# IBPS Specialist Officers (IT) Model Paper 

English

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

There is no field of human endeavor that has been so misunderstood as health. While health which connotes well-being and the absence of illness has a low profile, it is illness representing the failure of health which virtually monopolizes attention because of the fear of pain, disability and death. Even Sushruta has warned that this provides the medical practitioner power over the patient which could be misused.

Till recently, patients had implicit faith in their physician whom they loved and respected, not only for his knowledge but also in the total belief that practitioners of this noble profession, guided by ethics, always placed the patient's interest above all other considerations. This rich interpersonal relationship between the physician, patient and family has barring a few exceptions, prevailed till the recent past, for caring was considered as important as curing. Our indigenous systems of medicine like ayurveda and yoga have been more concerned with the promotion of the health of both the body and mind and with maintaining a harmonious relationship not just with fellow-beings but with nature itself, of which man is an integral part. Healthy practices like cleanliness, proper diet, exercise and meditation are part of our culture which sustains People even in the prevailing conditions of poverty in rural India and in the unhygienic urban slums.

These systems consider disease as an aberration resulting from disturbance of the equilibrium of health, which must be corrected by gentle restoration of this balance through proper diet, medicines and the establishment of mental peace. They also teach the graceful acceptance of old age with its infirmities resulting from the normal degenerative process as well as of death which is inevitable.

This is in marked contrast to the western concept of life as a consonant struggle against disease, ageing and death which must be fought and conquered with the knowledge and technology derived from their science which, with its narrow dissective and quantifying approach, has provided us the understanding of the microbial causes of communicable diseases and provided highly effective technology for their prevention, treatment and control. This can rightly be claimed as the greatest contribution of western medicine and justifiably termed as 'high' technology'. And yet the contribution of this science in the field of noncommunicable diseases is remarkably poor despite the far greater inputs in research and treatment for the problems of ageing like cancer, heart diseases, paralytic strokes and arthritis which are the major problems of affluent societies today.

## 1. Endeavour means

1) Struggle
2) Voyage
3) Adventure
4) Make an effort 5) None of these
2. In India traditionally the doctors were being guided mainly by which of the following?
1) High technology
2) Good knowledge
3) Professional ethics
4) Power over patient
5) Western concept of life

## 3. What caution have proponents of indigenous systems sounded against medical practitioners?

1) Their undue concern for the health of the person.
2) Their emphasis on research on non-communicable diseases.
3) Their emphasis on curing illness rather than preventive health measures.
4) Their emphasis on restoring health for affluent members of the society.
5) None of these

## 4. Why has the field of health not been understood properly?

1) Difficulty in understanding distinction between health and illness.
2) Confusion between views of indigenous and western system.
3) Highly advanced technology being used by the professionals.
4) Not given in the passage.
5) None of these
5. Why, according to the author, have people in I ndia survived in spite of poverty?
1) Their natural resistance to communicable diseases is very high.
2) They have easy access to western technology.
3) Their will to conquer diseases
4) Their harmonious relationship with the physician
5) None of these
6. Which of the following pairs are mentioned ad 'contrast' in the passage?
1) Western concept of life and science.
2) Technology and science.
3) Western physician and western-educated Indian physician.
4) Indian and western concepts of life.
5) Knowledge and technology.
7. Why does the author describe the contributions of science as remarkably poor?
1) It concentrates more on health than on illness.
2) It suggests remedies for the poor people.
3) It demands more inputs in terms of research and technology.
4) The cost of treatment is low.
5) None of these
8. Which of the following can be inferred about the position of the author in writing the passage?
A) Ardent supporter of western system in present context.
B) Supremacy of ancient Indian system in today's world.
C) Critical and objective assessment of the present situation.
1) Only A
2) Only B
3) Only C
4) Neither B nor C
5) None of these

## 9. The author seems to suggest that

1) We should give importance to improving the health rather than curing of illness.
2) We should move towards becoming an affluent society.
3) Ayurveda is superior to yoga.
4) Good interpersonal relationship between the doctor and the patient in necessary but not sufficient.
5) Ayrvedic medicines can be improved by following western approaches and methods of science.

Directions (Q. 10-12): Choose the word which is most OPPOSITE in meaning of the word printed in bold as used in the passage.
10. I nevitable

1) Undesirable
2) Unsuitable
3) Detestable
4) Avoidable
5) Available
11. Concerned
1) Diluted
2) Liberated
3) Indifferent
4) Divested
5) Relaxed
12. Degenerative
1) Recuperative
2) Revolving
3) Innovative
4) Integrative

Directions (Q. 13-15): Choose the word which is most nearly the SAME in meaning as the word printed in bold as used in the passage.

## 13. Connotes

1) Helps
2) Cures
3) Follows
4) Confirms
5) Implies

## 14. Aberration

1) Observation
2) Alternative
3) Deviation
4) Outcome
5) Stimulate
15. Derived
1) Constructed
2) Sprung
3) Directed
4) Processed
5) Continued

Direction (Q.16-20): In each question, there is a group of sentence. There is a blank space denoting a gap of a part of full sentence. Each question has five alternative answers. Find out from the given answers, the one that exactly fits into the blank in the context of the group of sentences in the questions.
16. A messenger from ' $X$ ' bank's chairman called on the manager of our branch to deliver a special letter. The secretary to the manager requested the messenger to. $\qquad$ As the manager was busy in meeting with some other VIPs.

1) Go to the manager of our branch
2) Report to his chairman
3) Return to his office after handing over the letter
4) Wait for a while in the lounge
5) Discuss the matter with the branch manager
17. Mahesh goes out for a walk daily in the morning and crosses Ramesh exactly at the garden gate without fail. Mahesh...... and wondered whether Ramesh got indisposed or was out of town.
1) Met him yesterday exactly at the gate
2) Missed him yesterday and day before
3) Failed to go out for a walk today
4) Had crossed him yesterday and day before
5) Having met him yesterday, after a week
18. My friend had borrowed from me a loan of hundred rupees on $25^{\text {th }}$ January, with a promise to repay it within three days. He repaid it on $\mathbf{3 1}^{\text {st }}$ J anuary $\qquad$
1) As per his promise.
2) Quite in time, with a thank-you note.
3) With a note of regrets for the delay.
4) With an appreciation for keeping the promise.
5) With a reminder to keep the promise.
19. I received my friend's letter from Hyderabad on $25^{\text {th }}$ May. The envelope containing the letter had a date stamp of Hyderabad post office with $19^{\text {th }}$ May as the date. He $\qquad$ .that letter on or before $19^{\text {th }}$ May.
1) Obviously did write
2) Ought to have obviously written
3) Should have obviously written
4) Could have obviously posted
5) Must have obviously written
20. The landlord said to his servant, "Let's not make a fool of ourselves by adopting such a stance". The servant shot back, "What..."?
1) Other course would you suggest, sir
2) Else can he do in these circumstances
3) Other choice do we have
4) If we do not have other choice
5) Should he do them

Directions (Q. 21-25): In each questions, there are two statement which can be combined into a single statement in a number of different ways without changing their meaning. Below them are given three probable starters of such combined sentence. One, two three or none of them may be correct, Decide upon which is/ are correct, if any, and answer the questions.
21. Mahesh was extremely impressed by the fascinating painting. He purchased all of them although they were very expensive.
A) Since the paintings were expensive...
B) Mahesh was so...
C) Although Mahesh was...

1) Only A
2) Only B
3) Only C
4) Only B and C
5) Only A and B
22. Raju observed all the Yogic exercises very carefully. He could not succeed in practicing even a single one.
A) Raju's careful observation of...
B) In spite of observation all the...
C) Though Raju had not succeeded...
1) Only A
2) Only B
3) Only C
4) Only B and C
5) Only A and B
23. He possesses all the qualities of a good leader except one. He is very shy.
A) Despite his shyness...
B) Had he been a good leader
C) But for his shyness...
1) Only A
2) Only B
3) Only C
4) A and B only
5) B and C only
24. Shyam faced all the problems with utmost courage. Any other ordinary person would have been ruined.
A) Shyam was extraordinary enough...
B) Though Shyam was not extraordinary...
C) Unlike any ordinary person...
1) Only A
2) Only B
3) Only C
4) Only A and C
5) None
25. With his persevering practice of classical, he would have been a famous singer. He lacks melody in his voice.
A) Had his voice been melodious...
B) Though his voice is not melodious...
C) Since he lacks persevering practice...
1) Only A
2) Only B
3) Only C
4) Only B and C
5) None

Directions (Q. 26-40): Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is ' 5 '. (I gnore the errors of punctuation, if any.)
26. I have been 1)/ working for this 2)/ organization for 3)/ the last ten years. 4)/ No error 5)/
27. The officer along with 1)/ his family members was 2 )/ invited at the reception party 3)/ organized by his employer. 4)/ No error 5)/
28. On hearing from you 1)/ I will come not only 2 )/ to the airport but will 3)/ also help you in customs clearance 4)/ No error 5).
29. I always prefer 1)/ working in a 2)/ relaxed atmosphere than 3)/ one full of tension and anxiety. 4)/ No error 5)
30. If we had Mohan 1)/ in our team we 2)/ would have won the match 3)/ against your team. 4)/ No error 5)/
31. My observation is that 1)/ between Ragav and 2)/ Deepa, Ragav is 3)/ the most intelligent. 4)/ No error 5)
32. In my opinion 1)/ Balraj is very 2)/ honest and can 3)/ be depended. 4)/ No error5)/
33. When your father inquired 1)/ about your marks 2)/ you lied to him. 3)/ Have you not? 4)/ No error 5)/
34. A nationwide survey has 1)/ brought up an 2)/ interesting finding regarding 3)/ infant mortality rate in India. 4)/ No error 5)/
35. Yesterday Ramesh got the 1)/ information that his father 2)/ died of accident 3)/ while travelling in a car. 4)/ No error 5)/
36. No sooner did 1)/ I reach 2)/ Delhi railway station than 3)/ the train departed. 4)/ No error 5)/
37. As soon as I will 1)/ reach Patna I will 2)/ send you the books 3)/ you have asked for. 4)/ No error 5)
38. One of my good quality 1 ) is that I do not 2 ) take things like 3 )/ this very seriously. 4)/ No error 5)/
39. Our Housing Society comprises of 1)/ eight blocks and 2)/ forty-eight flats in an 3)/ area of about thousand sq. metres 4)/ No error 5).
40. It being a 1)/ pleasant morning I 2)/ decide to go out 3)/ on walking in the garden. 4)/ No error 5)/

Directions (Q. 41-50) : in the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.

Barely three months before the tenth anniversary of the parliament attack, another constitutional. (41), the Delhi High Court, was attacked on September 7, 2011 to stop authorities from hanging Afzal Guru, a (42) in the Parliament attack case. The National Investigation Agency was given the (43) of investigation on the same day, (44) the Delhi Police.

The NIA, which was (45) after the Mumbai attacks in 2008 to (46) terrorism, is struggling to crack the Delhi High Court blast case. While the Delhi Police recently (47) to have (48) at top Indian Mujahideen (49) named Sanaullah, (50) to be the 'mastermind'.
41. 1) Building
4) Edifice
2) Palace
5) Monument
42. 1) Felonic
4) Convict
2) Jailbird
5) consultant
43. 1) Commission
4) Function
2) Supervision
5) Degree
44. 1) Regarding
2) Insulting
4) Roundabout
5) Bypassing
45. 1) Formed
2) Isolated
4) Created
5) guilty
46. 1) Battle
2) Conflict
4) Interact
5) Dispute
47. 1) Demanded
4) Claimed
2) Asked
5) Required
48.1) Retained
2) Delayed
4) Keep
5) Detained
49. 1) Working
2) Inquiry
4) Concealed
5) Conducted
50. 1) Vigilant
2) Survived
4) Surmised
5) Suspected
3) Structure
3) Captivated
3) Charge
3) Deviating
3) Formative
3) Combat
3) Acquisitioned
3) Checked
3) Operative
3) Conjectured

## Quantitative Aptitude

51. A can do a piece of work in $\mathbf{1 2}$ days, $B$ can do the same work in $\mathbf{8}$ days, and $C$ can do the same job in $\frac{4}{5}$ th time required by both A and B. If both A and B work together for 3 days, then $C$ completes the job. How many complete days did C work?
1) 8
2) 6
3) 3
4) 10
5) None of these
52. Two-thirds of three-fifths of one-eighth of a certain number is $\mathbf{2 6 8 . 5 0}$. What is $\mathbf{3 0}$ per cent of that number?
1) 1611.0
2) 716.0
3) 1342.5
4) 596.60
5) None of these
53. Which of the following equations are equivalent?
(a) $\mathbf{4} p^{2}-9 q^{2}$
(b) $(2 p-3 q)^{2}$
(c) $(2 p-3 q)(2 p+3 p)$
(d) $(2 p-3 q)^{2}+12 p q-18 q^{2}$
1) All except b
2) a and c
3) b and c
4) All
5) None of these
54. What approximately value should come in place of the question mark (?) in the following equation?
$\mathbf{3 1 \%}$ of $3581+\mathbf{2 7 \%}$ of $9319=$ ?
1) 2630
2) 3625
3) 2625
4) 3635
5) 3824
55. If the places of last two digits of a three-digit number are interchanged, a new number greater than the original number by 54 is obtained. What is the difference between the last two digits of that number?
1) 9
2) 12
3) 6
4) Data inadequate
5) None of these
56. A man was $\mathbf{n}$ years old $x$ years ago. His age $m$ years from now would be expressed as
1) $n-x+m$
2) $x+n-m$
3) $x+m-n$
4) $n+x+m$
5) None of these
57. Multiply the difference between the two lowest numbers with the difference the two highest numbers in the following sequence $\begin{array}{lllllllllllll}89 & 91 & 7 & 12 & 31 & 25 & 18 & 89 & 16 & 58 & 38 & 42 & 86\end{array}$
1) 18
2) 10
3) 15
4) 16
5) None of these
58. What value should come in place of the questions marks (?) in the following equation?

$$
48 \sqrt{?}+\mathbf{3 2} \sqrt{?}=\mathbf{3 2 0}
$$

1) 16
2) 2
3) 4
4) 32
5) None of these
59. What should come in place of question mark (?) in the following equation?

36964-3(?) $=$ 68344-8(5574)

1) 5808
2) 4404
3) 4400
4) 13212
5) None of these
60. What should come in place of the question mark (?) in the following equation?
1) $7 \frac{1}{4} \times 4 \frac{2}{3}+7 \frac{5}{6} \times 3 \frac{1}{2}=$ ?
2) $24 \frac{2}{3}$
3) $61 \frac{1}{4}$
4) $51 \frac{3}{4}$
5) $53 \frac{5}{12}$
6) None of these
61. The ratio of two numbers is $3: 2$. If 10 and the sum of the two numbers are added to their product, square of sixteen is obtained. What could be the smaller number?
1) 14
2) 12
3) 16
4) 18
5) None of these
62. Raghu is younger than Radha by 10 years. If five years back their ages were in the ratio 1:2, how old is Radha?
1) 20
2) 15
3) 25
4) Data inadequate
5) None of these
63. Four of the five parts numbered (1), (2), (3), (4) and (5) in the following equations are exactly, equal. You have to find out the part that is not equal to the other four. The number of that part is the answer.
$8362.64+768.3-190.57=593.38+604.7+7742.29$
1) 

$=2235.925 \times 4=9931.04-990.67=17880.74 \div 2$
3)
4)
5)
64. If the side of a small square is $\frac{1}{10} \mathrm{~m}$, how many such square will get accommodated in a square of side $4 \mathbf{m}$ ?

1) 400
2) 220
3) 525
4) 226
5) 225
65. The number $x, y, z$ are such that $x y=96050$ and $x z=95625$ and $y$ is greater than $z$ by one. Find out the numbered $z$.
1) 1425
2) 1600
3) 1525
4) 1226
5) 1225
66. Find the amount on Rs 60,000, if the interest is compounded half-yearly at 4 p.c.p.a for $1 \frac{1}{2}$ years.
1) 63672.48
2) 62424.00
3) 67491.84
4) 64896.00
5) None of these
67. A solution of sugar syrup has $15 \%$ sugar. Another solution has 5\% sugar. How many litres of the second solution must be added to $\mathbf{2 0}$ litres of the first solution to make a solution of $\mathbf{1 0 \%}$ sugar?
1) 10
2) 5
3) 15
4) 20
5) None of these
68. Sum of which of the following pairs of number is highest?
a) 351236912 and 351236930
b) $\mathbf{3 5 1 2 3 6 9 2 0}$ and 351236918
c) $\mathbf{3 5 1 2 3 6 9 4 0}$ and $\mathbf{3 5 1 2 3 6 9 0 9}$
d) $\mathbf{3 5 1 2 3 6 9 0 6}$ and 351236960
1) $a$
2) $b$
3) c
4) $d$
5) All are same
69. On the occasion of a certain meeting each gave shake hand to the remaining members. If the total shake hands were 28, how many members were present for the meeting?
1) 14
2) 7
3) 9
4) 8
5) None of these
70. When in each box 5 or 6 dozens of oranges were packed. Three dozens were remaining. Therefore, bigger boxes were taken to pack 8 or 9 dozens of oranges. However, still three dozens of oranges to be packed?
1) 216
2) 243
3) 363
4) 435
5) None of these

Directions (Q.71-75): In each of the following question a number series is given. A number in the series is suppressed by ' $P$ ' mark. First you have to find out the number in the place of the ' $P$ ' mark and use this number to find out the answer of the question following the series.
$\begin{array}{llllll}71.188 & 186 & P & 174 & 158 & 126\end{array}$

$$
\sqrt{P-13}=?
$$

1) 14.03
2) 14.10
3) 13.00
4) 13.67
5) None of these
$\begin{array}{llllll}72.3 .2 & 4.8 & 2.4 & 3.6 & P & 2.7\end{array}$

$$
0.06 \% \text { of } 54 \div P=?
$$

1) 0.18
2) 1.62
3) 0.62
4) 18.0
5) 0.018
73. $4 \quad 6 \frac{1}{3} \quad 8 \frac{2}{3} \quad P \quad 13 \frac{1}{3} \quad 15 \frac{2}{3}$
$30 \%$ of $\left(P^{2}+13^{2}\right)=?$
1) 78.73
2) 87.00
3) 98.83
4) 172.80
5) None of these
$\begin{array}{lllllll}74.220 & 182 & 146 & 114 & 84 & 58 & P\end{array}$

$$
P \times \frac{1}{\sqrt{256}}=?
$$

1) $2 \frac{1}{8}$
2) 2
3) $2 \frac{1}{4}$
4) $3 \frac{7}{8}$
5) None of these

75.25 | 37 | 51 | 67 | 85 | $P$ | 127 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $20 \%$ | of $\left(\begin{array}{ll}P & \times \\ \hline 625\end{array}\right)=$ ? |  |  |  |  |

1) 625
2) 550
3) 450
4) 525
5) None of these

Directions (Q.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 provided in the statement 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 questions.
Give answer (3): if the data either in statement I alone or in statement II alone are sufficient to answer the question.
Give answer (4): if the data even in both the statements I and II together are not sufficient to answer the question; and
Give answer (5): if the data in both the statement I and II together are necessary to answer the question.

## 76. How many boys are there in the class?

I. The class has total 45 children and ratio of boys to girls is $4: 5$.
II. The ratio of girls to boys is $4: 5$ and boys are nine more than the girls.
77. What is the average monthly income per family members?
I. Each male earns Rs 1,250 a month and each female earns Rs 1,050 a month.
II. Ratio of males to females in the family is $2: 1$.
78. What is the value of $\mathbf{m}-\mathrm{n} \div \mathbf{3 7}$ ?
I. $m$ is the largest possible six-digit number and $n$ is the smallest possible -ixdigit number.
II. The difference between $m$ and $n$ is known.
79. What selling price should be marked on the article?
I. Discount of $5 \%$ is to be given and profit percentage shnuli' be double the discount. Purchase cost is in the range of Rs 300 -Rs 400
II. $\mathbf{1 0 \%}$ discount is to be allowed and $15 \%$ profit is . . he obtained on the purchases cost of Rs 200 of the article.
80. What is the cost of polishing the re ta ncular floor?
I. Room is 9 m long and 7 m wide
II. Cost of polishing the floor of $1 . m$ by is Rs 112.50.

Directions (Q. 81-85): Stucv:he following graph carefully Production of Roses are given.

81. Which of the following state(s) contributes(s) less than $\mathbf{1 0}$ per cent in the total rose production?

1) Only Rajasthan
2) Rajasthan, Karnataka
3) Rajasthan, Karnataka, Haryana
4) Rajasthan, Karnataka, Haryana and Gujarat
5) None of these
82. By what percentage rose production of other states is more than that of the Maharashtra?
1) 25
2) 30
3) 20
4) 15
5) None of these
83. What is the approximate average production of roses (in thousands) across all the states?
1) 21
2) 20
3) 19
4) 18
5) none of these
84. Approximately what percentage of the total rose production is shared by the other states?
1) 10
2) 20
3) 30
4) 40
5) 35
85. If total percentage contribution of the states having production of roses below twenty thousand is considered, which of the following statements is true?
1) It is little above $40 \%$
2) It is exactly $35 \%$
3) It is below $35 \%$
4) It is little below $30 \%$
5) None of these
86. If averages of six consecutive odd number is 48 , what is the difference between the smallest and the largest numbers?
1) 10
2) 12
3) 9
4) Data inadequate
5) None of these
87. If the sum of one-half, one-third and one-fourth of a number exceeds the number itself by 4, what could be the number?
1) 24
2) 36
3) 72
4) 84
5) None of these
88. A person invested a certain amount at simple interest at the rate of 6 p.c.p.a. earning Rs 900 an interest at the end of three years. Had the interest been compounded every year, how much more interest would he have earned on the same amount with the same interest rate after three years?
1) 38.13
2) 25.33
3) 55.08
4) 35.30
5) None of these
89. A closed box made of thermocol of uniform thickness has length, breadth and height $15 \mathrm{~cm}, 12 \mathrm{~cm}$ and 9 cm respectively. If the thickness of the thermocol is $\mathbf{1 ~ c m}$, what would be the inner surface area of the box?
1) 670 sq cm
2) 658 sq cm
3) 682 sq cm
4) 582 sq cm
5) None of these
90. If a dealer wants to earn 5\% profit on an article after offering 10\% discount to the customer, by what percentage should he increase his marked price to arrive at the label price?
1) 15
2) $16 \frac{2}{3}$
3) $15 \frac{1}{2}$
4) $16 \frac{1}{2}$
5) None of these

Directions (Q.91-95) : In each of these questions a number series is given. In each series only one number is wrong. Find out the wrong number.
91.5531550654255304513549104621

1) 5531
2) 5425
3) 4621
4) 5135
5) 5506
$\begin{array}{lllllll}92.6 & 7 & 9 & 13 & 26 & 37 & 69\end{array}$
6) 7
7) 26
8) 69
9) 37
10) 9
93.1 3

10
$\begin{array}{ll}36 & 152 \quad 760\end{array}$
4632

1) 3
2) 36
3) 4632
4) 760
5) 152
$94.4 \quad 3 \quad 9$
$34 \quad 96$
219435
6) 4
7) 9
8) 34
9) 435
10) 219
95. $157.545 \quad 15 \quad 6 \quad 3 \quad 2 \quad 1$
1) 1
2) 2
3) 6
4) 157.5
5) 45

Directions (Q. 96-100): Study the following table carefully and answer the questions given below:

Number of students in Five Disciplines of a college over the years

| Year | Discipline |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Arts | Science | Commerce | Management | Agriculture |
| 2001 | 240 | 358 | 275 | 215 | 314 |
| 2002 | 260 | 390 | 286 | 234 | 365 |
| 2003 | 275 | 374 | 265 | 269 | 336 |
| 2004 | 284 | 368 | 290 | 255 | 348 |
| 2005 | 296 | 415 | 272 | 284 | 326 |
| 2006 | 312 | 432 | 364 | 276 | 383 |

96. In which year the percentage change in the case of Agriculture discipline was highest from the previous year?
1) 2002
2) 2003
3) 2004
4) 2005
5) 2006
97. What was approximate percentage increase in the number of students in Commerce discipline from 2003 to 2004?
1) 14
2) 18
3) 20
4) 9
5) 22
98. In which year was the difference in number of students in Arts and Science exactly 130?
1) 2001
2) 2002
3) 2004
4) 2006
5) None of these
99. The total number of students in Agriculture in 2001 and 2005 together was approximately what per cent number of students from the same discipline in 2002?
1) 75
2) 165
3) 65
4) 175
5) 190
100. In which discipline was there a continuous increase in number of students over the given years?
1) Science
2) Agriculture
3) Arts
4) Commerce
5) Management

## Reasoning

Directions (Q. 101-105): In each question below are given two statements followed by four conclusions numbered I, II, III and IV. You have to take the given statement 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 follows from the given statements, disregarding commonly known facts.
101. Statement: All spoons are bowls.

Some bowls are plates.
Conclusions: I. Some spoons are plates.
II. Some bowls are spoons.
III. Some plates are spoons.
IV. All bowls are spoons.

1) Only I follows
2) Only II follows
3) Only II and III follow
4) Only I and II follow
5) None of these
102. Statement: Some dogs are cats.

No cat is a cow.
Conclusions: I. Some cats are dogs.
II. Some cows are dogs.
III. No dog is a cow.
IV. Some cats are not dogs.

1) Only I and II follow
2) Only II follow
3) Only III and IV follow
4) Only III follow
5) None of these
103. Statement: All bats are flies.

All rats are bats.
Conclusions: I. All flies are rats
II. All bats are rates.
III. All rats are flies.
IV. Some flies are not bats.

1) Only I and III follow
2) Only I and IV follow
3) Only III and IV follow
4) Only II and III follow
5) None of these
104. Statements: All cups are saucers.

All pots are cups.
Conclusions: I. All pots are saucers.
II. All saucers are cups.
III. Some cups are pots.
IV. Some saucers are pots.

1) Only I and III follow
2) Only I, III and IV follow
3) None of these
105. Statement: All fishes are birds.

All birds are rats.
Conclusions: I. All rats are fishes.
II. All rats are birds.
III. All fishes are rats.
IV. Some rats are not fishes.

1) Only I and III follow
2) Only I and IV follow
3) Only III and IV follow
4) Only II and III follow
5) None of these

Directions (Q.106-112): The world famous Edward Museum in city 'X' has introduction the system of passcode for its visitors. The passcodes are generated by machine and automatically change after every one hour, during the visiting hours 11am to 7 pm . The illustration of passcodes generated batch wise is given below:

Pass code for batch I starting at 11 am
Things keep dust your all away from never.
Pass code for batch II starting at 12 noon.
All dust things your away from never keep.
Pass code for batch III starting at $1 \mathbf{p m}$.
Away things all your from never keep dust.

## Pass code for batch IV starting at 2 pm.

From all away your never keep dust things.
And so on up to the last batch starting at 6 pm .
106. If "he for went then to the shop in" is the pass code for seventh batch," shop to the then in for went he" will be the pass code for which of the following batches?

1) First batch
2) Second batch
3) Third batch
4) Fourth batch
5) None of these
107. "wait not for her till go to garden" is the passcode fo batch starting at 12 noon. When Sumitra visited, she was issued the passcode" garden
go her not for wait till". At what time did she visit?
1) 3 pm
2) 5 pm
3) 6 pm
4) 4 pm
5) 1 pm
108. Mr. ' $X$ ' visited the museum at 1 pm , but was wrongly issued the passcode for 4 pm batch which was "left is the hand right to his way". What is the correct passcode that should have been issued to Mr. 'X'?
1) Way to hand his is the left right
2) Way to his hand is the left right
3) Way to his hand the is left right
4) Way to his hand is the right left
5) None of these
109. The passcode generated for the second batch on a particular day was "fat big nice girl for it was out". What will be the passcode for the sixth batch on that day?
1) Out is was girl big fat nice for
2) Out was it girl big nice fat for
3) Out it was girl big nice fat for
4) Out it girl was big nice fat for
5) None of these
110. The passcode for batch starting at 2 pm was "walk slow health for good physique for men". What would be the passcode for the batch starting at 5 pm?
1) For physique good for men slow health walk
2) For good physique for men health slow walk
3) Good for physique for men health slow walk
4) Good physique for men health slow walk
5) None of these
111. Mr. Ashok visited the museum at 3 pm . The passcode he received was "at the few words all in race". What would have been his passcode had he visited the museum 1pm?
1) The for words race few at all in
2) The for race words few at all in
3) For the words race few at all in
4) For the race words few at all in
5) None of these
112. If the passcode for fifth batch is "set all get ready for the race today", what will be the passcode for the first batch?
1) Race for the ready today all get set
2) Race for the today ready all get set
3) Race the for ready today all get set
4) Race for the ready today get all set
5) None of these
113. In a certain code language the word DI STANCE is written as FLUWCQEH. How will the word NUMERALS be written in that code language?
1) PXNHTDNV
2) PXOITDNV
3) PWOHTDNV
4) PXOHTDNV
5) None of these
114. Five friends, $A, B, C, D$ and $E$ are staying in the same locality. $B$ 's house is to the east of A's house and to the north of C's house. C's is to the west of $D$ 's house. $D$ 's house is in which direction with respect to A's house?
1) South-East
2) North-East
3) East
4) Data inadequate
5) None of these
115. What should come in place of the question mark (?) in the following series?

A3E, D6H, ?, J12N

1) F9]
2) G9L
3) F 9 K
4) G9M
5) None of these

Directions (Q.116-120): Each of the questions consists of a Questions and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the questions. Read both the statements and

Give answer (i): 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 either in statement I alone or in statement II alone are sufficient to answer the question.
Give answer (4): if the data even in both statement I and II together are not sufficient to answer the question.

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

## 116. How long does it take to reach city ' $Y$ ' from city ' $X$ '?

I. Sangita was scheduled to leave the city ' X ' at 17. 15 hrs but got late by 45 minutes and reached city ' $Y$ ' at 06.15 hrs the next day.
II. Sangita reached the bus-stand of city ' $X$ ' at 14.25 hrs and got the bus after waiting for 35 minutes. She reached city ' $Y$ ' at 3.15 hrs the next day.

## 117. When was Samir born?

I. Samir passed out from the university on his 22 nd birthday on $16^{\text {th }}$ April 1999.
II. Samir was elder than Sudha by three years who recently celebrated her $18^{\text {th }}$ birthday?

## 118. How is Mr. Sandeep related to Sushila?

I. Mr. Sandeep is the only son of Sushila's brother's father-in-law.
II. Mr. Sandeep's father-in-law is Sushila's father.
119. The annual functions of college ' $X$ ' was celebrated on which date?
I. The annual function was celebrated on its $25^{\text {th }}$ foundation day.
II. The college was founded on $85^{\text {th }}$ day of the year 1974.
120. Who among the three friends $A, B$, and $C$ reached the school first?
I. A reached the school at 7.15- am five minutes before the bell rang.
II. B reached before $C$, who reached the school before the bell rang.

Directions (Q.121-123) : Study the following letter/ number series to answer these questions.

## F 6 Z 71 T 3 UXR 529 P4BA78D46FGH2P3QR

121. How many letters are there in the series which are immediately preceded as well as immediately followed by a number?
1) 2
2) 3
3) 4
4) 5
5) None of these
122. How many number are there in the series which are immediately preceded by a number and immediately followed by a letter?
1) 4
2) 2
3) 3
4) 5
5) None of these
123. If all the numbers are dropped from the series and the order of letters is reversed, which letter will be $\mathbf{6}^{\text {th }}$ to the right of fifth letter from left?
1) $F$
2) $x$
3) $R$
4) $G$
5) None of these

Directions ( $Q$.124-130) : A chemical company ' $X$ ' decided to recruit Management Trainees for its ammonia plant. The company laid down the following criteria. The candidate.
(i) Should be a Chemical Engineering graduate with minimum 65\% marks.
(ii) Should have done at least a diploma in business management.
(iii) Should not be less than 21 years and more than 28 years of age as on 1.7.99.
(iv) Should have secured a minimum of $75 \%$ marks in the Common Entrance Test (CET).

However, if the candidate fulfils all the criteria except
(a) (i) above, but has secured marks above 60\% and below 65\% and also working experience of one year. His case may be referred to the Managing Director.
(b) (ii) above, and has secured more than $80 \%$ marks in CET, his case may be referred to the General Manager of the plant.
(c) (iv) above, but has passed the CET exam with at least $65 \%$ marks and has secured more than 70\% marks in Chemical Engineering degree exam, his case may be referred to the Vice-president.

Based on the above criteria and the information given in each of the following questions, you have to take a decision in regard to each case. You

## are not to assume anything. These cases are given to you as on 1st July, 1999.

Mark your answer

1) If the candidate is to be selected.
2) If the candidate is to be referred to the Managing Director.
3) If the candidate is to be referred to the General Manager of the plant.
4) If the candidate is to be referred to the Vice- President.
5) If the candidate is not to be selected.
124. Subhash Chandra, who is working in a chemical factory as Junior Engineer (Chemicals) since 30.6.98, is a Chemical Engineering Graduate with 72\% marks. He has passed CET with $85 \%$ marks. His date of birth is 23.12.77.
125. Arundhati, a 27 -years-old lady, is chemical engineer with $16 \%$ marks and has also done a diploma course in Information Technology. She is working with a private company as manager, software since past three years. She has obtained a Postgraduate degree in business management. She has secured 79\% marks in CET.
126. Shirish Guha has completed his graduation in chemical engineering with $75 \%$ marks and diploma in business management with 60\% marks. He has passed the CET with $69 \%$ marks. He celebrated his $27^{\text {th }}$ birthday on $17^{\text {th }}$ March 1999.
127. Dilip Khare is an engineering graduate passed out in 1996 with $70 \%$ marks. He has secured 68\% marks in CET. His date of birth is 25.10.1976. He has completed his postgraduate diploma in business management from a reputed institute.
128. Rajiv Mhatre is a 25 -years-old Chemical Engineering graduate with $62 \%$ marks in Graduation. He is working in a private chemical company as an Assistant Manager for the last two years. He has passed CET with $28 \%$ marks and has done diploma in business management in 1995.
129. Mamta is an electrical engineer with $74 \%$ marks. She has done diploma in business management as well as in chemical technology securing $66 \%$ and $62 \%$ marks respectively. Her data of birth is 16.12.1973. She has passed out CET with 80\% marks.
130. Subhodh Roy is studying for postgraduate degree in chemical engineering at present. He has secured $73 \%$ marks in B.E. chemical engineering. His date of birth is $25^{\text {th }}$ June 1978. He has also completed the diploma in business management and has passed out CET with $82 \%$ marks. He has no working experience.
131. If it is possible to make a meaningful word from the first, fourth, fifth and the seventh letters of the word MYSTERIOUS, using each letter only one, write second letter of that word as your answer. If more than one such word can be formed, write ' $M$ ' as your answer and if no such word can be formed, write ' $X$ ' as your answer.
1) 1
2) E
3) T
4) $M$
5) $x$

Directions (Q. 132-135): Study the following formation carefully to answer the questions given below.
(i) Six friends, A, B, C, D, E and F are sitting along the sides of a hexagonal table for playing a game, though not necessarily in the same order.
(ii) $F$, who is sitting exactly opposite of $A$, is to the immediate right of $B$.
(iii) $D$ is between $A$ and $B$ and is exactly opposite of $C$.
132. $A$ is sitting between which of the following pairs of persons?

1) D and E
2) B and E
3) B and C
4) E and C
5) None of these
133. Four of the following pairs are alike in a certain way on the basis of sitting positions and so form a group. Which is the one that does not belong to the group?
1) A, D
2) B, C
3) B, F
4) C, E
5) $E, A$
134. Who is sitting opposite of $B$ ?
1) C
2) $A$
3) E
4) Data inadequate
5) None of these
135. In Rita's class boys and girls are in the ratio of 1:2. From top Rita ranks $8^{\text {th }}$ among girls and $17^{\text {th }}$ among all students. If her rank from the bottom among all students is $\mathbf{2 0}^{\text {th }}$, how many boys are there below Rita in the class?
1) 4
2) 1
3) 9
4) Data inadequate
5) None of these

Directions (Q.136-140): In the following questions, the symbols $+\times,=, \div$, and - are used with the following meaning:
$P+Q$ means $P$ is greater than $Q$.
$\mathrm{P} \times \mathrm{Q}$ means P is either greater than or equal to Q .
$P=Q$ means $P$ is equal to $Q$.
$P \div Q$ means $P$ is smaller than $Q$.
$P-Q$ means $P$ is either smaller than or equal to $Q$.
Now in each of the following questions assuming the given statements to be true, find which of the two conclusions I and II given below them is/ are definitely true.

Give answer (1): if only conclusion I is true.
Give answer (2): if only conclusion II is true.
Give answer (3): if either I or II is true.
Give answer (4): if neither I nor II is true.
Give answer (5): if both I and II are true.
136. Statements: $U+V, \quad W-Y, \quad Y \times U$

Conclusions: I. W+U II. W $\div \mathrm{V}$
137. Statements: $B \div A, \quad D \times E, \quad E+A$

Conclusions: I. $D+A \quad$ II. $B \div E$
138. Statements: $S \times Q, \quad R+T, \quad R-S$

Conclusions: I. $\mathrm{S}+\mathrm{T} \quad$ II. $\mathrm{Q}=\mathrm{T}$
139. Statements: $M \div N, \quad P \times Q, \quad P+N$

Conclusions: I. N+Q
II. N-Q
140. Statements: G-H K×L L-G

Conclusions: I. G $\div$ K II. L-H

Directions ( Q . 141-150): In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?
141.

142.


## 143.


144.

145.


## 146.



## 147.


148.

149.

150.


## P. Ofessional Knowledge

151. The tracks o . a l: $\Delta \mathrm{k}$ which can be accused without repositioning the $R / \mathbf{W}$ heads is
1) Surface
2) Cylinder
3) Cluster
4) All of tae
5) None of these

## 152. Which of the following is true about GUI s?

1) They make computers easier to use for non-professionals
2) They use icons and menus that users can select with a mouse
3) Both (1) and (2)
4) All of these
5) None of these
153. A computer system consisting of its processor, memory and I/ O devices accepts data, processes it and produces the output results. Can you tell in which component is the raw data fed?
1) Mass memory
2) Main memory
3) Logic unit
4) Arithmetic unit
5) None of these
154. The mechanical diskette in which you insert your diskette is connected to the computer's bus
1) Data
2) Communication
3) Address
4) Parallel
5) None of these
155. A set of programs that handle firm's database responsibilities is called a
1) Database Management System (DBMS)
2) Database Processing System (DBPS)
3) Data Management System (DMS)
4) All of these
5) None of these
156. You are in the process of analyzing a problem that requires you to collect and store TCP/ IP Packets. Which of the following utilities is best suited for this purpose?
1) NBTSTAT
2) Performance Monitor
3) NETSTAT
4) Network Monitor
5) DHCP Management console
157. A top to bottom relationship among the items in a database is established by a
1) Hierarchical Scheme
2) Network Schema
3) Relational Schema
4) All of the above
5) None of these
158. The purpose of transforming data intended for peripheral device into a disk (or intermediate store) so that it can be transferred to peripheral at a more convenient time or in bulk is known as -
1) Multiprogramming
2) Spooling
3) Caching
4) Virtual programming
5) None of these
159. Which of the following system program forgoes the production of object code to generate absolute machine code and load it into the physical main storage location from which it will be executed immediately upon completion of the assembly?
1) Two pass assembler
2) Load-and -go assembler
3) Microprocessor
4) Compiler
5) None of these
160. Relocation bits is used by relocating loader are specified (generated) by
1) Relocating loader itself
2) Linker
3) Assembler to translator
4) Macro processor
5) None of these
161. From what location are the $1^{\text {st }}$ computer instructions available on boot up?
1) ROM BIOS
2) CPU
3) Boot.init
4) Config.sys
5) None of these
162. Abstraction is $\qquad$
1) The act of representing the essential features of something without including much detail
2) The act of representing the features of something in much detail
3) A tree structure
4) All of these
5) None of these
163. Aggregation is a special form of $\qquad$
1) Generalization
2) Specialization
3) Association
4) Object
5) None of these
164. Consider an operation of addition. For two numbers, the operating will generate a sum. If the operand are strings, and the same operation would produce a third string by concatenation. This feature is called
$\qquad$
1) Inheritance
2) encapsulation
3) Polymorphism
4) Binding
5) None of these
165. In E-R diagram, the term cardinality is a synonym for the term $\qquad$
1) Attribute
2) degree
3) Entities
4) Cartesian
5) None of these
166. An oracle server index $\qquad$
1) Is a schema object
2) Is used speed up the retrieval of rows by using a pointer
3) Is independent of the table indexes
4) All of these
5) None of these
167. Which of the following is not a context free grammar component?
1) Terminal Symbols
2) Non-terminal symbol
3) Production line
4) List
5) None of these
168. Which of the following is a phase of RAD model?
1) Business modeling
2) data modeling
3) Application generation
4) All of the above
5) None of these
169. $\qquad$ is set of design steps that allow a DFD with transform flow characteristics to be mapped into a predefined template for program structure.
1) Transaction flow
2) Contributor
3) Transform mapping
4) Design evaluation
5) None of these
170. A combinational logic circuit which is used to send data coming from a single source to two or more separate destinations is called as $\qquad$
1) Decoder
2) encoder
3) Multiplexer
4) Demultiplexer
5) None of these
171. Which of the following is a universal gate?
1) AND
2) $O R$
3) $\mathrm{EX}-\mathrm{OR}$
4) NAND
5) None of these
172. The two's complement of binary number 010111.1100 is
1) 101001.1100
2) 101000.0100
3) 010111.0011
4) 101000.0011
5) None of these
173. In 8086 the overflow flag is set when
1) The sum is more than 16 bits
2) Signed numbers go out their range after an arithmetic operation
3) Carry and sign flags are set
4) During subtraction
5) None of these
174. What does microprocessor speed depends on?
1) Clock
2) Data bus width
3) Address bus width
4) All of these
5) None of these
175. The trap is one of the interrupts available its I NTEL 8085 which one statement is true of TRAP?
1) It is level triggered
2) It is negative edge triggered
3) It is positive edge triggered
4) It is both positive edge triggered and negative edge triggered
5) None of these
176. A special type of gateway that can keep external users from accessing resources on the LAN users access the external into is called $\qquad$
1) Repeater
2) Firewall
3) Encryption
4) Hub
5) None of these
177. What is the name given to the exchange of control signals which is necessary for establishing a connection between a modem and a computer at one end of a line and another modem and computer at the other end?
1) Handshaking
2) Modem options
3) Protocol
4) All of these
5) None of these
178. In SQL, which command is used to changes data in data table?
1) UPDATE
2) INSERT
3) BROWSE
4) APPEND
5) None of these
179. In SQL, which of the following is not a data definition language command?
1) RENAME
2) REVOKE
3) GRANT
4) UPDATE
5) None of these
180. Which command( $s$ ) is (are) used to redefine a column of the table in SQL?
1) ALTER TABLE
2) DEFINE TABLE
3) MODI FY TABLE
4) ALL of these
5) None of these
181. In a relational schema, each tuple is divided into fields called
1) Relations
2) Domains
3) Queries
4) All of these
5) None of these
182. An indexing operation
1) Sorts a file using a single key
2) Sorts file using two keys
3) Establishes an index for a file
4) Both $a$ and b
5) None of these
183. Data security threats include
1) Hardware failure
2) Privacy invasion
3) Fraudulent manipulation of data
4) All of these
5) None of these
184. The language used in application programs to request data from the DBMS is referred to as the
1) DML
2) $D D L$
3) Query language
4) DCL
5) None of these
185. A contains the smallest unit of meaningful data, so you might call it the basic building block for a data file
1) File structure
2) records
3) Fields
4) Database
5) None of these
186. A $\qquad$ means that one record in a particular record type is related to only one record of another record type
1) One-to-one relationship
2) One-to-many relationship
3) Many-to-one relationship
4) Many-to many relationship
5) None of these
187. Through linked list one can implement
1) Stack
2) Graph
3) Queue
4) All of the above
5) None of these
188. A heap allows a very efficient implementation of a $\qquad$
1) Double ended queue
2) Priority queue
3) Stack
4) Trees
5) None of these
189. In files, there is a key associated with each record which is used to differentiate among different record. For every file there is at least one set of keys i.e. unique. Such a key is called $\qquad$
1) Unique key
2) Prime attribute
3) Index key
4) Primary key
5) None of these
190. $\qquad$ is primarily used for mapping host names and e-mail destinations to IP address but can also be used for other purposes.
1) TCP (Transfer Control Protocol)
2) DNS (Domain Name System)
3) SHA (Secure Hash Algorithm)
4) Simple Network Management Protocol
5) None of these
191. Override is a method $\qquad$
1) For an operation that replaces an inherited method for the same operation
2) For a data that replaces an inherited method for the same operation
3) For an operation that takes arguments from library function
4) All of these
5) None of these

## 192. Local variables

$\qquad$

1) Are created outside a block
2) Are known only to that block
3) Continue to exit when their block ends
4) Area illegal in C++
5) None of these
193. $\qquad$ is virus that inserts itself into a system's memory. Then it take number of actions when an infected file is executed.
1) Web scripting virus
2) Boot sector virus
3) Polymorphic virus
4) resident virus
194. This _-_data mining technique derives rules from real world case examples
1) Waterfall model
2) RAD
3) White box
4) Spiral model
5) Case based reasoning
195. The $\qquad$ model remains operative until the software is required.
1) Waterfall model
2) Incremental model
3) Spiral model
4) Prototyping model
5) Incremental model
196. Data mining evolve as a mechanism to cater the limitations of $\qquad$ systems to deal massive data sets with high dimensionality, new data type, multiple heterogeneous data resource etc.
1) OLTP
2) OLAP
3) DSS
4) DWH
5) None of these
197. An important application of cryptography, used in computerized commercial and financial transaction
1) Data mining
2) data warehousing
3) digital signature
4) Media convergence
5) None of these
198. Rows of a relation are called
1) Relation
2) Tuples
3) data structure
4) An entity
5) none of these
199. The drawbacks of the binary tree sort remedied by the
1) Linear sort
2) Quick sort
3) heap sort
4) Insertion sort
5) None of these
200. Which layer of OSI determines the interfaces of the system with the user?
1) Network
2) Application
3) Data link
4) Session
5) None of these
