/hr, find the time taken by the boat to go 108 km downstream.  
 1) 2 hours 2) 3 hours  
 3) 4 hours 4) 5 hours 5) 6 hours

52. Altaf takes twice as much time as Billa or thrice as much time as Chumpa to finish a piece of work. Working together, they can finish the work in 2 days. How long does Billa take to complete work alone?  
 1) 4 days 2) 6 days 3) 8 days  
 4) 12 days 5) None of these

### Key

1-4	10-2	19-2	28-5	37-2	46-2
2-2	11-2	20-3	29-4	38-2	47-4
3-5	12-1	21-2	30-5	39-3	48-1
4-1	13-3	22-2	31-2	40-1	49-3
5-4	14-4	23-3	32-3	41-2	50-3
6-3	15-1	24-3	33-1	42-1	51-5
7-3	16-3	25-1	34-5	43-2	52-2.
8-3	17-4	26-3	35-1	44-3	
9-4	18-2	27-2	36-4	45-1	

**53.** A rectangular park 60 m long and 40 m wide has two concrete crossroads running in the middle of the park and rest of the park has been used as a lawn. If the area of the lawn is 2109 sq. m, then what is the width of the road?

- 1) 2.91 m      2) 3 m      3) 5.82 m  
4) 7.96 m      5) None of these

**54.** Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is not a multiple of 3 or 5?

- 1)  $\frac{9}{20}$       2)  $\frac{2}{5}$       3)  $\frac{7}{15}$   
4)  $\frac{11}{20}$       5)  $\frac{7}{20}$

**55.** The ratio of the number of boys and girls in a school is 7 : 8. If the percentage increase in the number of boys and girls during an academic year is 20% and 10% respectively, what is the new ratio of boys to girls?

- 1) 18 : 19      2) 21 : 25  
3) 21 : 22      4) 25 : 13  
5) Cannot be determined

**Directions (Q. 56 to 60):** What value will come in place of the question mark (?) in the following questions?

**56.**  $7072 \div (16\% \text{ of } 884) = 30 \div 1 \frac{1}{12}$  of  $(? + 39)$

- 1) 60      2) 62      3) 65  
4) 55      5) 67

**57.**  $(562.5 \times 6)^6 \div (135 \div 9)^{10} \div (37.5 \times 6)^7$   
=  $(3.75 \times 4)^{? - 6}$

- 1) 0    2) 2    3) 3    4) 4    5) 5

**58.**  $1478.4 \div 56 + 66.8 \times 57 = (? \times 3) + (34 \times 34.5)$

- 1) 785    2) 887    3) 889    4) 989    5) 885

**59.**  $(13 + 2\sqrt{5})^2 = ? \times \sqrt{5} + 189$

- 1) 26      2) 25      3) 52  
4) 130      5) None of these

**60.**  $0.2 \times 1.1 + 0.6 \times 0.009 = ? - 313.06$

- 1) 353.2184    2) 353.2854    3) 331.54  
4) 313.2854    5) 331.2854

**Directions (Q. 61 to 65):** In the following questions, three equations numbered I, II and III are given. You have to solve all the equations either together or separately, or two together and one separately, or by any other method and give answer.

- 1) if  $x < y = z$       2) if  $x \leq y < z$   
3) if  $x < y > z$       4) if  $x = y > z$   
5) if  $x = y = z$  or if none of the above relationships can be established.

**61.** I.  $7x + 6y + 4z = 122$

- II.  $4x + 5y + 3z = 88$   
III.  $9x + 2y + z = 78$

**62.** I.  $7x + 6y = 110$

- II.  $4x + 3y = 59$   
III.  $x + z = 15$

**63.** I.  $x = \sqrt{(36)^{1/2} \times (1296)^{1/4}}$

- II.  $2y + 3z = 33$   
III.  $6y + 5z = 71$

**64.** I.  $8x + 7y = 135$

- II.  $5x + 6y = 99$   
III.  $9y + 8z = 121$

**65.** I.  $(x + y)3 = 1331$

- II.  $x - y + z = 0$   
III.  $xy = 28$

**Directions (Q. 66 to 70):** Answer the questions based on the following information.

I, J, K, L, M, N, O and P are the eight members of a family in which there are three different generations. There are three married couples in the family and all the members are sitting around a circular table facing the centre but not necessarily in the same order. It is also known that:

J is an immediate neighbour of both her brother-in-law and her mother-in-law. L sits second to the left of her husband, N who has two children I and K. Only one person sits between K and, his niece, O but that person is not her father. I is not an immediate neighbour of his mother. O is not an immediate neighbour of her aunt, J. K and his sister-in-law are immediate neighbours. M sits third to the right of his uncle, I and sits neither to the opposite nor to the immediate left of his father.

**66.** Who is sitting opposite to I?

- 1) N    2) M    3) K    4) J    5) None

**67.** How is P related to I?

- 1) Daughter    2) Sister    3) Wife  
4) Husband    5) None of these

**68.** Who are the female members of the family?

- 1) K, P, L and O    2) O, P, L and J  
3) O, P, K and M    4) K, M, N and O  
5) None of these

**69.** Who are the immediate neighbours of the granddaughter of L?

- 1) P and N    2) K and M    3) P and I  
4) J and M    5) None of these

**70.** Who is sitting fourth to the right of the aunt of the daughter of P?

- 1) L    2) J    3) K    4) N    5) None

**71.** Introducing a girl, Vipin said, "Her mother is the only daughter of my mother-in-law." How is Vipin related to that girl?

- 1) Uncle    2) Father    3) Brother  
4) Husband    5) None of these

**72.** Showing the lady in the park, Vineet said, "She is the daughter of my grandfather's only son." How is Vineet related to that lady?

- 1) Brother    2) Cousin    3) Father  
4) Uncle    5) Either (1) or (2)

**Directions (Q. 73 to 75):** Answer the questions based on the following information.

I, J, K, L, M, N, O and P are eight friends with different heights who are standing in a row facing the North direction in ascending order of their heights. N is shorter than at-least two persons. P is not the second tallest among all. J is taller than two persons and K is one among them. O is shorter than three persons. L is not as tall as O but is not the shortest. I is shorter than at-least one person and at-most four persons.

**73.** Who is the second shortest among all?

- 1) L    2) J    3) I    4) K    5) None

**74.** Who is the tallest among all?

- 1) M    2) N    3) O  
4) P    5) Cannot be determined

**75.** Who is standing third to the right of the one who is an immediate neighbour of both O and J?

- 1) N    2) I    3) P    4) L    5) None

**Directions (Q. 76 to 80):** Answer the questions on the basis of the information given below.

Aditi, Bheem, Chintu, Dhairyaa, Ema, Fida and Gauri are travelling in three cars, viz Ferrari, Audi, and Toyota, with at least two persons in each car. There are three female mem-

bers among them with at least one in each car. Ema is not travelling in Ferrari. Chintu is travelling in Audi with his best friend Gauri only. Bheem is not travelling with either Aditi or Dhairyaa and his best friend Fida is travelling in Ferrari. Dhairyaa is not travelling in Toyota.

**76.** Which of the following definitely represents a group of male members?

- 1) Chintu, Bheem, Aditi  
2) Chintu, Bheem, Fida  
3) Chintu, Bheem, Fida, Aditi  
4) Chintu, Bheem, Aditi, Dhairyaa  
5) Data inadequate

**77.** In which car is Bheem travelling?

- 1) Ferrari    2) Toyota  
3) Audi    4) Cannot be determined  
5) None of these

**78.** Which of the following cars is carrying three persons together?

- 1) Toyota    2) Audi    3) Ferrari  
4) Cannot be determined  
5) None of these

**79.** In which car is Aditi travelling?

- 1) Ferrari    2) Audi    3) Toyota  
4) Cannot be determined    5) None

**80.** Which of the following represents a group of three female members?

- 1) Dhairyaa, Ema, Gauri    2) Aditi, Ema, Gauri  
3) Fida, Ema, Gauri  
4) Cannot be determined    5) None

**Directions (Q. 81 to 85):** In the following questions, the symbols #, @, &, \$ and % are used with the following meaning as illustrated below:

'A # B' means 'A is neither smaller than nor greater than B'.

'A @ B' means 'A is neither smaller than nor equal to B'.

'A & B' means 'A is neither greater than nor equal to B'.

'A \$ B' means 'A is not greater than B'.

'A % B' means 'A is not smaller than B'.

Now in each of the following questions assuming that the given statements to be true, find which of the four conclusions I, II, III and IV given below them is/are definitely true and give your answer accordingly.

**81. Statements:** K & R, R \$ B, B # D, D % H

**Conclusions:**

- I. D @ R      II. H # R  
III. K & B      IV. H @ K  
1) Only I is true    2) Only III is true  
3) Only II is true    4) Only II & III are true  
5) All I, II, III & IV are true

**82. Statements:** A % L, M \$ L, M @ P, S & P

**Conclusions:**

- I. M @ S      II. A # M  
III. P \$ L      IV. A @ S  
1) Only II & IV are true    2) Only II is true  
3) Only IV is true    4) Only I is true  
5) Only I & IV are true

**83. Statements:** V \$ T, T # F, F & J, N % J

**Conclusions:**

- I. F # V      II. T & J  
III. N @ T      IV. J % V  
1) Only II is true    2) Only III is true  
3) Only II & III are true  
4) Only I, II & III are true  
5) None of these

**84. Statements:** D @ H, H # L, L & K, K \$ A

**Conclusions:**

- I. A # L      II. L & D  
III. K @ D      IV. A @ H  
1) Only II is true    2) Only III is true  
3) Only IV is true    4) Only II & III are true  
5) Only II & IV are true

**85. Statements:** C \$ D, D & H, H # Q, Q % X

**Conclusions:**

- I. Q # X      II. H @ C  
III. X & Q      IV. D @ C  
1) Only II & either I or III are true  
2) Only II is true  
3) Only II & either III or IV are true  
4) Only I is true    5) None of these

**Directions (Q. 86 to 90):** Answer the questions based on the following information.

Twelve friends are sitting in two parallel rows, containing six persons each, in such a way that there is an equal distance between the adjacent persons. U, V, W, X, Y and Z are sitting in row 1 and all of them are facing south. O, P, Q, R, S and T are sitting in row 2 and all of them are facing north.

The person facing Y is second to the right of R who is not an immediate neighbour of S. P is facing X and is not an immediate neighbour of R. V is facing O and is sitting at one of the extreme ends of the row. R is sitting third to the left of O while U is sitting third to the right of Y who is sitting second to the left of Z. Q is not facing Y and he is not sitting to the immediate left of R.

**86.** Who are the immediate neighbours of S?

- 1) Q and O    2) Q and T    3) T and O  
4) Q and P    5) None of these

**87.** Who is sitting opposite to Z?

- 1) T    2) R    3) Q    4) P    5) None

**88.** Who is sitting at one of the extreme ends of the row?

- 1) U    2) S    3) W    4) T    5) None

**89.** Who is sitting fourth to the left of the one who is facing the immediate neighbour of both P and R?

- 1) V    2) Y    3) W    4) P    5) None

**90.** Find the odd one out.

- 1) U    2) R    3) T    4) Y    5) S

**Directions (Q. 91 to 95):** Answer the questions based on the following information.

In a certain code language, 'ph wa re ha' is written as 'pu lo su pe', 'ph is es co' is written as 'pu lo po by', 'ph re te' is written as 'pu pe ch', 'te is ha' is written as 'ch lo su' and 'co ph hu' is written as 'by ze pu'.

**91.** What is the code for 'co'?

- 1) lo    2) jo    3) pe    4) by    5) None

**92.** Which of the following may be the code for 'ph is go'?

- 1) pu nu lo      2) lo by pu  
3) pu lo ch      4) ni lo pu  
5) None of these

**93.** Which of the following is the code for 'te ha hu ph'?

- 1) ze pu su ch    2) ph re ne pe  
3) ze pu su po    4) ze ne pe lo  
5) None of these

**94.** What is the code for 'wa'?

- 1) to    2) su    3) pu  
4) pe    5) Cannot be determined

**95.** Whose code is 'su'?

- 1) ha    2) is    3) es  
4) hu    5) None of these

**Directions (Q. 96 to 100):** In each question below are given three statements followed by four conclusions -I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follow(s) from the given statements disregarding commonly known facts.

**96. Statements:**

- Some ships are pens.
- All pens are rockets.
- Some rockets are science.

**Conclusions:**

- I. Some ships are rockets.
- II. Some rockets are ships.
- III. All science are rockets.
- IV. Some science are rockets.
- 1) All follow      2) Only I, II and III follow
- 3) Only I, II and IV follow
- 4) Only II, III and IV follow

- 5) None of these

**97. Statements:**

- All cars are jeeps.
- All jeeps are buses.
- All buses are trucks.

**Conclusions:**

- I. All trucks are buses.
- II. All buses are jeeps.
- III. All jeeps are cars.
- IV. All cars are trucks.
- 1) Only I and III follow      2) All follow
- 3) Only III and IV follow
- 4) Only IV follows      5) None follows

**98. Statements:**

- Some trees are flows.
- Some flows are purse.
- Some purse are tables.

**Conclusions:**

- I. Some tables are flows.
- II. Some purse are trees.
- III. Some tables are trees.

- IV. Some trees are purse.

- 1) All follow      2) Only II follows
- 3) Only I and III follow
- 4) Only II and IV follow
- 5) None follows

**99. Statements:**

- All roads are red.
- Some red are white.
- All white are doors.

**Conclusions:**

- I. Some roads are doors.
- II. Some doors are whites.
- III. Some roads are not doors.
- IV. All doors are roads.
- 1) Only I and II follow
- 2) Only I, II and III follow
- 3) Only either I or III and II follow
- 4) Only either I or III and IV follow
- 5) None of these

**100. Statements:**

- Some books are pens.
- Some pens are watches.

- All watches are radios.

**Conclusions:**

- I. Some radios are watches.
- II. Some radios are pens.
- III. Some watches are books.
- IV. Some books are watches.
- 1) All follow      2) Only I and III follow
- 3) Only II and IV follow
- 4) Only I and IV follow
- 5) Only I and II follow

Key				
53-2	63-2	73-1	83-3	93-1
54-4	64-4	74-4	84-5	94-1
55-3	65-5	75-5	85-1	95-1
56-1	66-1	76-5	86-1	96-3
57-1	67-3	77-2	87-2	97-4
58-2	68-2	78-3	88-5	98-2
59-3	69-3	79-1	89-1	99-3
60-4	70-3	80-4	90-2	100-5.
61-1	71-2	81-2	91-4	
62-3	72-1	82-5	92-4	

## Explanations

1. Statement D is the first sentence because the sentence initiates the discussion of shifting the economy to accommodate IT. Statement B which is the second sentence is the continuation of statement D.
2. Statement B is the second sentence because it explains the present boom of IT in the domestic sector. The sentence is an extension of statement D where we come across the initial attempts to include IT in the economy.
3. Again, statement F is a logical continuation of statement B. Statement F mentions the "level of connectedness" and we already know from statement B that ninety-five percent of households enjoy broadband connection.
4. The fourth sentence is statement C and the fifth sentence is statement A. Statement A follows from statement C. Statement C talks about online bids and statement A describes the online bidding process.
5. Statement E is the last sentence. The statement talks about "a system" and this system is actually the online tracking and availability of bidding information which we come across in statement A (fifth sentence).
6. The first paragraph gives the meaning of the Greek word 'pharmakon', which is *purification through purging*. This meaning is given in the context that early man viewed healing as purification or internal cleansing. Options (1) and (5) are not supported by the passage. Option (2) is negated because the author does not suggest that the ancient beliefs are still prevalent today. Option (4) is ruled out because the author does not talk of mental and physical causes of disease in the first paragraph of the passage.
7. According to the second paragraph, 'the Sumerians in the Tigris-Euphrates Valley had developed virtually all of our modern meth-



- ods of administering drugs'. So, the similarity between Sumerian and modern drugs is in the methods of administering them. The other options are ruled out because the passage does not talk about chemicals used for making drugs, mental and physical disorders, and chemical research in the context of Sumerians.
8. Option (3) is clearly supported by the fifth paragraph of the passage. Option (1) is negated because the passage does not mention advanced chemical applications. Option (2) is negated because the passage does not mention anything about Greeks not acknowledging the physical roots of illness while option (4) is not supported by the passage.
  9. The fourth paragraph describes the different people involved in the process of making drugs, including the 'chief of the preparers of drugs, the collectors of drugs, the preparers' aides and the conservator of drugs'. With all these different jobs, the hierarchy appears to be an example of division of labour.
  10. Refer to the last line of the passage, '...many of the latest sophisticated additions to our medicine shelves were accidental finds'. In other words, many modern drugs were discovered by accident. Option (2) paraphrases 'accidental finds' as 'chance events'. Option (1) is factually incorrect while options (3), (4) and (5) are not supported by the passage.
  11. According to the second paragraph, ointments are mentioned as a characteristic of Sumerian and not Egyptian medicine. The

- other options are cited as a characteristic of Egyptian medicine: the second paragraph mentions that ethyl alcohol was used as anaesthesia to 'numb the pain of tooth extraction', ingredients derived from animals and herbs are mentioned in the fourth paragraph and the use of trial-and-error is mentioned in the third paragraph.
12. Refer to the last line of the passage. 'Sophisticated' is used as an adjective to describe the additions as highly developed and complex additions to the medicine field. So, the most apt antonym amongst the given options is 'simple'. The root word of sophisticated is 'soph' which means *wisdom*. Other words with the same root word are *sophiology* (philosophical concept regarding wisdom) and *sophistry* (use of clever but false arguments, especially with the intention of deceiving).
  13. According to the fifth paragraph, the author contends that the seventh-century Greeks had a 'mind-body view of medicine' in which mental maladies were interpreted as curses from displeased deities instead of stress. So, a doctor's prescription for praying to a deity would support this contention. Option (1) is irrelevant as the use of antacids is mentioned in the context of Egyptians while option (2) would go against the author's contention. Option (4) is negated because the passage does not talk about the Egyptian influence upon Greek medicine.
  14. The sixth paragraph states that the first major discoveries in chemistry occurred in the sixteenth century. So, option (4) can be definitely inferred from the passage. Options (1) and (3) are not supported by the passage. Option (2) is negated because the passage only states that many people believed that some maladies have supernatural causes and the author has not commented on the veracity of this statement.
  15. In the seventh paragraph, the author states

- that 'physicians, unaware of the existence of disease-causing pathogens such as bacteria and viruses, continued to dream up imaginary causative evils'. This supports option (1) The other options are not supported by the passage.
16. Instead of "forgot", the participle form "forgotten" should have been used since it is a past perfect sentence.
  17. Should have been "rethinking" instead of "rethink".
  18. Error in subject verb agreement. Subject is "bad thing" which is third person singular. Hence, "is" instead of "are" should have been used.
  19. The correct sentence should be "Nobody... offered to give a seat..."
  20. The correct sentence should read as "This is the only ... to make profits ..." The infinitive form of the verb "make" should be used.
  26. 'Raised' is the correct answer because the sentence implies that the World Bank increased its benchmark level of extreme poverty. 'Heightened' is inappropriate in the given context because it is used as an adjective to intensify something. 'Maintained' is incorrect because it implies that the benchmark is still the same.
  27. 'Claim' is the correct answer because experts assert their opinion that poverty has declined because of economic growth in India and China.
  28. 'Misleading' is the correct answer because the sentence implies that this opinion tends to sway people in wrong direction or often gives a wrong impression.
  29. 'Whether' is the correct answer because it is used to indicate choices or possibilities. 'Despite' means without being presented by. 'Regard' means in spite of.
  30. 'Study' is the correct answer because the sentence implies that the statistics are used to analyse and study the benefits of economic growth.



63.  $x = \sqrt{(6^2)^{1/2} \times (6^4)^{1/4}} = \sqrt{6 \times 6} = 6 \dots(i)$

$2y + 3z = 33 \dots(ii)$

$6y + 5z = 71 \dots(iii)$

From (ii) and (iii)

$y = 6$  and  $z = 7$

$x = y < z$

64.  $8x + 7y = 135 \dots(i)$

$5x + 6y = 99 \dots(ii)$

$9y + 8z = 121 \dots(iii)$

From (i) and (ii),

$x = 9$  and  $y = 9$

Putting the value of  $y$  in (iii),

$z = 5.44$

$\therefore x = y > z$

65.  $(x + y)^3 = 1331$

$\Rightarrow x + y = 11 \dots(i)$

$(x + y)^2 = 121$

$\Rightarrow (x - y)^2 + 4xy = 121$

$\Rightarrow x - y = 3 \dots(ii)$

[Value of  $xy$  from III]

From (i) and (ii),

$x = 7, y = 4$

Putting the value  $x$  and  $y$  in

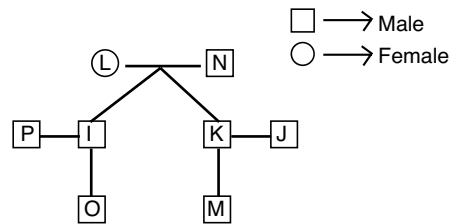
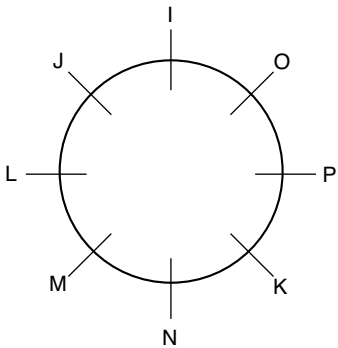
$x - y + z = 0$

$\Rightarrow 7 - 4 + z = 0$

$\Rightarrow 3 + z = 0$

$\Rightarrow z = -3$

For questions 66 to 70:



71. Only daughter of Vipin's mother-in-law is his wife. So, the girl is the daughter of Vipin.

72. Vineet's grandfather's only son is his father. So, the daughter of his father is his sister.

For questions 73 to 75:

$K < L < J < I < O < N < M < P$

For questions 76 to 80:

Person	Car	Gender
Aditi	Ferrari	-
Bheem	Toyota	Male
Chintu	Audi	Male
Dhairya	Ferrari	-
Ema	Toyota	Female
Fida	Ferrari	-
Gauri	Audi	Female

For questions 81 to 85:

$\# \Rightarrow =$

$@ \Rightarrow >$

$\& \Rightarrow <$

$\$ \Rightarrow \leq$

$\% \Rightarrow \geq$

81. Statements:

$K \& R \Rightarrow K < R$

$R \$ B \Rightarrow R \leq B$

$B \# D \Rightarrow B = D$

$D \% H \Rightarrow D \geq H$

Therefore  $K < R \leq B = D \geq H$

Conclusions:

I.  $D @ R \Rightarrow D > R$  (True)

II.  $H \# R \Rightarrow H = R$  (Not true)

III.  $K \& B \Rightarrow K < B$  (True)

IV.  $H @ K \Rightarrow H > K$  (Not true)

82. Statements:

$A \% L \Rightarrow A \geq L$

$M \$ L \Rightarrow M \leq L$

$M @ P \Rightarrow M > P$

$S \& P \Rightarrow S < P$

Therefore,  $A \geq L \geq M > P > S$

Conclusions:

I.  $M @ S \Rightarrow M > S$  (True)

II.  $A \# M \Rightarrow A = M$  (Not true)

III.  $P \$ L \Rightarrow P \leq L$  (Not true)

IV.  $A @ S \Rightarrow A > S$  (True)

83. Statements:

$V \$ T \Rightarrow V \leq T$

$T \# F \Rightarrow T = F$

$F \& J \Rightarrow F < J$

$N \% J \Rightarrow N \geq J$

Therefore,  $V \leq T = F < J \leq N$

Conclusions:

I.  $F \# V \Rightarrow F = V$  (Not true)

II.  $T \& J \Rightarrow T < J$  (True)

III.  $N @ T \Rightarrow N > T$  (True)

IV.  $J \% V \Rightarrow J \geq V$  (Not true)

84. Statements:

$D @ H \Rightarrow D > H$

$H \# L \Rightarrow H = L$

$L \& K \Rightarrow L < K$

$K \$ A \Rightarrow K \leq A$

Therefore,  $D > H = L < K \leq A$

Conclusions:

I.  $A \# L \Rightarrow A = L$  (Not true)

II.  $L \& D \Rightarrow L < D$  (True)

III.  $K @ D \Rightarrow K > D$  (Not true)

IV.  $A @ H \Rightarrow A > H$  (True)

85. Statements:

$C \$ D \Rightarrow C \leq D$

$D \& H \Rightarrow D < H$

$H \# Q \Rightarrow H = Q$

$Q \% X \Rightarrow Q \geq X$

Therefore,  $C \leq D < H = Q \geq X$

Conclusions:

I.  $Q \# X \Rightarrow Q = X$  (Not true)

II.  $H @ C \Rightarrow H > C$  (True)

III.  $X \& Q \Rightarrow X < Q$  (Not true)

IV.  $D @ C \Rightarrow D > C$  (Not true)

Hence only II and either I or III are true.

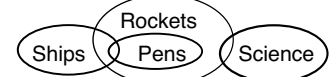
For questions 86 to 90:

Row -1:	X	U	Z	W	Y	V
Row -2:	P	T	R	Q	S	O

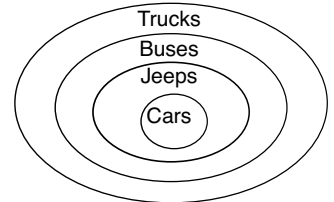
For questions 91 to 95:

ph	wa	re	ha	ls	es	co	te	hu
pu	to	pe	su	Lo	po	by	ch	ze

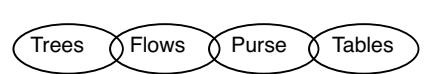
96.



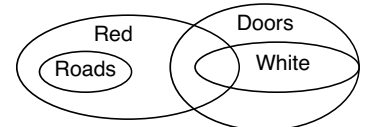
97.



98.



99.



100.

