ADMISSION TEST FOR PROGRAMME 2009-11
Time: 2 Hours
Marks: 100
ROLL NUMBER


NAME (in Capital Letters)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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## INSTRUCTIONS

1. Write the Question Booklet Serial Number in the space provided in the Answer Sheet. Question Booklet Serial Number is given at the top of this page.
2. Write your Roll No. clearly in the space provided in both the Question Booklet and the Answer Sheet.
3. Mark your answers in the Answer Sheet only. The Answer Sheet alone will constitute the basis of evaluation.
4. All rough work must be done in the Question Booklet only.
5. Do not make any stray marks anywhere in the answer sheet.
6. Do not fold or wrinkle the answer sheet.
7. Use only HB Pencil to mark the answers in the answer sheet.
8. All questions have one correct answer. Every answer must be indicated clearly darkening one circle for each answer. If you wish to change an answer, erase completely the already darkened circle, then make a fresh mark. If you darken more than one circle your answer will be treated as wrong, as shown in the example below:

## WRONG METHOD

 RIGHT METHOD

9. There is negative marking equivalent to $1 / 4^{\text {th }}$ of the mark allotted to the specific question for wrong answer.
10. The candidates are advised to read all options thoroughly.
11. No clarification of any sort regarding the question paper is permitted.

THE ENTIRE QUESTION PAPER IS DIVIDED INTO
THE FOLLOWING SECTIONS

| SECTIONS | NO. OF QUESTIONS | MARKS PER <br> QUESTION | TOTAL MARKS |
| :---: | :---: | :---: | :---: |
| $(\mathrm{a})$ | $(\mathrm{b})$ | $(\mathrm{c})$ | $(\mathbf{d})=(\mathbf{b}) \times(\mathbf{c})$ |
| Section -1 | $32($ Questions $01-32)$ | 0.8 | $\mathbf{2 5 . 6 0}$ |
| Section -2 | 27 (Questions $33-59)$ | 0.7 | $\mathbf{1 8 . 9 0}$ |
| Section -3 | 26 (Questions $60-85)$ | 0.8 | $\mathbf{2 0 . 8 0}$ |
| Section -4 | $12($ Questions $86-97)$ | 0.8 | $\mathbf{9 . 6 0}$ |
| Section -5 | $23($ Questions $98-120)$ | 0.7 | $\mathbf{1 6 . 1 0}$ |
| Section -6 | 30 (Questions $121-150)$ | 0.3 | $\mathbf{9 . 0 0}$ |
| Total | $\mathbf{1 5 0}$ | $\mathbf{1 0 0 . 0 0}$ |  |

## SECTION - 1

1. Three children won prizes in the _Tech India Quiz‘ contest. They are from three schools: Lancer, Columbus and Leelavati, which are located in different states. One of the children is named Binod. Lancer school's contestant did not come first. Leelavati school's contestant's name is Rahman. Columbus school is not located in Andhra Pradesh. The contestant from Maharashtra got third place and is not from Leelavati School. The contestant from Karnataka did not secure first position. Columbus school's contestant's name is not Badal.

Which of the following statements is TRUE?
A. $1^{\text {st }}$ prize: Rahman (Leelavati), $2^{\text {nd }}$ prize: Binod (Columbus), $3^{\text {rd }}$ prize: Badal (Lancer)
B. $1^{\text {st }}$ prize: Binod (Columbus), $2^{\text {nd }}$ prize: Rahman (Leelavati), $3^{\text {rd }}$ prize: Badal (Lancer)
C. $1^{\text {st }}$ prize: Rahman (Leelavati), $2^{\text {nd }}$ prize: Badal (Lancer), $3^{\text {rd }}$ prize: Binod (Columbus)
D. $1^{\text {st }}$ prize: Binod (Columbus), $2^{\text {nd }}$ prize: Badal (Lancer), $3^{\text {rd }}$ prize: Rahman (Leelavati)
2. Mother Dairy sells milk packets in boxes of different sizes to its vendors. The vendors are charged Rs. 20 per packet up to 2000 packets in a box. Additions can be made only in a lot size of 200 packets. Each addition of one lot to the box results in a discount of one rupee an all the packets in the box. What should be the maximum size of the box that would maximize the revenue per box for Mother Dairy?
A. 2400 packets
B. 3000 packets
C. 4000 packets
D. None of the above.
3. All employees have to pass through three consecutive entrance doors to enter into the office and one security guard is deployed at each door. These security guards report to the manager about those who come to office after 10 AM. Ms. Rani is an employee of this office and came late on the annual day. In order to avoid report to the manager she had to pay each security guard half of the money she had in her purse and 2 rupees more besides. She found only one rupee with her at the end. How much money Ms. Rani had before entering the office on the annual day?
A. Rs. 40
B. Rs. 36
C. Rs. 25
D. Rs. 42

Directions for questions 4-5: Answer the questions based on the following information.
Director of an institute wants to distribute teaching assignments of HRM, Psychology, Development Studies, Trade policy and Finance to five of six newly appointed faculty members. Prof. Fotedar does not want any assignment if Prof. Das gets one of the five. Prof. Chaudhury desires either HRM or Finance or no assignment. Prof. Banik opines that if Prof. Das gets either Psychology or Trade Policy then she must get the other one. Prof. Eswar insists on an assignment if Prof. Acharya gets one.
4. Which of the following is valid faculty - assignment combination if all the faculty preferences are considered?
A. Prof. Acharya - HRM, Prof. Banik - Psychology, Prof. Chaudhury - Development studies, Prof. Das - Trade Policy, Prof. Eswar - Finance
B. Prof. Chaudhury - HRM, Prof. Das - Psychology, Prof. Acharya - Development studies, Prof. Banik - Trade Policy, Prof. Eswar - Finance
C. Prof. Acharya - HRM, Prof. Banik - Psychology, Prof. Eswar - Development studies, Prof. Das Trade Policy, Prof. Fotedar - Finance
D. Prof. Banik - HRM, Prof. Fotedar - Psychology, Prof. Eswar - Development studies, Prof. Chaudhuri - Trade Policy, Prof. Acharya - Finance
5. If Prof. Acharya gets HRM and Prof. Chaudhury gets Finance, then which of the following is not a correct faculty-assignment combination assuming all faculty preferences are considered?
A. Prof. Das - Development Studies, Prof. Banik - Trade Policy
B. Prof. Fotedar - Development Studies, Prof. Banik - Trade Policy
C. Prof. Banik - Development Studies, Prof. Eswar - Trade Policy
D. Prof. Banik - Development Studies, Prof. Das - Trade Policy

Directions for questions 6-8: Answer the questions based on the following information.
Five women decided to go for shopping to South Extension, New Delhi. They arrived at the designated meeting place in the following order: 1. Aradhana, 2. Chandrima, 3. Deepika, 4. Heena and 5. Sumitra. Each of them spent at least Rs. 1000. The woman who spent Rs. 2234 arrived before the woman who spent Rs. 1193. One of them spent Rs. 1340 and she was not Deepika. One woman spent Rs. 1378 more than Chandrima. One of them spent Rs. 2517 and she was not Aradhana. Heena spent more than Deepika. Sumitra spent the largest amount and Chandrima the smallest.
6. What was the amount spent by Heena?
A. Rs. 1193
B. Rs. 1340
C. Rs. 2234
D. Rs. 2517
7. Which of the following amount is spent by one of the women?
A. Rs. 1139
B. Rs. 1378
C. Rs. 2571
D. Rs. 2518
8. The lady who spent Rs. 1193 is:
A. Aradhana
B. Chandrima
C. Deepika
D. Heena

Directions for questions 9-11: Answer the questions based on the following information.

In a motor race competition certain rules are given for the participants to follow. To control direction and speed of the motorists, guards are placed at different signal points with caps of different colour. Guard with red cap indicates the direction of participant's movement and guards with green cap indicates the speed of the participant's movement. At any signal point presence of three guards, two guards and one guard with red cap means the participant must stop, turn left and turn right respectively. Signal points with three guards, two guards and one guard with green cap means the participants must move at 10,4 and $2 \mathrm{~km} /$ hour respectively.

Kartikay, one of the participants, starts at a point where his car was heading towards north and he encountered signals as follows: at start point one guard with green cap; after half an hour two guards with red cap and two guards with green cap at first signal; after fifteen minutes one guard with red cap at second signal; after half an hour one guard with red cap and three guards with green caps at third signal; after 24 minutes two guard with red cap and two guards with green cap at fourth signal; after 15 minutes three guard with red cap at fifth signal. (Time mentioned in each case is applicable after crossing the previous signal).
9. Total distance travelled by Kartikay from starting point till last signal is:
A. 9 km .
B. 10 km .
C. 8 km .
D. 12 km .
10. What would be the final position of Kartikay if one guard with red cap and two guards with green caps were placed at the first signal point after the starting point?
A. 3.0 km to the west and 2.0 km to the south
B. 3.0 km to the west and 4.0 km to the north
C. 5.0 km to the east and 4.0 km to the north
D. 2.0 km to the west and 4.0 km to the south
11. If at the starting point Kartikay was heading towards south what would be his final position?
A. 3.0 km to the east and 4.0 km to the south
B. 5.0 km to the east and 4.0 km to the south
C. 3.0 km to the west and 4.0 km to the south
D. 5.0 km to the west and 2.0 km to the north

Directions for questions 12-15: Answer the questions based on the following information.

Mr. Mansingh has five sons - Arun, Mahi, Rohit, Nilesh and Saurav, and three daughters - Tamanna, Kuntala and Janaki. Three sons of Mr. Mansingh were born first followed by two daughters. Saurav is the eldest child and Janki is the youngest. Three of the children are studying at Trinity School and three are studying at St. Stefan. Tamanna and Rohit study at St. Stefan school. Kuntala, the eldest daughter, plays chess. Mansorover school offers cricket only, while Trinity school offers chess. Beside, these schools offer no other games. The children who are at Mansorover school have been born in succession. Mahi and Nilesh are cricketers while Arun plays football. Rohit who was born just before Janki, plays hockey.
12. Arun is the $\qquad$ child of Mr. Mansingh.
A. $2^{\text {nd }}$
B. $3^{\text {rd }}$
C. $6^{\text {th }}$
D. $5^{\text {th }}$
13. Saurav is a student of which school?
A. Trinity
B. St. Stefan
C. Mansorover
D. Cannot be determined
14. What game does Tamanna play?
A. Cricket
B. Hockey
C. Football
D. Cannot be determined
15. Which of the following pairs was not born in succession (ignore the order)?
A. Mahi and Nilesh
B. Kuntala and Arun
C. Rohit and Janki
D. Arun and Rohit

Directions for questions 16-17: Answer the questions based on the following information.
In each question below three statements (I, II, III) are given followed by four conclusions numbered 1, 2,3 and 4. 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 follows from the given statements, disregarding commonly known facts. Choose the correct options (A \& D) presented below.
16. Statements:
I. Some drivers are technicians
II. All technicians are engineers
III. Some engineers are lecturers

Conclusions:

1. Some technicians are lecturers
2. Some lecturers are drivers
3. All engineers are technicians
4. Some engineers are drivers
A. Only 3 follows
B. Only 4 follows
C. Only 3 and 4 follows
D. None of the above
5. Statements:
I. Some barbers are fashion designers
II. No fashion designers are businessmen
III. Some businessmen are traders

Conclusions:

1. No Fashion designers are traders
2. Some traders are not fashion designers
3. Some fashion designers are traders
4. Some barbers are not businessmen
A. Either 1, 2 and 4 or 3, 2 and 4 follow
B. Either 1 and 4 or 3 and 4 follow
C. Either 1 and 2 or 3 and 2 follow
D. None of the above
5. Pointing to Priya, father of Pritu says, -She is the daughter of the daughter of the wife of the only son of the grandfather of my sister. $\square$ How is Sushma related to Priya if Sushma is the sister of Pritu?
A. Mother
B. Aunt
C. Niece
D. None of the above

Directions for questions 19-20: Answer the questions based on the following information.
To get admission in a management course at Dadhichi Institute of Management (DIM) following criteria are given. A candidate must:

1. be a graduate from a recognized university with minimum 54 percent marks.
2. not be more than 33 years of age as on 1.4.2008.
3. have secured 60 percent or more marks in the entrance test.
4. pay one-time deposit fee of Rs. $2,00,000$ at time of admission.
5. pay tuition fee of Rs. 4,000 per month.

Any candidate who fails to fulfill the condition (4) at above, he/she may be referred to the chairmanadmission.
Any candidate who has scored 80 percent mark in the entrance test but does not fulfill the condition (1) at above, he/she may be referred to the director.
Any candidate having work experience of at least 10 years in supervisory cadre and does not satisfy the condition (2) at above, he/she may be admitted under sponsored quota.

Given the above information and condition in each of the following questions, you have to decide which of the following course of action should be taken. You should not assume anything in case of any of the candidates. Mark answer
I. if the candidate is admitted
II. if the candidate is not admitted
III. if the candidate is referred to the director
IV. if the candidate is referred to the chairman-admission
V. if the candidate is admitted under sponsor quota
19. Kamaljeet secured 60 percent marks in graduation and was born on 15 th April 1976. He scored 56 percent marks in the entrance test. He can pay one-time deposit of Rs. 2,00,000 and monthly tuition fee of Rs. 4,000.
A. I
B. II
C. III
D. IV
20. Gourav is a first-class science graduate who obtained 81 percent marks in the entrance test. He has 12 years of work experience in supervisory cadre. He can pay the stipulated one-time deposit and monthly tuition fees. His date of birth is 20th October, 1970.
A. I
B. IV
C. III
D. V

Directions for questions 21-23: Read the following information and answer the questions given below it.

For selection of films produced before December 2007 for the national film festival of India, following criteria are given.

1. The film must be submitted to the National Film Development Corporation (NFDC) by 31.10.2007.
2. The production cost of the film should not exceed Rupees Five crores.
3. The director of the film should have passed a three rear course either from the Film and Television Institute of India (FTII) or from Satyajit Ray Film \& Television Institute.
4. The length of the film should not exceed 150 minutes.
5. The film must have been approved by the film censor board of India.
6. However, if the film fulfils all the above criteria except
(a) criteria 2 above, it must be sent to the finance secretary
(b) criteria 3 above, the director has done at least a one year course from FTII or Satyajit Ray Film \& Television Institute, the film is kept as a stand-bye

On the basis of above information and information provided below, decide the course of action in each case. No further information is available. You are not to assume anything. Mark answer
I. if the film is to be selected
II. if the film is not to be selected
III. if the film should be sent to the finance secretary
IV. if the film should be kept as a stand-bye
V. if the data given about the film are not adequate to make a decision.
21. Film Dainandini was produced at the cost of Rupees 2.5 crore. It was submitted to the NFDC on 29th September 2007. The director of the film Govind Chadha passed a 3-year course from FTII. Length of film was 120 minutes and has been approved by the censor board of India.
A. I
B. II
C. IV
D. V
22. Bhadrasalam is a 135 -minute film directed by Katyani, who was a student of Satyajit Ray Film \& Television Institute from 1996 to 1999. The cost of producing the film was Rupees 2.3 crore and it was submitted to NFDC on 24th July 2007. The film has been approved by the censor board of India.
A. I
B. V
C. III
D. IV
23. Rakesh Mohan, the director of film Ek Bar Achanak, has successfully completed a 2-years course at Satyajit Ray Film \& Television Institute. The 150-minute film was produced at rupees 4.85 crore. It has approved by the censor board of India and submitted to NFDC on 30th Nov. 2007.
A. I
B. III
C. IV
D. II

Directions for the questions 24-27: Answer the questions based on the following information.

A number arrangement machine, when given a particular input, rearranges it following a particular rule. Illustrations of the input and the steps of arrangement is given below.

Input: 245, 316, 436, 519, 868, 710, 689
Step 1: 710, 316, 436, 519, 868, 245, 689
Step 2: 710, 316, 245, 519, 868, 436, 689
Step 3: 710, 316, 245, 436, 868, 519, 689
Step 4: 710, 316, 245, 436, 519, 868, 689
Step 4 is the last step for the given input
24. If the input is given as $-655,436,764,799,977,572,333 \square$, which of the following step will be -333 , $436,572,655,977,764,799 \square$ ?
A. Step Third
B. Step Second
C. Step Fourth
D. None of the above
25. How many steps will be required to get the final output from the following input? Input: 544, 653, 325, 688, 461, 231, 857
A. 6
B. 5
C. 4
D. None of the above
26. Step third for an input is $-432,433,542,666,734,355,574 \square$ What will be the first step for the input?
A. $666,542,432,734,433,574,355$
B. $542,666,734,432,433,574,355$
C. $355,574,433,432,734,666,542$
D. Cannot be determined
27. What will be the third step for the following input?

Input: 653, 963, 754, 345, 364, 861, 541
A. $541,345,754,963,364,816,653$
B. $541,345,364,653,963,754,861$
C. $541,345,364,963,754,861,653$
D. $541,345,364,653,861,754,963$

Directions for the questions 28-30: Answer the questions based on the following information.

A wood arrangement machine, when given a particular input, rearranges it following a particular rule. Following is the illustration of the input and the steps of arrangement:

Input: She was interested in doing art film
Step 1: art she was interested in doing film
Step 2: art was she interested in doing film
Step 3: art was in she interested doing film
Step 4: art was in film she interested doing
Step 5: art was in film doing she interested
Step 5 is the last step of the given input. Now study the logic and rules followed in the above steps, find out appropriate step for the question given below for the given input.
28. Which of the following will be the last step for the input given below?

Input: he is going out to search air
A. out is air to going search he
B. out is air to search going he
C. search he out is air to going
D. None of the above
29. If step 2 of an input is not -not is the casino considering legal action $\square$, which step is: —not is casino action legal the considering $\square$ ?
A. Step: 3
B. Step: 6
C. Step: 4
D. None of the above
30. How many steps will be required to get the final output from the following input?

Input: Father needs to check on the boy
A. Four
B. Five
C. Six
D. None of the above
31. Among Anil, Bibek, Charu, Debu, and Eswar, Eswar is taller than Debu but not as fat as Debu. Charu is taller than Anil but shorter than Bibek. Anil is fatter than Debu but not as fat as Bibek. Eswar is thinner than Charu, who is thinner than Debu. Eswar is shorter than Anil. Who is the thinnest person?
A. Bibek
B. Charu
C. Debu
D. Eswar
32. Pointing to a photograph Yuvraj says, - He is the only brother of the only daughter of my sister's maternal grandmother. $\square$ Pointing to another photograph Sourav says, -he is the only brother of the only daughter of my sister's maternal grandmother. $\square$ If among the two photographs, one was either of Sourav or Yuvraj, and the photograph, towards which Yuvraj was pointing, was not of Sourav, then how is Yuvraj related to Sourav?
A. Paternal uncle
B. Maternal uncle
C. Grandfather
D. None of the above

## SECTION - 2

33. DSBO Company produces $Z$ units of output at a total cost of Rs. R, where $R=\frac{1}{10} Z^{3}-5 Z^{2}+10 Z+5$. At what level of output will the average variable cost attain its minimum?
A. 20
B. 33
C. 25
D. None of the above
34. If $\mathrm{H}_{1}, \mathrm{H}_{2}, \mathrm{H}_{3}, \ldots \ldots$. Hn , are n Harmonic means between ${ }_{=} \mathrm{a}^{\text {‘ }}$ and ${ }_{=} \mathrm{b}^{\text {‘ }}(\neq \mathrm{a})$, then value of $\frac{\mathrm{H}_{1}+\mathrm{a}}{\mathrm{H}_{1}-\mathrm{a}}+\frac{\mathrm{H}_{n}+\mathrm{b}}{\mathrm{H}_{\mathrm{n}}-\mathrm{b}}$ is cqual to:
A. $\mathrm{n}+1$
B. 2 n
C. $2 \mathrm{n}+3$
D. $\mathrm{n}-1$
35. If $\mathrm{n}+2 \mathrm{C}^{8} \cdot \mathrm{n}-2 \mathrm{p}^{4}=57: 16$, then $\mathrm{n}=$
A. 20
B. 22
C. 15
D. None of the above
36. Suppose $\mathrm{a}, \mathrm{b}$ and c are in Arithmetic Progression and $\mathrm{a}^{2}, \mathrm{~b}^{2}$ and $\mathrm{c}^{2}$ are in Geometric Progression. If $\mathrm{a}<\mathrm{b}<\mathrm{c}$ and $\mathrm{a}+\mathrm{b}+\mathrm{c}=\frac{3}{2}$ then the value of $\mathrm{a}=$
A. $\frac{1}{2 \sqrt{2}}$
B. $\frac{1}{2 \sqrt{3}}$
C. $\frac{1}{2}-\frac{1}{\sqrt{3}}$
D. $\frac{1}{2}-\frac{1}{\sqrt{2}}$
37. If three positive real numbers $a, b$ and $c(c>a)$ are in Harmonic Progression, then $\log (a+c)+\log (a$ $-2 b+c)$ is equal to:
A. $2 \log (c-b)$
B. $2 \log (a-c)$
C. $2 \log (c-a)$
D. $\log a+\log b+\log c$
38. Sum of the series $1^{2}-2^{2}+3^{2}-4^{2}+\ldots \ldots .+2001^{2}-2002^{2}+2003^{2}$ is:
A. 2007006
B. 1005004
C. 200506
D. None of the above
39. The number of ways in which a mixed double tennis game can be arranged amongst 9 married couples if no husband and wife play in the same game is:
A. 1514
B. 1512
C. 3024
D. None of the above
40. The interior angles of a polygon are in Arithmetic Progression. If the smallest angle is $120^{\circ}$ and common difference is $5^{\circ}$, then number of sides in the polygon is:
A. 7
B. 8
C. 9
D. None of the above
41. A ladder 25 meters long is placed against a wall with its foot 7 meters away from the foot of the wall. How far should the foot be drawn out so that the top of the ladder may come down by half the distance of the total distance if the foot is drawn out?
A. 6 meters
B. 8 meters
C. 8.75 meters
D. None of the above
42. $2-\frac{\sqrt{6407522205}}{\sqrt{36900840049}}=$
A. 0.666039
B. 0.666029
C. 0.666009
D. None of the above
43. If the positive real numbers $a, b$ and $c$ are in Arithmetic Progression, such that $a b c=4$, then minimum possible value of $b$ is:
A. $2^{\frac{3}{2}}$
B. $2^{\frac{2}{3}}$
C. $2^{\frac{1}{3}}$
D. None of the above
44. If one root of the equation $a x^{2}+b x+c=0$ is double of the other, then $2 b^{2}=$
A. 9 ca
B. $\mathrm{c} \sqrt{2} \mathrm{a}$
C. $2 \sqrt{3} \mathrm{ac}$
D. None of the above
45. A boat goes 30 km . upstream and 44 km . downstream in 10 hours. In 13 hours, it can go 40 km . upstream and 55 km down-stream. The speed of the boat in still water is:
A. $3 \mathrm{~km} / \mathrm{hour}$
B. $4 \mathrm{~km} /$ hour
C. $8 \mathrm{~km} / \mathrm{hour}$
D. None of the above
46. $\cot ^{-1}\left[\frac{\sqrt{1-\sin a}+\sqrt{1+\sin a}}{\sqrt{1-\sin a}-\sqrt{1+\sin a}}\right]=$
A. $2 \pi-\mathrm{a}$
B. $\pi-\frac{1}{2} a$
C. $\frac{1}{2} a-3 \pi$
D. None of the above
47. A pole has to be erected on the boundary of a circular park of diameter 13 meters in such a way that the difference of its distances from two diametrically opposite fixed gates A and B on the boundary is 7 metres. The distance of the pole from one of the gates is:
A. 8 metres
B. 8.25 metres
C. 5 metres
D. None of the above
48. A spiral is made up of 13 successive semicircles, with center alternatively at $A$ and $B$, starting with center at A. the radii of semicircles, thus developed are $0.5 \mathrm{~cm}, 1.0 \mathrm{~cm}, 1.5 \mathrm{~cm}$, and 2.0 cm and so on. The total length of the spiral is:
A. 144 cm
B. 143 cm
C. 174 cm
D. None of the above
49. The mean salary in ICM LTD. was Rs. 1500, and the standard deviation was Rs. 400. A year later each employee got a Rs. 100 raise. After another year each employee's salary (including the above mentioned raise) was increased by $20 \%$. The standard deviation of the current salary is:
A. 460
B. 480
C. 580
D. None of the above
50. A medical clinic tests blood for certain disease from which approximately one person in a hundred suffers. People come to the clinic in group of 50. The operator of the clinic wonders whether he can increase the efficiency of the testing procedure by conducting pooled tests. In the pooled tests, the operator would pool the 50 blood samples and test them altogether. If the polled test was negative, he could pronounce the whole group healthy. If not, he could then test each person's blood individually. The expected number of tests the operator will have to perform if he pools the blood samples are:
A. 47
B. 25
C. 21
D. None of the above
51. The game of —chuck-a-luck $\square$ is played at carnivals in some parts of Europe. Its rules are as follows: if $u$ pick a number from 1 to 6 and the operator rolls three dice. If the number you picked comes up on all three dice, the operator pays you $\square 3$; if it comes up on two dice, you are paid $\square 2$; and if it comes up on just one die, you are paid $\square 1$. Only if the number you picked does not come up at all, you pay the operator $\square 1$. The probability that you will win money playing in this game is:
A. 0.52
B. 0.753
C. 0.42
D. None of the above

Directions for questions 52 - 54: Answer the questions based on the following information.

Rajat is sales manager of Dubin Computers Ltd. and looks after Delhi market. The company sells laptops in India. He is currently trying to select a distributor for coming five years. The distributor ensures that the products are accessible to the customers in the market. Market share of a company depends on the coverage by the distributor.

The total profit potential of the entire laptop market in Delhi is Rs. 5 crores in the current year and present value of next four years‘ cumulative profit potential is Rs. 15 crores.

The first choice for Rajat is to enter into long-term contract with a distributor M/s Jagan with whom Dubin has done business in the past, and whose distribution system reaches 55 percent of all potential customers. At the last moment, however, a colleague suggests Rajat to consider signing a one-year contract with other distributors. Distributors M/s Bola and M/s James are willing to be partner with Dubin. Although a year ago M/s Bola‘s and M/s James‘s coverage reached only 40 and 25 percent of customers respectively, they claim to have invested heavily in distribution resources and now expect to be able to reach 60 percent and 75 percent of customers respectively. The probability of M/s Bola‘s claim and M/s James‘s claim to be true is 0.60 and 0.20 respectively. The knowledge about distributors‘ coverage will evolve over time. The assumption is that the true level of coverage offered by the new distributors could be discovered, with certainty, through a one-year trail, and this trail will reveal exactly one of the two levels of coverage: for example in case of $\mathrm{M} / \mathrm{s}$ Bola - 40 percent (as it was last year) or 60 percent (as claimed). In addition, it is also assumed that whatever the coverage is for both distributors, it will not change over time. Rajat narrows down on three choices, which are as follows:

Choice 1. Give a five year contract to the familiar distributor M/s Jagan
Choice 2. Give a one year contract to the new distributor M/s Bola, and base next year‘s decision to renew contract with $\mathrm{M} / \mathrm{s}$ Bola on observed coverage for next four years contract with M/s Jagan.
Choice 3. Give a one-year contract to the new distributor M/s James, and base next year's decision to renew contract with M/s James on observed coverage for next four years contract with M/s Jagan.
52. The expected present value of the five years cumulative profit with choice 3 is:
A. Rs. 12.7 crores
B. Rs. 10.6 crores
C. Rs. 11.7 crores
D. None of the above
53. Which of the following statement is TRUE?
A. Choice 1 is more profitable than Choice 2
B. Choice 3 is more profitable than Choice 2
C. Choice 3 is more profitable than Choice 1
D. None of the above
54. If the distributor M/s James claims a coverage of $55 \%$ instead of $75 \%$ and probability of this claim to be true is 0.70 instead of 0.20 then which of the following statement is true?
A. Choice 1 is more profitable than Choice 2
B. Choice 2 is more profitable than Choice 3
C. Choice 3 is more profitable than Choice 1
D. None of the above
55. McDonald's ran a campaign in which it gave game cards to its customers. These game cards made it possible for customers to win hamburgers, French fries, soft drinks, and other fast-food items, as well as cash prizes. Each card had 10 covered spots that could be uncovered by rubbing them with a coin. Beneath three of these spots were -No Prize $\square$ signs. Beneath the other seven spots were names of the prizes, two of which were identical. For, example, one card might have two pictures of a hamburger, one picture of a coke, one of French fries, one of a milk shake, one of a $\$ 5$, one of $\$ 1000$, and three -No Prize $\square$ signs. For this card the customer could win a hamburger. To win on any card, the customer had to uncover the two matching spots (which showed the potential prize for that card) before uncovering a -No Prize $\square$; any card with a -No Prize $\square$ uncovered was automatically void. Assuming that the two matches and the three -No Prize $\square$ signs were arranged randomly on the cards, what is the probability of a customer winning?
A. 0.10
B. 0.15
C. 0.12
D. None of the above
56. While packing for a business trip Mr. Debashis has packed 3 pairs of shoes, 4 pants, 3 half-pants, 6 shirts, 3 sweater and 2 jackets. The outfit is defined as consisting of a pair of shoes, a choice of -lower wear $\square$ (either a pant or a half-pant), a choice of —upper wear $\square$ (it could be a shirt or a sweater or both) and finally he may or may not choose to wear a jacket. How many different outfits are possible?
A. 567
B. 1821
C. 743
D. None of the above
57. If $\operatorname{Tan} x+\operatorname{Tan}\left(x+\frac{\pi}{3}\right)+\operatorname{Tan}\left(x+\frac{2 \pi}{3}\right)=3$ then which of the following is correct?
A. $\operatorname{Tan} x=1$
B. $\operatorname{Tan} 2 x=1$
C. $\operatorname{Tan} 3 x=1$
D. None of the above
58. If D is the midpoint of side BC of a triangle ABC and AD is the perpendicular to AC then:
A. $3 \mathrm{AC}^{2}=\mathrm{BC}^{2}-\mathrm{AB}^{2}$
B. $3 \mathrm{BC}^{2}=\mathrm{AC}^{2}-3 \mathrm{AB}^{2}$
C. $\mathrm{BC}^{2}+\mathrm{AC}^{2}=5 \mathrm{AB}^{2}$
D. None of the above
59. A cylinder, a hemisphere and a cone stand on the same base and have the same heights. The ratio of the areas of their curved surface is:
A. $2: 2: 1$
B. $2: \sqrt{ } 2: 1$
C. $\sqrt{ } 2: 3: 1$
D. None of the above

Directions for questions 60-65: Answer the questions based on the following table.
Growth Trend in Rail Wagons

| Year | Totat | Open |  | Open | Depart- | Spectat | Totat |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wagons | wagons | High <br> sided <br> wagons | $\begin{gathered} \text { Low } \\ \text { sided } \\ \text { wagons } \end{gathered}$ | mental wagons | type wagons | wagon capacity | $\begin{aligned} & \text { Average } \\ & \text { wagon } \\ & \text { capacity } \end{aligned}$ |
|  | Number | Number | Number | umber N | mber Nu | nber (Mil | ion <br> Tones) | (Tonnes) |
| 1993 | 337562 | 157581 | 105469 | 12221 | 12009 | 50282 | 11.79 | 34.9 |
| 1994 | 312405 | 138642 | 101160 | 11922 | 11473 | 49208 | 11.32 | 36.2 |
| 1995 | 291360 | 121946 | 98795 | 11507 | 11185 | 47927 | 10.76 | 36.9 |
| 1996 | 280791 | 114065 | 98297 | 11196 | 11008 | 46225 | 10.62 | 37.8 |
| 1997 | 272127 | 106634 | 98906 | 10601 | 10645 | 45341 | 10.64 | 39.1 |
| 1998 | 263981 | 102217 | 97616 | 9726 | 10569 | 43853 | 10.69 | 40.5 |
| 1999 | 252944 | 96371 | 95613 | 9106 | 9612 | 42242 | 10.7 | 42.3 |
| 2000 | 234397 | 86024 | 91415 | 7735 | 8907 | 40316 | 10.26 | 43.8 |
| 2001 | 222193 | 75768 | 91099 | 7999 | 8443 | 38884 | 10.19 | 45.9 |
| 2002 | 216717 | 71950 | 90371 | 7585 | 9536 | 37275 | 10.09 | 46.6 |
| 2003 | 214760 | 68467 | 90765 | 7160 | 10718 | 37650 | 9.98 | 46.5 |
| 2004 | 227752 | 67870 | 100211 | 8882 | 11388 | 39401 | 10.66 | 46.8 |
| 2005 | 222379 | 64417 | 101757 | 8787 | 10964 | 36454 | 10.6 | 47.7 |

60. Find the TRUE Statement:
A. The number of covered wagons expressed as a percentage of total wagons declined consistently from 1993 to 2002, but increased marginally in 2003 as compared to the previous year level.
B. The special type wagons expressed as a percentage of total wagons is maximum during 2003.
C. The open high sided wagons expressed as a percentage of total wagons increased during 1994 to 2001, but declined from the 2001 level in 2002.
D. None of the above.
61. The special type wagons expressed as a percentage of total wagons were at almost same level during the following pair of years:
A. 1995 and 2001
B. 1998 and 2004
C. 2000 and 2002
D. 1993 and 1994
62. The Departmental wagons expressed as a percentage of total wagons was maximum during:
A. 2002
B. 2005
C. 2004
D. 2003
63. Find out the LOWEST annual growth rate among the following:
A. Annual growth rate of total wagons in 1999
B. Annual growth rate of covered wagons in 1998
C. Annual growth rate of special type wagons in 2002
D. Annual growth rate of total wagon capacity in 2000
64. Find out the FALSE statement:
A. The annual growth rate of covered wagons in 1996 was higher than the same in 2000.
B. The annual growth rate of open high sided wagons in 1997 was higher than the same in 2003.
C. The annual percentage growth rate of average wagon capacity has been maximum in 1999.
D. None of the above.
65. Find out the HIGHEST annual growth rate among the following:
A. Annual growth rate of total wagons in 1995.
B. Annual growth rate of covered wagons in 2002.
C. Annual growth rate of open Low sided wagons in 1998.
D. Annual growth rate of departmental wagons in 2000.

Direction for questions 66-70: Answer the questions based on the following graph.

66. In which year the annual growth rate of total production (of all products) is highest?
A. 1991
B. 1992
C. 1993
D. 1995
67.
$\frac{\text { Average Production }}{\text { Maximum Production - Minimum Production }}$ then which product is most stable?
A. Product P
B. Product Q
C. Product R
D. Product S
68. If four products $\mathrm{P}, \mathrm{Q}, \mathrm{R}$ and S shown in the graph are sold at price of Rs. 9, Rs. 4, Rs. 13 and Rs. 3 respectively during 1990-1995, then the total revenue of all the products is lowest in which year?
A. 1991
B. 1992
C. 1993
D. None of the above
69. Individual revenue of $P, Q, R$ and $S$ for the entire period (1990-1995) is calculated based on the price of Rs.9, Rs.4, Rs. 13 and Rs. 3 respectively. Which product fetches the lowest revenue?
A. Product P
B. Product Q
C. Product R
D. Product S
70. Four products P, Q, R and S shown in the graph are sold at price of Rs.9, Rs.4, Rs. 13 and Rs. 3 respectively during 1990-1995. Which of the following statements is TRUE?
A. Product R fetches second highest revenue across products in 1991.
B. Sum of revenue of P, Q and S is more than the revenue of R in 1994.
C. Cumulative revenue of P and Q is more than the revenue of S in 1993.
D. None of the above

Directions for questions 71-75: Answer the questions based on the following table.

| State-wise FDI Inflow |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :--- | ---: | ---: | ---: |
| State | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |
| Andhra |  |  |  |  |  |  |  |  |
| Pradesh | 3707 | 34522 | 14566 | 8708 | 16256 | 15819 | 17311 | 47828 |
| Bihar | 659 | 5586 | 52 | 346 | 1878 | 10849 | 58002 | 40107 |
| Gujarat | 14193 | 10889 | 10781 | 10020 | 32043 | 29648 | 82793 | 72093 |
| Haryana | 3414 | 1201 | 800 | 834 | 8345 | 2685 | 5577 | 16095 |
| Karnataka | 3299 | 3553 | 4101 | 2164 | 14071 | 10904 | 15066 | 71844 |
| Kerala | 376 | 535 | 197 | 70 | 199 | 290 | 600 | 1141 |
| Madhya | 7099 | 2726 | 2472 | 13891 | 17761 | 56138 | 58679 | 131267 |
| Pradesh | 70975 | 14442 | 9780 | 21440 | 6909 | 10675 | 24480 | 60864 |
| Maharashtra | 372754 | 2342 | 897 | 3477 | 17718 | 45565 | 38255 | 97185 |
| Orissa | 6144 | 2184 | 11274 | 627 | 1747 | 3894 | 6340 | 9228 |
| Punjab | 13657 | 2184 |  |  |  |  |  |  |
| Rajasthan | 4204 | 3236 | 2823 | 710 | 1096 | 2162 | 5077 | 10034 |
| Tamil Nadu | 5906 | 4066 | 2867 | 1424 | 2622 | 54107 | 11365 | 19850 |
| Uttar Pradesh | 5160 | 1936 | 2899 | 2419 | 3483 | 24058 | 37405 | 48622 |
| West Bengal | 6706 | 2111 | 1933 | 8584 | 7569 | 13994 | 12028 | 51830 |

71. Mark the HIGHEST FDI inflow growth rate among the following:
A. Annual FDI inflow growth rate in Gujarat in 2006.
B. Annual FDI inflow growth rate in Kerala in 2004.
C. Annual FDI inflow growth rate in Haryana in 2007.
D. Annual FDI inflow growth rate in Punjab in 2004.
72. Mark the LOWEST FDI inflow growth rate among the following:
A. Annual FDI inflow growth rate in West Bengal in 2001.
B. Annual FDI inflow growth rate in Kerala in 2002.
C. Annual FDI inflow growth rate in Maharashtra in 2004.
D. Annual FDI inflow growth rate in Haryana in 2005.
73. Mark the TRUE statement:
A. The decline in annual FDI growth rate for Gujarat in 2001 was smaller than the corresponding figure for Karnataka in 2005.
B. The annual growth rate of FDI in Kerala in 2001 was greater than the corresponding figure for Uttar Pradesh in 2004.
C. The annual growth rate of FDI in Kerala in 2005 was greater than the corresponding figure for Punjab in 2007.
D. None of the above.
74. Mark the FALSE statement:
A. The absolute annual increase in FDI inflow in Bihar in 2001 is lower than the corresponding figure for Rajasthan in 2007.
B. The annual FDI growth rate in West Bengal in 2006 was higher than the corresponding figure for Uttar Pradesh in 2003.
C. The absolute annual increase in FDI inflow in Madhya Pradesh in 2004 is lower than the corresponding figure for Maharashtra in 2005.
D. None of the above.
75. Mark the TRUE statement:
A. The absolute annual increase in FDI inflow in Haryana in 2006 is lower than the corresponding figure for Punjab in 2007.
B. Among all States, in 2003 the absolute annual increase in FDI inflow was maximum for Madhya Pradesh.
C. The absolute annual increase in FDI inflow in Bihar in 2003 is higher than the corresponding figure for Karnataka in 2001.
D. The FDI inflow in Kerala over 2002 to 2007 was consistently the lowest across all the states.

Directions for questions 76 - 80: Answer the questions based on the following table.

| World Merchandise Exports by Regions and Selected Economics |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region/ Country | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| World | 6454000 | 6187000 | 648700075 | 8000092 | 0000104 | 20001208 | 000 |
| North America | 1224975 | 1147545 | 10624011 | 162965132 | 4235 | 1479330 | 1678315 |
| Canada | 276635 | 259858 | 252394 | 272739 | 316548 | 359399 | 389538 |
| US | 781918 | 729100 | 693103 | 724771 | 818520 | 905978 | 1038278 |
| Latin America | 195800 | 188600 | 190700 | 219100 | 284700 | 355000 | 429900 |
| Argentina | 26341 | 26543 | 25650 | 29566 | 34576 | 40351 | 46569 |
| Brazil | 55086 | 58223 | 60362 | 73084 | 96475 | 118308 | 137470 |
| Europe | 2633930 | 2654555 | 283944033 | 386490405 | 1000 | 4396895 | 4962980 |
| Germany | 551818 | 571645 | 615831 | 751560 | 909887 | 970915 | 1111969 |
| UK | 285429 | 272715 | 280195 | 305627 | 347493 | 384477 | 448291 |
| Africa | 147800 | 137400 | 141100 | 176400 | 229900 | 299500 | 363300 |
| Nigeria | 20975 | 17261 | 15107 | 22605 | 31148 | 42277 | 52000 |
| South Africa | 29983 | 29258 | 29723 | 36482 | 46146 | 51626 | 58412 |
| Asia | 1837300 | 1674400 | 180780021 | 138300265 | 3100 | 3059000 | 3577700 |
| China | 249203 | 266098 | 325596 | 438228 | 593326 | 761953 | 968936 |
| India | 42379 | 43361 | 49250 | 58963 | 76427 | 99376 | 120254 |
| Japan | 479249 | 403496 | 416726 | 471817 | 565675 | 594905 | 649931 |

76. Mark the LOWEST percentage among the following:
A. Export from Canada expressed as a proportion of export from North America in 2000.
B. Export from Germany expressed as a proportion of export from Europe in 2004.
C. Export from China expressed as a proportion of export from Asia in 2004.
D. Export from Japan expressed as a proportion of export from Asia in 2003.
77. Identify the TRUE statement:
A. The annual export growth rate of Argentina in 2003 was lower than the corresponding figure for US in 2006.
B. The annual export growth rate of Africa in 2004 was lower than the corresponding figure for Latin America during the same period.
C. The annual export growth rate of US in 2004 was lower than the corresponding figure for Canada in 2005.
D. None of the above.
78. Mark the HIGHEST annual growth rate among the following:
A. Annual growth rate of World export in 2005.
B. Annual growth rate of North American export in 2004.
C. Annual growth rate of India's export in 2002.
D. Annual growth rate of Japan's export in 2003.
79. Mark the FALSE statement:
A. The exports from Argentina expressed as a proportion of export from Latin America in 2001 was greater than the exports from Nigeria expressed as a proportion of exports from Africa in 2004.
B. The exports from UK expressed as a proportion of exports from Europe in 2000 is lower than the exports from Argentina expressed as a proportion of exports from Latin America in 2005.
C. The annual export growth rate of Argentina in 2004 was higher than the corresponding figure for Asia in 2005.
D. The exports from South Africa in 2001 expressed as a proportion of exports from Africa is lower than the exports from China expressed as a proportion of exports from Asia in 2003.
80. Mark the FALSE statement:
A. The absolute annual increase in exports from Asia in 2003 was less than the corresponding figure in 2006.
B. The absolute annual increase in exports from Germany in 2001 was higher than the corresponding figure for US in 2003.
C. The absolute annual increase in exports from Brazil in 2005 was higher than the corresponding figure for Japan in 2002.
D. None of the above.

Direction for the question 81 - 85: Answer the questions based on the following two graphs, assuming that there is no fixed cost component and all the units produced are sold in the same year.



IIFT 2008 Set $\mathbf{A}-25$
81. In which year per unit cost is HIGHEST?
A. 2002
B. 2001
C. 2005
D. 2007
82. What is the approximate average quantity sold during the period 2000-2010?
A. 64 units
B. 70 units
C. 77 units
D. 81 units
83. If volatility of a variable during 2000-2010 is defined as $\frac{\text { Maximum Value - Minimum Value }}{\text { Average Value }}$, then which of the following is TRUE?
A. Price per unit has highest volatility
B. Cost per unit has highest volatility
C. Total profit has highest volatility
D. Revenue has highest volatility
84. If the price per unit decreases by $20 \%$ during 2000-2004 and cost per unit increases by $20 \%$ during 2005-2010, then during how many number of years there is loss?
A. 3 years
B. 4 years
C. 5 years
D. 7 years
85. If the price per unit decreases by $20 \%$ during $2000-2004$ and cost per unit increases by $20 \%$ during 2005-2010, then the cumulative profit for the entire period 2000-2010 decreases by:
A. Rs. 1650
B. Rs. 1550
C. Rs. 1300
D. Rs. 1250

## SECTION - 4

Direction for questions 86-97: Read the three passages carefully and answer the questions given at the end of each passage:

## Passage - 1

Turning the business involved more than segmenting and pulling out of retail. It also meant maximizing every strength we had in order to boost our profit margins. In reexamining thee direct model, we realized that inventory management was not just a core strength; it could be an incredible opportunity for us, and one that had not yet been discovered by any of our competitors.

In Version 1.0 the direct model, we eliminated the reseller, thereby eliminating the markup and the cost of maintaining a store. In Version we went one step further to reduce inventory inefficiencies. Traditionally, a long chain of partners was involved 1irgettIn customer. Let's say you have a factory building a PC we'll call model \#4000. The system is then sent to the distributor, which sends it to the warehouse, which sends it to the dealer, who eventually pushes it on to the consumer by advertising, -I've got model \#4000. Come and buy it. $\square$ If the consumer says, —But I want model \#8000, $\square$ the dealer replies, —Sorry, I only have model \#4000. $\square$ Meanwhile, the factory keeps building model \#4000s and pushing the inventory into the channel.

The result is a glut of model \#4000s that nobody wants. Inevitably, someone ends up with too much inventory, and you see big price corrections. The retailer can't sell it at the suggested retail price, so the manufacturer loses money on price protection (a practice common in our industry of compensating dealers for reductions in suggested selling price). Companies with long, multi-step distribution systems will often fill their distribution channels with products in an attempt to clear out older targets. This dangerous and inefficient practice is called -channel stuffing $\square$ Worst of all, the customer ends up paying for it by purchasing systems that are already out of date.

Because we were building directly to fill customers' orders, we didn't have finished goods inventory devaluing on a daily basis. Because we aligned our suppliers to deliver components as we used them, we were able to minimize raw material inventory. Reductions in component costs could be passed on to our customers quickly, which made them happier and improved our competitive advantage. It also allowed us to deliver the latest technology to our customers faster than our competitors.

The direct model turns conventional manufacturing inside out. Conventional manufacturing because your plant can't keep going. But if you don't know what you need to build because of dramatic changes in demand, you run the risk of ending up with terrific amounts of excess and obsolete inventory. That is not the goal. The concept behind the direct model has nothing to do with stockpiling and everything to do with information. The quality of your information inversely amount of assets required, in this case excess inventory. With less information about customer needs, you need massive amounts of inventory. So, if you have great information - that is, you know exactly what people want and how much - you need that much, less inventory. Less inventory, of course, corresponds to less inventory depreciation. In the computer industry, component prices are always falling as suppliers introduce faster chips, bigger disk drivers and modems with ever-greater
bandwidth. Let‘s say that Dell has six days of inventory. Compare that to an indirect competitor who has twenty-five days of inventory with another thirty in their distribution channel. That's a difference of forty-nine days; and in forty-nine days, the cost of materials will decline about 6 percent.

Then there's the threat of getting stuck with obsolete inventory if you 're caught in a transition to a nextgeneration product, as we were with those memory chip in 1989. as the product approaches the end of its life, the manufacturer has to worry about whether it has too much in the channel and whether a competitor will dump products, destroying profit margins for everyone. This is a perpetual problem in the computer industry, but with the direct model, we have virtually eliminated it. We know when our customers are ready to move on technologically, and we can get out of the market before its most precious time. We don't have to subsidize our losses, by charging higher prices for other products.

And ultimately, our customer wins. Optimal inventory management really starts with the design process. You want to design the product so that the entire product supply chain, as well as the manufacturing process, is oriented not just for speed but for what we call velocity. Speed means being fast in the first place. Velocity means squeezing time out of every step in the process.

Inventory velocity has become a passion for us. To achieve maximum velocity, you have to design your products in a way that covers the largest part of the market with the fewer number of parts. For example, you don't need nine different disk drives when you can serve 98 percent of the market with only four. We also learned to take into account the variability of the lost cost and high cost components. Systems were reconfigured to allow for a greater variety of low-cost parts and a limited variety of expensive parts. The goal was to decrease the number of components to manage, which increased the velocity, which decreased the risk of inventory depreciation, which increased the overall health of our business system.

We were also able to reduce inventory well below the levels anyone thought possible by constantly challenging and surprising ourselves with the result. We had our internal skeptics when we first started pushing for ever-lower levels of inventory. I remember the head of our procurement group telling me that this was like -flying low to the ground 300 knots. $\square$ He was worried that we wouldn't see the trees.

In 1993, we had $\$ 2.9$ billion in sales and $\$ 220$ million on in inventory. Four years later, we posted $\$ 12.3$ billion in sales and had inventory of 33 million. We're now down to six days of inventory and we're starting to measure it in hours instead of days. Once you reduce your inventory while maintaining your growth rate, a significant amount of risk comes from the transition from one generation of product to the next. Without traditional stock of inventory, it is critical to precisely time the discontinuance of the older product line with the ramp-up in customer demand for the newer, one. Since we were introducing new products all the time, it became imperative to avoid the huge drag effect from mistakes made during transitions. - excess and obsolete $\square$ became taboo at Dell. We would debate about whether our E\&O was 30 or 50 cent per PC. Since anything less than $\$ 20$ per PC is not bad, when you're down in the cents range, you're approaching stellar performance.

In effect, we got stronger with each transition and more competitive with each turn of the crank. We were increasing our productivity and improving our cash flow in a broader range of products in larger and larger markets. Unlike that period in 1993, when every day the news got a little worse, now, finally, every day the news was better and better.
86. Find out the TRUE statement:
A. According to the passage, the working of the direct model was being heavily exploited by all players in the software business.
B. Analysis of the supply chain of the product reveals that the product is sent to the warehouse by the dealer, and any delay at that stage leads to an obvious increase in cost.
C. The nature of the computer industry is such that the production decision at factory level is usually undertaken after getting the customer demand feedback from the distributors.
D. Whenever the production of some old-fashioned model of a product by a company exceeds the existing demand, the market forces create a downward pressure on its prices.
87. Find out the FALSE statement:
A. The company mentioned in the passage could attain efficiency on raw material inventory management because they were procuring components only in line with their timely requirement.
B. Generally the more the amount of quality information about the consumer needs and the market a firm possess, the less is its inventory requirement.
C. In order to serve the market more efficiently, the firm mentioned here reconfigured their computers with increased proportion of low-cost parts and a fewer types of high-priced parts.
D. The conventional manufacturing system always ensured that no competitor can lower prices to reduce profit margins for everybody.
88. Choose the option which best matches the following sets:

| 1 | Inventory | i | Precarious |
| :--- | :--- | :--- | :--- |
| 2 | Conventional Manufacturing | ii | Warehouse |
| 3 | Distributor | iii | Stockpile |
| 4 | Market | iv | Velocity |

A. $1-\mathrm{iv}, 2-\mathrm{ii}, 3-\mathrm{i}, 4-\mathrm{iii}$
B. 1 - iii, $2-\mathrm{i}, 3-\mathrm{iv}, 4$ - ii
C. 1 - iv, 2 - iii, 3 - ii, 4 - i
D. 1 - iii, $2-\mathrm{ii}, 3-\mathrm{iv}, 4-\mathrm{i}$

## 89. Find out the FALSE Statement:

A. Having less amount of inventory is better in the computer industry as with time better quality components with enhanced capacity reach the market with lower price.
B. Before improving the inventory management system under the direct model, the firm first removed the reseller from its marketing model, which contributed in its cost-cutting attempt.
C. The efficient inventory management allowed the firm to enhance productivity as well as the flexibility to enter or exit a market.
D. The companies with long distribution network incorporate information- gathering process within their systems which enable them to market products with latest available technologies.

## Passage - 2

My comrade and I had been quartered in Jamaica, and from there we had been drafting off to the British settlement of Belize, lying away West and North of the Mosquito coast. At Belize there had been great alarm of one cruel gang of pirates (always more pirates than enough in those Caribbean Seas), and as they got the better of our English cruisers by running into out-of-the-way creeks and shallows, and taking the land when they were hotly pressed, the governor of Belize had received orders from home to keep a sharp look-out for them along shore. Now, there was an armed sloop came once a year from Port Royal, Jamaica, to the Island, laden with all manner of necessaries to eat, and to drink, and to wear, and to use in various ways; and it was aboard of that sloop which had touched at Belize, that I was standing, leaning over the bulwarks.

The Island was occupied by a very small English colony. It had been given the name of Silver-Store. The reason of its being so called, was, that the English colony owned and worked a silver-mine over on the mainland, in Honduras, and used this Island as a safe and convenient place to store their silver in, until it was annually fetched away by the sloop. It was brought down from the mine to the coast on the backs of mules, attended by friendly local people and guarded by white men; from thence it was conveyed over to Silver-Store, when the weather was fair, in the canoes of that country; from Silver-Store, it was carried to Jamaica by the armed sloop once a-year, as I have already mentioned; from Jamaica, it went, of course, all over the world.

How I came to be aboard the armed sloop, is easily told. Four-and-twenty marines under command of a lieutenant - that officer's name was Linderwood - had been told off at Belize, to proceed to Silver-Store, in aid of boats and seamen stationed there for the chase of the Pirates. The Island was considered a good post of observation against the pirates, both by land and sea; neither the pirate ship nor yet her boats had been seen by any of us, but they had been so much heard of, that the reinforcement was sent. Of that party, I was one. It included a corporal and a sergeant. Charker was corporal, and the sergeant's name was Drooce. He was the most tyrannical non-commissioned officer in His Majesty's service.

The night came on, soon after I had had the foregoing words with Charker. All the wonderful bright colours went out of the sea and sky in a few minutes, and all the stars in the Heavens seemed to shine out together, and to look down at themselves in the sea, over one another's shoulders, millions deep.

Next morning, we cast anchor off the Island. There was a snug harbour within a little reef; there was a sandy beach; there were cocoa-nut trees with high straight stems, quite bare, and foliage at the top like plumes of magnificent green feathers; there were all the objects that are usually seen in those parts, and I am not going to describe them, having something else to tell about.

Great rejoicings, to be sure, were made on our arrival. All the flags in the place were hoisted, all the guns in the place were fired, and all the people in the place came down to look at us. One of the local people had come off outside the reef, to pilot us in, and remained on board after we had let go our anchor.

My officer, Lieutenant Linderwood, was as ill as the captain of the sloop, and was carried ashore, too. They were both young men of about my age, who had been delicate in the West India climate. I thought I was much fitter for the work than they were, and that if all of us had our deserts, I should be both of them rolled into one. (It may be imagined what sort of an officer of marines I should have made, without the power of reading a written order. And as to any knowledge how to command the sloop-Lord! I should have sunk her in a quarter of an hour!)

However, such were my reflections; and when we men were ashore and dismissed, I strolled about the place along with Charker, making my observations in a similar spirit.

It was a pretty place: in all its arrangements partly South American and partly English, and very agreeable to look at on that account, being like a bit of home that had got chipped off and had floated away to that spot, accommodating itself to circumstances as it drifted along. The huts of the local people, to the number of five- and-twenty, perhaps, were down by the beach to the left of the anchorage. On the right was a sort of barrack, with a South American Flag and the Union Jack, flying from the same staff, where the little English colony could all come together, if they saw occasion. It was a walled square of building, with a sort of pleasureground inside, and inside that again a sunken block like a powder magazine, with a little square trench round it, and steps down to the door.

Charker and I were looking in at the gate, which was not guarded; and I had said to Charker, in reference to the bit like a powder magazine, -That's where they keep the silver you see; $\square$ and Charker had said to me, after thinking it over, —And silver ain't gold. Is it, Gill? $\square$
90. Find out the TRUE statement:
A. During the time of the narration, the total number of pirates at Belize was much more than the same in the Caribbean Seas.
B. From the accounts presented here, when the narrator of the passage made the journey he already happened to be an experienced sailor with considerable navigating experiences.
C. The author and his friends used to consider Drooce as the most authoritarian non- commissioned officer in Her Majesty‘s service.
D. While walking with Charker, the narrator came across a barrack like structure where all the English settlers could assemble and stay together, if there was any necessity for doing so.
91. Find out the FALSE statement:
A. According to the passage, the silver that was being stored in the place where the author went to was being mined in Honduras.
B. The narrator noted that the silver was being transported from the mine to the coast on the backs of mules, after which it was being sent to Jamaica in a sloop, from where it was reaching various destinations.
C. Although the sea-voyage near Belize was being threatened by the presence of one notorious pirate fleet, the captain of the patrolling ship was accompanied by less than thirty soldiers.
D. The Island the author talks here about was considered to be a good point for surveillance against the pirates both by land and sea.

## 92. Find out the TRUE Statement:

A. The author was initially staying in Jamaica, which is located in the West and North of the Mosquito coast.
B. A casual review of the place by the narrator revealed that the store for keeping the silver was heavily guarded, fearing a possible pirate attack anytime.
C. The narrator and his companion noticed the South American Flag and the Union Jack flying on the port office.
D. When the ship entered the harbour, both it's Captain and Lieutenant Linderwood was unwell as the West Indian climate was not suiting them.

## 93. Mark the FALSE statement:

A. It was being difficult to capture the pirates because they either used to hide in uncommon waters whenever the patrolling ships were pursuing them or used to disembark and flee whenever severely chased.
B. The local canoes were employed by the miners to bring the silver from the coast to the island during favorable climatic condition.
C. The lifestyle of the island was not exactly British as it had to adjust itself with the local South American culture, but the same seemed quite delightful for the narrator and his company.
D. When Corporal Charker and Sergent Gill were walking around the harbour, they noticed that the size of the settlement of the local people was not very large.

## Passage - 3

We now come to the second part of our journey under the sea. The first ended with the moving scene in the coral cemetery which left a deep impression on my mind. I could no longer content myself with the theory which satisfied Conseil. That worthy fellow persisted in seeing in the Commander of the Nautilus one of those unknown servants who returns mankind contempt for indifference. For him, he was a misunderstood genius who, tired of earth's deceptions, had taken refuge in this inaccessible medium, where he might follow his instincts freely. To my mind, this explains but one side of Captain Nemo's character. Indeed, the mystery of that last night during which we had been chained in prison, the sleep, and the precaution so violently taken by the Captain of snatching from my eyes the glass I had raised to sweep the horizon, the mortal wound of the man, due to an unaccountable shock of the Nautilus, all put me on a new track. No; Captain Nemo was not satisfied with shunning man. His formidable apparatus not only suited his instinct of freedom, but perhaps also the design of some terrible retaliation.

That day, at noon, the second officer came to take the altitude of the sun. I mounted the platform, and watched the operation. As he was taking observations with the sextant, one of the sailors of the Nautilus (the strong man who had accompanied us on our first submarine excursion to the Island of Crespo) came to clean the glasses of the lantern. I examined the fittings of the apparatus, the strength of which was increased a hundredfold by lenticular rings, placed similar to those in a lighthouse, and which projected their brilliance in a horizontal plane. The electric lamp was combined in such a way as to give its most powerful light. Indeed, it was produced in vacuo, which insured both its steadiness and its intensity. This vacuum economised the graphite points between which the luminous arc was developed - an important point of economy for Captain Nemo, who could not easily have replaced them; and under these conditions their waste was imperceptible. When the Nautilus was ready to continue its submarine journey, I went down to the saloon. The panel was closed, and the course marked direct west.

We were furrowing the waters of the Indian Ocean, a vast liquid plain, with a surface of $1,200,000,000$ of acres, and whose waters are so clear and transparent that any one leaning over them would turn giddy. The Nautilus usually floated between fifty and a hundred fathoms deep. We went on so for some days. To anyone but myself, who had a great love for the sea, the hours would have seemed long and monotonous; but the daily walks on the platform, when I steeped myself in the reviving air of the ocean, the sight of the rich waters through the windows of the saloon, the books in the library, the compiling of my memoirs, took up all my time, and left me not a moment of ennui or weariness.

From the $21^{\text {st }}$ to the $23^{\text {rd }}$ of January the Nautilus went at the rate of two hundred and fifty leagues in twenty-four hours, being five hundred and forty miles, or twenty-two miles an hour. If we recognized so many different varieties of fish, it was because, attracted by the electric light, they tried to follow us; the greater part, however, were soon distanced by our speed, though some kept their place in the waters of the Nautilus for a time. The morning of the $24^{\text {th }}$, we observed Keeling Island, a coral formation, planted with magnificent cocos, and which had been visited by Mr. Darwin and Captain Fitzroy. The Nautilus skirted the shores of this desert island for a little distance. Soon Keeling Island disappeared from the horizon, and our course was directed to the north-west in the direction of the Indian Peninsula.

From Keeling Island our course was slower and more variable, often taking us into great depths. Several
times they made use of the inclined planes, which certain internal levers placed obliquely to the waterline. I observed that in the upper regions the water was always colder in the high levels than at the surface of the sea. On the 25th of January the ocean was entirely deserted; the Nautilus passed the day on the surface, beating the waves with its powerful screw and making them rebound to a great height. Three parts of this day I spent on the platform. I watched the sea. Nothing on the horizon, till about four o'clock a steamer running west on our counter. Her masts were visible for an instant, but she could not see the Nautilus, being too low in the water. I fancied this steamboat belonged to the P.O. Company, which runs from Ceylon to Sydney, touching at King George's Point and Melbourne.

At five o'clock in the evening, before that fleeting twilight which binds night to day in tropical zones, Conseil and I were astonished by a curious spectacle. It was a shoal of argonauts traveling along on the surface of the ocean. We could count several hundreds. These graceful molluscs moved backwards by means of their locomotive tube, through which they propelled the water already drawn in. Of their eight tentacles, six were elongated, and stretched out floating on the water, whilst the other two, rolled up flat, were spread to the wing like a light sail. I saw their spiral-shaped and fluted shells, which Cuvierjustly compares to an elegant skiff. For nearly an hour the Nautilus floated in the midst of this shoal of molluscs.

The next day, $26^{\text {th }}$ of January, we cut the equator at the eighty-second meridian and entered the northern hemisphere. During the day a formidable troop of sharks accompanied us. They were -cestracio philippi $\square$ sharks, with brown backs and whitish bellies, armed with eleven rows of teeth, their throat being marked with a large black spot surrounded with white like an eye. There were also some Isabella sharks, with rounded snouts marked with dark spots. These powerful creatures often hurled themselves at the windows of the saloon with such violence as to make us feel very insecure. But the Nautilus, accelerating her speed, easily left the most rapid of them behind.

About seven o'clock in the evening, the Nautilus, half-immersed, was sailing in a sea of milk. At first sight the ocean seemed lactified. Was it the effect of the lunar rays? No; for the moon, scarcely two days old, was still lying hidden under the horizon in the rays of the sun. The whole sky, though lit by the sidereal rays, seemed black by contrast with the whiteness of the waters. Conseil could not believe his eyes, and questioned me as to the cause of this strange phenomenon. Happily I was able to answer him.
-It is called a milk sea, $\square$ I explained. -A large extent of white wavele often to be seen on the coasts of Amboyna, and in these parts of the sea. $\square$
—But, sir, $\square$ said Conseil, —can you tell me what causes such an effect? For I suppose the water is not really turned into milk. $\square$
-No, my boy; and the whiteness which surprises you is caused only by the presence of myriads of luminous little worm, gelatinous and without colour, of the thickness of a hair, and whose length is not more than seven-thousandths of an inch. These insects adhere to one another sometimes for several leagues. $\square$
-Several leagues! $\square$ exclaimed Conseil.
-Yes, my boy; and you need not try to compute the number of these infusoria. You will not be able, for, if I am not mistaken, ships have floated on these milk seas for more than forty miles.

Towards midnight the sea suddenly resumed its usual colour; but behind us, even to the limits of the horizon, the sky reflected the whitened waves, and for a long time seemed impregnated with the vague glimmerings of an aurora borealis.
94. Find the TRUE Sentence:
A. According to the narrator, the above-mentioned journey was taking place during full moon period.
B. According to Conseil, the Captain of the Nautilus in which they were traveling was really a brilliant person, a fact which had been corroborated by many people.
C. It is implied from the passage that although the author was witnessing many interesting events during their journey, he was not always having his way.
D. From the chronicle, it is understood that the Nautilus was in the vicinity of the Island of Crespo on the 25 of January.
95. Find the FALSE sentence:
A. After entering the Northern Hemisphere, the narrator witnessed several sea creatures, including several varieties of sharks, who kept bumping on the windows of the submarine.
B. On 25 January, the second officer of Nautilus came to the platform for measuring the altitude of the sun and for that purpose took observations with the sextant.
C. After January 24, Nautilus started traveling at a relatively reduced speed, and some of the time it was going further away from the sea-surface.
D. The course of Nautilus took them near the Keeling Island, which had earlier been visited by Mr. Darwin and Captain Fitzroy.
96. Match the following:

| 1 | Molluses | i | Colourless |
| :--- | :--- | :--- | :--- |
| 2 | Sharks | ii | Tentacles |
| 3 | Infusia | iii | Coco |
| 4 | Coral | iv | Snouts |

A. $1-\mathrm{ii}, 2-\mathrm{iv}, 3-\mathrm{i}, 4-\mathrm{iii}$.
B. 1-iii, 2-i, 3-iv, 4-ii.
C. 1-iv, 2-iii, 3-ii, 4-i.
D. 1- iii, 2-ii, 3-iv, 4-i.
97. Find the TRUE statement:
A. During $22^{\text {nd }}$ to $24^{\text {th }}$ of January. Nautilus was traveling at the rate of two hundred and fifty leagues in twenty-four hours, which means a speed of twenty-two miles an hour.
B. On $26^{\text {th }}$ January for approximately an hour the narrator witnessed a shoal of mollusks, and he enjoyed watching their spiral-shaped and fluted shells.
C. On the $25^{\text {th }}$ of January the narrator come across a steamboat, which was owned by PO Company, which travels between Ceylon to Sydney.
D. The electric lamp of the submarine was an example of efficiency and effective fixtures.

## SECTION - 5

Direction for questions 98- 100: Find the most appropriate word from the given choices which is described by the meaning provided in the question.
98. Meaning: a bowl-shaped drinking vessel
A. rumble
B. fracas
C. aquifer
D. chalice
99. Meaning: definition of a substance, especially a strong acid; erosive; mordant.
A. vitriolic
B. briny
C. puerile
D. prophylactic
100. Meaning: an upward slope or grade (as in a road); rise; raise; climb; upgrade.
A. maelstrom
B. acclivity
C. alacrity
D. slighting

Direction for questions 101-104: Select the most appropriate word(s) from the given choices to fill the blank(s).
101. Justice Minister Bola Ige, confronted with the general incivility of local police, placed a $\qquad$ on the cads. Said the Hon. Bola Ige, -I pray that God will make big holes in their pockets.
A. malediction
B. sanction
C. proscription
D. plea
102. I $\qquad$ that he will pass his exam and get a good job.
I will make a $\qquad$ ii $\qquad$ .There will be a new government in less than a year.
A. i. prophecy ii. prophesy
B. i. prophesy ii. prophecy
C. i. prophecy ii. prophecy
D. i. prophesy ii. prophesy
103. Imagine an $\qquad$ public figure attacked by press and public, who is facing an inquiry into allegations of having obtained money by deception.
A. empowered
B. endangered
C. embattled
D. engrossed
104. His listeners enjoyed his $\qquad$ wit but his victims often $\qquad$ at its satire.
A. lugubrious, suffered
B. bitter, smarted
C. lugubrious, smiled
D. trenchant, winced

Directions for questions 105- 108: In each of the following sentences, part or all of the sentence is underlined. The answer-choices offer four ways of phrasing the underlined part. If you think the original sentence is better than the alternatives, choose A which merely repeats the underlined part; otherwise choose one of the alternatives.
105. Had the President's Administration not lost the vote on the budget reduction package, his first year in office would have been rated an A.
A. Had the President‘s Administration not lost the vote on the budget reduction package, his first year in office would have been rated an A.
B. Had the President's Administration not lost the vote on the budget reduction package, it would have been rated an A in the first year.
C. If the President had not lost the vote on the budget reduction package, the Administration's first year in office would have been rated an A.
D. Had the President's Administration not lost the vote on its budget reduction package, his first year in office would have been rated an A.
106. The rise in negative attitudes toward foreigners indicate that the country is becoming less tolerant, and therefore that the opportunities are ripe for extremist groups to exploit the illegal immigration problem.
A. indicate that the country is becoming less tolerant, and therefore that
B. indicates that the country is becoming less tolerant, and therefore
C. indicates that the country is becoming less tolerant, and therefore that
D. indicates that the country has become less tolerant, and therefore
107. This century began with war brewing in Europe, the industrial revolution well- established, and a nascent communication age.
A. war brewing in Europe, the industrial revolution well-established, and a nascent communication age.
B. war brewing in Europe. the industrial revolution surging, and a nascent communication age.
C. war brewing in Europe, the industrial revolution well-established, and the communication age beginning.
D. war brewing in Europe. the industrial revolution well-established, and saw the birth of the communication age.
108. Due to the chemical spill, the commute into the city will be delayed by as much as 2 hours.
A. Due to the chemical spill, the commute into the city will be delayed by as much as 2 hours.
B. The chemical spill will be delaying the commute into the city by as much as 2 hours.
C. Due to the chemical spill, the commute into the city had been delayed by as much as 2 hours.
D. Because of the chemical spill, the commute into the city will be delayed by as much as 2 hours.

Direction for questions 109-112: Select the option which is having similar analogy vis-a-vis the analogy given in the question.
109. TRAVESTY: PARAGON ::
A. autonomy: subordination
B. disqualification : ineptitude
C. sentinel : creed
D. conundrum : accountability
110. CONTRITE : OBDURATE ::
A. grievous : lamentable
B. aphoristic : esoteric
C. sophisticated : cultured
D. favorable : assenting
111. PECCADILLO : FLAW ::
A. clandestine : openness
B. nick : score
C. forensics : judiciary
D. invasion : putsch
112. MUTTER : INDISTINCT ::
A. define : easy
B. blunder : polished
C. articulate: well-spoken
D. expedite : completed

Direction for questions 113-115: Select the most OPPOSITE of the given word from the given choices.
113. REQUIEM
A. Humility
B. Prerequisite
C. Resolution
D. Reign
114. ASPERSION
A. Infamy
B. Restriction
C. Tradition
D. Obeisance
115. STOLIDITY
A. Posterity
B. Proximity
C. Agility
D. Sobriety

Directions for questions 116-118: A number of sentences are given below which, when properly sequenced. form a COHERENT PARAGRAPH. Choose the most LOGICAL ORDER of sentences from the choices given to construct a COHERENT PARAGRAPH.
116.
I. The economy's performance in expenditure terms was even poorer. with real GDP contracting by $0.6 \%$ after a gain of $0.5 \%$ in the October-December quarter.
II. On an output basis-the government's preferred measure because it is less volatile thin expenditure-based GDP-the economy contracted by $0.3 \%$ in real terms from the previous quarter.
III. Data from Statistics New Zealand, a government agency, published on June 27th show an almost uniformly abysmal economic performance in January-March 2008.
IV. This was the first contraction since late 2005, made worse by the fact that the previous quarter's growth rate was revised down from $1 \%$ to $0.8 \%$.
A. III, IV, II, I
B. I, II, III, IV
C. III, II, IV, I
D. I, III, II, IV
117.
I. Matti Meri, a teacher-trainer at Helsinki University. was a teacher at the time.
II. By the time comprehensives reached the more populous south, teachers were eager to join in what was clearly a roaring success.
III. -Grammar-school teachers were quite afraid of the reforms, $\square$ he recalls.
IV. -They used to teach only one-third of the students. But the comprehensive schools used almost the same curriculum as the grammar schools had-and we discovered that the two-thirds were mostly able to cope with it.
V. Comprehensive schools were introduced in 1972 in the sparsely populated north, and then over the next four years in the rest of the country.
A. V, I, III, IV, II
B. I, II, III, IV, V
C. V, II, IV, I, II
D. I, III, II,IV, V
118.
I. -It is a clear illustration of the major role played by diet and culture on your risk of chronic disorders, $\square$ he says.
II. Little is known about its effects, but changing its levels, possibly through diet or with different gut bacteria, might help to control high blood pressure.
III. Chinese and Japanese people are very similar at a genetic level, but Dr Nicholson found big differences in the type and variety of metabolites in their blood and urine.
IV. -Metabolomics can provide very specific pointers as to what is going wrong and new ways of intervening.
V. For instance, he found an unexpected metabolic marker, called formate, that seems to have a role in regulating blood pressure.
A. III, II, IV, I, V
B. III, IV, V, I, II
C. II, III, IV, I, V
D. III, I, IV, V, II
119. There are four sentences $\mathrm{S} 1, \mathrm{~S} 2, \mathrm{~S} 3, \mathrm{~S} 4$ where the underlined word is used either correctly or incorrectly. Choose the option which lists the sentences, where the underlined word is used correctly.

S1. Only $22 \%$ of the people voted. The rest were totally disinterested.
S2. The management and the union asked a completely disinterested party to mediate between them. S3. I don't know why he didn't go to the exhibition. Perhaps he was too busy or just disinterested. S4. France's intervention in the dispute was not entirely disinterested. It gave her increased power and influence in the area.
A. S1, S2, S4.
B. S2, S3, S4.
C. $\mathrm{S} 1, \mathrm{~S} 4$.
D. $\mathrm{S} 2, \mathrm{~S} 4$.
120. There are four sentences $\mathrm{S} 1, \mathrm{~S} 2, \mathrm{~S} 3, \mathrm{~S} 4$ where the underlined phrase is used either correctly or incorrectly. Choose the option which lists the sentences, where the underlined phrase is used correctly.

S1. Good Lord, I'm not rich! on the contrary, I'm constantly in debt.
S2. She's very intelligent, but on the contrary she 's apt to be impatient.
S3. Yes, it‘s a very co city. On the contrary, it's very expensive.
S4. I don't think he'll pass the exam. On the contrary, I think he'll almost certainly fail.
A. S1, S2, S4
B. $\mathrm{S} 2, \mathrm{~S} 4$
C. $\mathrm{S} 1, \mathrm{~S} 4$
D. $\mathrm{S} 2, \mathrm{~S} 3$

## SECTION - 6

121. Which of the following country is not a member of G8 group of countries?
A. United Kingdom
B. China
C. Germany
D. Canada
122. Which prominent intergovernmental organization launched the movement, Education For All‘ (EFA):
A. UNCTAD
B. UNIDO
C. UNDP
D. UNESCO
123. Which of the following country is a member of OECD group?
A. Venezuela
B. Brazil
C. Mexico
D. South Africa
124. Select the correct Year - Olympic host cities match:

|  | Year |  | Olympic host cities |
| :--- | :--- | :--- | :--- |
| 1 | 1976 | i | London |
| 2 | 1992 | ii | okyo |
| 3 | 1964 | iii | Montreal |
| 4 | 2012 | iv | Barcelona |

A. 1-ii, 2-iii, 3-iv, 4-i
B. 1-iii, 2-i, 3-iv, 4-ii
C. 1-iv, 2-ii, 3-i, 4-iii
D. 1-iii, 2-iv, $3-\mathrm{ii}, 4-\mathrm{i}$
125. Select the correct IPL Franchise - Owner match:

|  | IPL Franchise |  | Owner |
| :--- | :--- | :--- | :--- |
| 1 | Mumbai Indians | i | UB group |
| 2 | Royal Challengers | ii | IMR Holdings |
| 3 | Chennai Super Kings | iii | Reliance Industries |
| 4 | Delhi Daredevils | iv | ndia Cements |

A. 1-ii, 2-iii, 3-iv, 4-i
B. 1-iii, 2-i, 3-iv, 4-ii
C. 1-iv, 2-ii, 3-i, 4-iii
D. 1-iii, 2-iv, 3-ii, 4-i
126. Which of the following country is not a member of Nuclear Suppliers Group?
A. Belarus
B. Malta
C. Turkey
D. Albania
127. Select the correct Bharat Ratna recipient-Year match:

|  | Bharat Ratna recipients |  | Year |
| :--- | :--- | :--- | :--- |
| 1 | Pandit Ravi Shankar | i | 1992 |
| 2 | Ustad Bismillah Khan | ii | 1999 |
| 3 | M S Subbulakshmi | iii | 2001 |
| 4 | Satyajit Ray | iv | 1998 |

A. 1-ii, 2-i, 3-iv, 4-i
B. 1-iii, 2-i, 3-iv, 4-ii
C. 1 -iv, 2-ii, 3-i, 4-iii
D. 1-iii, 2-iv, 3-ii, 4-i
128. Select the WRONG Country-River-Currency match:

|  | Country | River | Currency |
| :--- | :--- | :--- | :--- |
| A. | Nigeria | Benue | Naira |
| B. | South Korea | Nakdong | Won |
| C. | Colombia | Magdalena | Peso |
| D. | Malaysia | Siouguluan | Ringgit |

129. Select the WRONG International Organization - Location of Headquarter - Country match:

|  | International Organization | Location of <br> Headquarter | Country |
| :--- | :--- | :--- | :--- |
| A. | International Atomic Energy Agency | Vienna | Austria |
| B. | World Health Organization | Geneva | Switzerland |
| C. | International Monetary Fund | New York | USA |
| D. | International Court of Justice | The Hague | Netherlands |

130. Select the WRONG Venue of Hockey World Cup - Year - Winner match:

|  | Venue of Hockey World Cup | Year | Winner |
| :--- | :--- | :--- | :--- |
| A. | Kuala Lumpur | 1975 | India |
| B. | London | 1986 | Australia |
| C. | Sydney | 1994 | Netherlands |
| D. | Monchengladbach | 2006 | Germany |

131. Select the WRONG Book - Author match:

|  | Book | Author (s) |
| :--- | :--- | :--- |
| A | The Google Story | David A. Vise and Mark <br> Malseed |
| B | Accidental Empires: How the Boys of Silicon <br> Valley Make Their Millions, Battle Foreign <br> Competition, and Still Can't Get a Date | Robert X. Kennedy |
| C | The Monk Who Sold His Ferrari | Robin S Sharma |
| D | Freakonomics: A Rogue Economist Explores <br> the Hidden Side of Everything | Steven Levitt and <br> Stephen J. Dubner |

132. Select the WRONG Country - Name of Parliament match:

|  | Country | Name of Parliament |
| :--- | :--- | :--- |
| A | Iran | Majlis |
| B | Norway | Riksdag |
| C | Tanzania | Bunge |
| D | Israel | Knesset |

133. Which of the following books has been authored by P. Chidambaram?
A. View from the outside: Why good economics works for everyone
B. Propelling India from Socialist Stagnation to Global Power
C. Interpreting the Indian Economy
D. Strategic consequences of India's economic performance
134. Which of the treaty was signed amongst the European nations for entering into the monetary union?
A. Treaty of Nice
B. Treaty of Versailles
C. Maastricht Treaty
D. Treaty of Paris.
135. Which of the following Indian automobile major has a tie-up with a German insurer?
A. Hindustan Motors
B. Maruti
C. Bajaj
D. Ashok Leyland.
136. Which Indian company has acquired General Chemical Industrial Products Inc. of USA in 2008 ?
A. Tata Chemicals
B. Mody Chemical Industries
C. Gujarat Heavy Chemicals Ltd
D. Hindustan Chemicals.
137. Which of the following is not part of the Central Police Forces under the Union Government of India?
A. Sashashatra Seema Ball
B. Assam Rifles
C. National Security Guard
D. Anti-Naxalite Force
138. In descending order, which of the following group of countries is correct about the length of India's land borders with its neighbors?
A. Bangladesh, Pakistan, China, Myanmar, Nepal
B. China, Pakistan, Bangladesh, Myanmar, Nepal
C. China, Bangladesh, Pakistan, Nepal, Myanmar
D. Bangladesh, China, Pakistan, Nepal, Myanmar
139. Chronologically which one of the following is correct?
A. (I) India‘s first nuclear test, (2) Comprehensive Test Ban Treaty comes to force, (3) France and China sign Non Proliferation Treaty
B. (I) India conducts its second nuclear test -1998, (2) N. Korea conducts test of nuclear weapon, (3) Chernobyl nuclear power station accident in Ukraine
C. (I) International Atomic Energy Agency set up, (2) France conducts first nuclear test, (3) China conducts its first nuclear test
D. (I) France and China sign Non Proliferation Treaty, (2) India conducts its second nuclear test, (3) France conducts first nuclear test
140. Which of the following mountain peak is not located in India?
A. Daulagiri
B. Mt. Kamet
C. Saltoro Kangri
D. Nanga Parbat (Diamir)
141. Select the correct Organization - Purpose match:

|  | Organization |  | Purpose |
| :--- | :--- | :--- | :--- |
| 1 | NABARD | i | Financial assistance for warehousing |
| 2 | NCDC | ii | Refinancing agricultural credit |
| 3 | SCARDB | iii | Inter-state sale of agricultural products |
| 4 | NAFED | iv | Land development |

A. 1-ii, 2-i, 3-iv, 4-iii
B. 1-iii, 2-i, 3-iv, 4-ii
C. 1-ii, 2-iii, 3-iv, 4-i
D. 1-iii, 2-iv, 3-ii, 4-i
142. In descending order, which one of the following is the correct sex ratio of states in India?
A. Kerala, Chhatisgargh, Tamil Nadu, Andhra Pradesh, Orissa
B. Kerala, Chhatisgargh, Orissa, Tamil Nadu, Andhra Pradesh
C. Kerala, Tamil Nadu, Orissa, Andhra Pradesh, Tamil Nadu
D. Kerala, Tamil Nadu, Chhatisgargh, Orissa, Andhra Pradesh
143. Select the correct Artists - Instruments match:

| Artists | Instruments |
| :--- | :--- |
| i. N. Rajam | a. Santoor |
| ii. Satish Vyas | b. Violin |
| iii. Vilayat Khan | c. Rudra Vina |
| iv. Asad Ali Khan | d. Sitar |

A. i-c, ii-b, iii-d, iv-a
B. i-b, ii-a, iii-d, iv-c
C. i-d, ii-a, iii-b, iv-c
D. i-c, ii-d, iii-b, iv-a
144. Select the correct Sobriquets - Primary Names match:

| Sobriquets | Primary Names |
| :--- | :--- |
| i. Emerald Island | a. Bahrain |
| ii. Island of pearls | b. Ireland |
| iii. Holy land | c. Bhutan |
| iv. Land of thunderbolt | d. Palestine |

A. i-b, ii-d, iii-c, iv-a
B. i-c, ii-d, iii-a, iv-b
C. i-b, ii-a, iii-d, iv-c
D. i-c, ii-a, iii-d, iv-b
145. Which of the following is an incorrect Award - Person match?
A. Indra Nooyi - Padma Shri
B. M Sukumaran - Sahitya Academy Award
C. Dr. Jagannath Prasad Das - Saraswati Samman
D. Rahman Rahi - Jnanpith Award
146. The antibiotic penicillin is obtained from:
A. a bacterium
B. fungus
C. synthetic means
D. virus-infected cells

| Railway Zone | Head Quarter |
| :--- | :--- |
| i. South-East Central | a. Jablpur |
| ii. North-East Frontier | b. Maligaon |
| iii. North Eastern | c. Bilaspur |
| iv. West Central | d. Gorakhpur |

A. i-a, ii-b, iii-d, iv-c
B. i-a, ii-d., iii-b, iv-c
C. i-b, ii-b, iii-c, iv-d
D. i-c, ii-a, iii-d, iv-d
148. Select the correct Inventions/Discoveries - Inventors/ Discoverers match:

| Inventions/Discoveries | nventors/ Discoverer |
| :--- | :--- |
| i. Cassette(Audio) | a. Philips Co. |
| ii. Super Computer | b. J. H. Van Tassel |
| iii. Cloning(Mammal) | c. Wilmut, et al |
| iv. HIV | d. Mortagnier |

A. i-a, ii-b, iii-c, iv-d
B. i-b, ii-a, iii-d, iv-c
C. i-c, ii-a, iiii-b, iv-d
D. i-a, ii-b, iii-d, iv-c
149. Select the correct Diseases — Plants affected match:

| Diseases | Plants |
| :--- | :--- |
| i. Black heart | a. Peas |
| ii. Red Rot | b. Wheat |
| iii. Karnal Bunt | c. Sugarcane |
| iv. Powdery Mildew | d. Patatos |

A. i-a, ii-b, iii-d, iv-c
B. i-d, ii-c, iii-b, iv-a
C. i-b, ii-c, iii-a, iv-d
D. i-a, ii-b, iii-c, iv-d
150. In April 2008 ISRO launched the following satellite form Sriharikota:
A. KITSAT-3
B. CARTOSAT-2A
C. HAMSAT
D. INSAT-4CR

