

9. $\{(0.013)^3 + 0.000000343\} / \{(0.013)^2 - 0.000091 + 0.000049\} =$
 [1] 0.020 [2] 0.002 [3] 0.023
 [4] 0.021 [5] None of these
10. In a number system, the product of 122 and 41 is 5442. The number 4434 of this system when converted to decimal system becomes:
 [1] 1030 [2] 1010 [3] 1020
 [4] 1040 [5] None of the above
11. Two persons are climbing up on two moving escalators which have 120 steps. The ratio of 1st person's speed to that of 1st escalator is 2:3 (steps). The ratio of 2nd person's speed to that of 2nd escalator is 3:5 (steps). The total number of steps taken by both the persons are
 [1] 85 [2] 93 [3] 80
 [4] 75 [5] None of the above
12. Given $z = \frac{x^2}{y}$, if x and y are both increased by 10%, then z is
 [1] unchanged [2] increased by 10% [3] increased by 11 %
 [4] increased by 20% [5] None of the above
13. The area bounded by the region $x^2 + y^2 = 1$, $|x| = 1$ and $|y| = 1$ is
 [1] 2 [2] 4 [3] π
 [4] $4 - \pi$ [5] None of the above
14. A milkman saves milk in two vessels, a cuboidal and the other a cylindrical. The capacity of the cuboidal vessel is 20 litres more than the cylindrical one. When 30 liters of milk is drawn from each of the two full vessels, the amount left in the cuboidal vessel is twice that left in the cylindrical vessel. The capacity (in litres) of the cuboidal vessel is
 [1] 30 [2] 70 [3] 130
 [4] 50 [5] None of the above
15. Sam and his 8 friends plan to rent an apartment for a duration of 15 days, by shelling out equal amount towards the rent. Contributing a particular amount, they each fall short of Rs.40. Sam observes that had there been 12 of them, they could have just paid the rent by contributing exactly the same amount. The rent and the amount each of them contribute are
 [1] Rent 1440, contribution 120
 [2] Rent 1500, contribution 125
 [3] Rent 1464, contribution 122
 [4] Rent 1680, contribution 140
 [5] None of the above
16. If A, B and C are three consecutive points on the arc of a semi-circle such that the angles subtended by the chords AB and AC at the centre of the circle are 60 and 100 degrees respectively. The $\angle BOC$ is
 [1] 30 degrees [2] 50 degrees [3] 25 degrees
 [4] 15 degrees [5] None of the above
17. A lamp lighter has to light 100 gas lamps. To go from one lamp post to the next he takes 60 seconds. Each lamp burns 10 cubic feet of gas per hour. If he lights the first lamp at 6 p.m. then the gas burnt when he lights the last lamp is
 [1] 1262 ft³ [2] 1000 ft³ [3] 825 ft³
 [4] 762.5ft³ [5] None of these

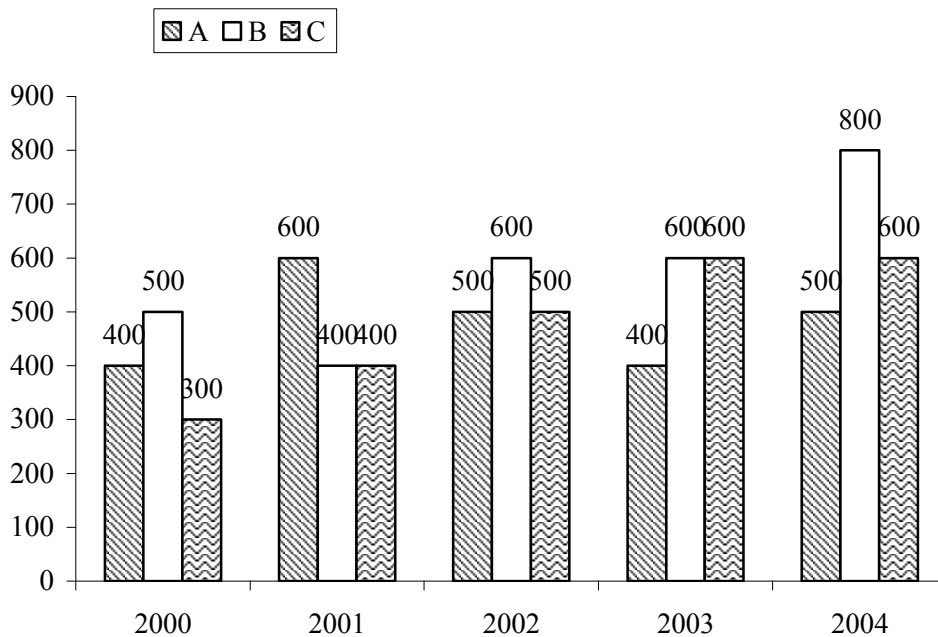
18. $\cot 15^\circ \cot 16^\circ \cot 7^\circ \dots \cot 73^\circ \cot 74^\circ \cot 75^\circ =$
 [1] 2 [2] 0 [3] 1
 [4] -1 [5] None of the above
19. Three screws are drawn at random from a lot of 100 screws, 10 of which are defective. The probability of the event that all 3 screws drawn are non-defective, assuming that the screws are drawn without replacement, is
 [1] 70.65% [2] 71.65% [3] 74.65%
 [4] 72.65% [5] None of the above
20. If $P = \sin^2 20^\circ + \sin^2 40^\circ + \sin^2 70^\circ$ then
 [1] $0 < P < 1$ [2] $1 < P < 1.5$ [3] $1.5 < P < 2$
 [4] $P = 2$ [5] None of these
21. $\frac{\sin 300^\circ \tan 330^\circ \sec 420^\circ}{\cot 135^\circ \cos 210^\circ \operatorname{cosec} 315^\circ} =$
 [1] $\frac{\sqrt{3}}{2}$ [2] $-\frac{\sqrt{3}}{2}$ [3] $-\frac{\sqrt{2}}{3}$
 [4] $-\sqrt{\frac{2}{3}}$ [5] None of these
22. Consider the following statements:
 Assertion (A): the result $\sec x > \tan x$ for every x which is a real number, is true.
 Reason (R) : $\sec^2 x = 1 + \tan^2 x$ is identically true for every x .
 Of these Statements,
 [1] both A and R are true and R is the correct explanation of A.
 [2] both A and R are true but R is not the correct explanation of A.
 [3] A is true but R is false
 [4] Both A and R are false
 [5] A is false but R is true
23. Consider the tangent table, given below:
 0' 6' 12' 18' 24' 30' 36' 42' 48' 54' 1'23'4'5' 66°22'46'257 267 278 289 300 311 322 333 3442
 4 6 7 9 Based on the above extract from the tangent table and the fact that $\tan q = 2.340$, then, $q =$
 [1] $66^\circ 48'$ [2] $66^\circ 44'$ [3] $66^\circ 50'$
 [4] $66^\circ 52'$ [5] None of these
24. The Managing Director reached the conference hall 10 min. before half past twelve and he reached 20 min. before the chairman. If the chairman was already late by half an hour than the schedule time of interview, what was the schedule time for interview?
 [1] 50 min. past 12 [2] 10 min. past 12 [3] 30 min. past 12
 [4] 40 min. past 12 [5] None of the above
25. If AB is a diameter of a circle and C is any point on the circumference of the circle, then
 [1] the perimeter of ΔABC is minimum when it is isosceles
 [2] the area of ΔABC is minimum when it is isosceles
 [3] the area of ΔABC is maximum when it is isosceles
 [4] the perimeter of ΔABC is maximum when it is isosceles
 [5] None of the above

34. The owner of an art shop conducts his business in the following manner: Every once in a while he raises his prices by X%, then a while later he reduces all the new prices by X%. After one such up-down cycle, the price of painting decreased by Rs.441. After a second- up-down cycle the painting was sold for Rs.1944.81. The original price of the painting was
 [1] 2756.25 [2] 225625 [3] 2500
 [4] 2000 [5] None of the above
35. $\frac{1}{\log_a bc + 1} + \frac{1}{\log_b ca + 1} + \frac{1}{\log_c ab + 1}$
 [1] 1 [2] 2 [3] 3
 [4] 4 [5] None of the above
36. The GCM of two numbers is 13 and their product is 4732. The possible number of pairs is/are
 [1] 0 [2] 1 [3] 2
 [4] 3 [5] None of the above
37. If w is a complex cube root of unity, then $(1-w)(1-w^2)(1-w^4)(1-w^5) =$
 [1] 4 [2] 9 [3] 1
 [4] 0 [5] w
38. If r, s, and t are consecutive odd integers with $r < s < t$, which of the following must be true?
 [1] $rs = t$ [2] $r + t = 2t - s$ [3] $r + s = t - 2$
 [4] $r + t = 2s$ [5] None of the above
39. The number of common terms of the two sequences 17,21,25,.....,417 and 16,21,26,.....,466 is
 [1] 21 [2] 19 [3] 20
 [4] 91 [5] None of the above
40. A class starts after lunch at 1 .00 p.m. and lasts till 3.52 p.m. In this duration four periods are held. Before every period, 4 minutes are allowed for going from one room to another. What is the exact duration of for each period, given that every period is of same duration?
 [1] 42 min [2] 39 min [3] 41 min
 [4] 40 min [5] None of the above
41. The minimum value of $2^{\sin x} + 2^{\cos x}$ is
 [1] 1 [2] $2^{\frac{-1}{\sqrt{2}}}$ [3] $2^{1-\frac{1}{\sqrt{2}}}$
 [4] $2^{1-\frac{1}{\sqrt{2}}}$ [5] None of the above
42. A man invited some boys and girls for on the birthday of his son. The number of boys was less than that of girls by 2. He gave Rs. 10 to each boy and Rs. 20 to each girl. If the total amount distributed by him is Rs. 280, what was the number of boys?
 [1] 25 [2] 10 [3] 8
 [4] 15 [5] None of the above
43. From a square piece of card board measuring 2a on each side a box with no top is to be formed by cutting out from each comer a square with sides b and bending up the flaps. The value of b for which the box has the greatest volume is
 [1] $b = \frac{a}{5}$ [2] $b = \frac{a}{4}$ [3] $b = \frac{a}{3}$
 [4] $b = \frac{a}{2}$ [5] None of the above

44. Consider the system of linear equations $x + y = 2$, $y - z^2 = 1$
The number of real solution of the system is/are
 [1] 0 [2] 1 [3] 2
 [4] 3 [5] None of the above
45. There are some cows, bulls and 45 hens in a group. One caretaker looks after 15 animals. The number of bulls is twice the number of cows. If the number of heads is less than the total number of feet by 186 (including the caretakers), how many caretakers are there?
 [1] 9 [2] 8 [3] 5
 [4] 6 [5] None of the above
46. The time when the hands of a clocks are coincident between 5 & 6 o' clock is
 [1] 22 min, Past 5 [2] $26\frac{3}{11}$ min, Past 3 [3] $22\frac{23}{11}$ min, Past 2
 [4] $27\frac{3}{11}$ min, Past 5 [5] None of these
47. The largest no. in the sequence $1, 2^{1/2}, (3)^{1/3}, (4)^{1/4}$
 [1] $2^{1/2}$ [2] $3^{1/3}$ [3] $5^{1/5}$
 [4] $\frac{1}{6}$ [5] None of these
48. Ten points exist in a plane out of which 3 points lie on straight line. The no. of distinct lines that can be drawn with these points are.
 [1] 40 [2] 42 [3] 43
 [4] 45 [5] None of the above

Direction (Qs. 49 to 52): Answer the following questions on the basis of the information given below.

Profit on three products A,B,C of company XYZ Ltd



Product → Year ↓	A	B	C
2000	25	20	30
2001	30	25	25
2002	25	25	40
2003	40	15	10
2004	40	10	20

Product → Year ↓	A	B	C
2000	30	50	35
2001	25	25	40
2002	20	30	25
2003	35	40	20
2004	25	60	30

49. In which of the following years was the profit as a percentage of exports the highest for the product A?
 [1] 2003 [2] 2004 [3] 2002
 [4] 2001 [5] None of the above
50. If the company sells only these three products, then in which of the following years did the total profit earned by the company grow by maximum percentage?
 [1] 2001 [2] 2002 [3] 2003
 [4] 2004 [5] None of the above
51. In the year 2002 if the total sales (by value) of A, B, C are S_A , S_B , S_C then which is true?
 [1] $S_C > S_A > S_B$ [2] $S_A > S_B > S_C$ [3] $S_B > S_A > S_C$
 [4] $S_A > S_C > S_B$ [5] None of the above
52. In the year 2004, the ratio of exports to the volume of total sales is 1 : 5 for the product B. What is the ratio of the average price of the product (per unit) in the domestic market to the average export price?
 [1] 1 : 6 [2] 1 : 5 [3] 3 : 2
 [4] 1 : 3 [5] None of the above

Directions (Qs. 53 to 57) : Below is given a passage followed by several possible inferences which can be drawn from the facts stated in the passage, You have to examine each inference separately in the context of the passage and decide upon its degree of truth or falsity.

- [1] if the inference is “definitely true”, i.e. it properly follows from the statement of facts given
 [2] if the inference is “probably true” though not “definitely true” in the light of the facts given
 [3] if the "data is inadequate", i.e. from the facts given you cannot say whether the inference is likely to be true or false.
 [4] if the inference is “probably false” though not “definitely false” in the light of the facts given
 [5] if the inference is “definitely false”, i.e. it cannot possibly be drawn from the facts given or its contradicts the given facts.

It has been estimated that if current trends continue, by 2025, about ten million people the world over will die each year due to tobacco consumption, doubling the number tobacco-related deaths at present. As of now, half the smoking population of the world will eventually lose their lives to tobacco. Today, tobacco is the fourth most common risk factor for disease and causes the death of one in ten adults worldwide. These statistics are not only a cause for concern in the health sector, but also for the economy of nations.

The consumption of tobacco is the highest among the most productive population of a country. Not only does tobacco lead to high public health costs, it also brings down the productivity of users. Whether rich or poor, a tobacco addict spends as much as ten per cent of income on his addiction. The cost of the tobacco habit is devastating for poor families as it cuts into other household expenditures. Despite the statutory warning on cigarette and tobacco pouches, the trend of taking up smoking is continuing. The reasons for this may be many-ranging from peer pressure to persistent advertising to idol imitation, etc.

53. Economies of nations lose much more than what they receive from the tobacco industry.
54. In India, cigarettes are only one form of consumption of tobacco.
55. Smokeless tobacco use is as harmful as smoking.
56. The most susceptible to tobacco advertising is the youth.
57. With the steps already taken for effective tobacco control, Indian tobacco users will find their dreams of easy access to tobacco going up in smoke.

Directions (Qs.58 to 63): The questions are based on different situations. Read the situations and answer the question that follows.

58. Between 1960 and 1970, ivory poachers in the African nation of Zinbaku killed over 6,500 elephants. During that period, the total elephant population in Zinbaku fell from about 35,000 to just under 30,000. In 1970, new anti-poaching measures were implemented in Zinbaku, and between 1970 and 1980 over 800 poachers were arrested and expelled from the country. Nevertheless, by 1980, the elephant population in Zinbaku had fallen to about 21,000.

Which of the following, if true, would best help to explain the apparent paradox presented above?

- [1] the poachers arrested in Zinbaku between 1970 and 1980 were rarely sentenced to long prison terms.
 - [2] Because of highly publicized campaigns against the slaughter of elephants, demand for ivory fell between 1970 and 1980
 - [3] The elephant population in neighboring Mombasa rose slightly between 1970 and 1980
 - [4] Before 1970, the anti-poaching laws passed by the parliament Zinbaku were rarely enforced.
 - [5] In Zinbaku, between 1970 and 1980, thousands of acres of forest, the elephants natural habitat, were cleared for fanning.
59. Partly because of bad weather, but also partly because some major pepper growers have switched to high-priced cocoa, world production of pepper has been running well below world wide sales for three years. Pepper is consequently in relatively short supply. The price of pepper has soared in response; it now equals that of cocoa.
Which of the following can be inferred from the passage?
 - [1] Pepper is a profitable crop only if it is grown on a large scale
 - [2] World consumption of pepper has been unusually high for three-years
 - [3] World production of pepper will return to previous levels once normal weather returns.
 - [4] Surplus stocks for pepper have been reduced in the last three years.
 - [5] The profits that the growers of pepper have made in the past three years have been unprecedented.

60. Technological education is worsening. People between eighteen and twenty-four, who are just emerging from their formal education, are more likely to be technologically illiterate than some what older adults. And yet, issues for public referenda will increasingly involve aspects of technology.
Which of the following conclusions can be properly drawn from the statements above?
- [1] If all young people are to make informed decisions on public reference many of them must learn more about technology.
 - [2] Thorough studies of technological issues and innovations should be made a required part of the public and private school curriculum
 - [3] It should be suggested that prospective voters attend applied science courses in order to acquire a minimal competency in technical matters.
 - [4] If young people are not to be overly influenced by famous technocrats, they must increase their knowledge of pure science.
 - [5] On public referenda issues, young people tend to confuse real or probable technologies with impossible ideals.
61. In 1980, global service exports totaled about \$370 billion, approximately 20 per cent of world trade. Still, no coherent system of rules, principles and procedures exists to govern trade in services.
Which of the following best summarises the argument?
- [1] Regulatory systems lag behind reality.
 - [2] A regulatory system ought to reflect the importance of services exports.
 - [3] World trade totaled \$1850 billion in 1980.
 - [4] Service trade legislation is a veritable wasteland.
 - [5] While trade legislation exists, it is uncoordinated.
62. Sally overslept. Therefore, she did not eat breakfast. She realized that she was late for school, so she ran as fast as she could and did not see a hole in the ground which was in her path. She tripped and broke her ankle. She was then taken to the hospital and while lying in bed was visited by her friend, who wanted to know why she had got up so late.
Which of the following conclusions can be made from the above passage?
- [1] Because Sally did not eat her breakfast, she broke her ankle.
 - [2] Sally's friend visited her in the hospital because she wanted to know why she was late for school.
 - [3] Sally did not notice the hole because she overslept
 - [4] Sally broke her ankle because she went to bed late the previous night.
 - [5] Sally's broken ankle meant she did not go to school that day.
63. In order to boost sales of toys at times other than the peak sale time - Deepawali - manufactures use many techniques, Character toys from movies or TV series are promoted, and all sets are 'collectible' by their young purchasers. Collections, however, never appear to be complete, because as soon as all the characters are acquired, the child then requires the 'car', the 'phone', the 'mobile home', and even the 'airplane' to ensure a happy environment for the toys. Ultimately, the elusive final piece of the series is attained just as the manufacturer and promoter release the next series of 'collectibles'.
The prime aim of the manufacturer and promoter is to ensure that
- [1] all children should be happy and no child can be happy without a complete series of toys.
 - [2] As soon as one set is complete or almost complete, then the next one arrives on the scene.
 - [3] Children should be encouraged to complete their collections of toys.
 - [4] Deepawali must be the peak selling period of toys.
 - [5] Sales need to be bolstered throughout the year.

- S 10 : The least intelligent of the group is sitting on the immediate left of G. The most intelligent is sitting on the immediate left of F.
 S 11 : There are as many more intelligent persons than the engineer as there are less intelligent
 S 12 : Student who is a male and unmarried has two females sitting next to him.
 S 13 : The psychologist is a female and unmarried.
 S 14 : C, an entrepreneur, sitting immediately left of her husband.
 S 15 : The student is more intelligent than the architect. They have two people in between them.
 S 16 : E is married and is sitting at the left most position of the row.

68. Who is sitting on the immediate right of D?
 [1] B
 [2] E
 [3] C
 [4] Cannot be deduced from above information
 [5] None of F, E, C.
69. What is the profession of A?
 [1] Engineer [2] Doctor [3] Teacher
 [4] Data insufficient [5] None of the above
70. What is the profession of F?
 [1] Doctor [2] Engineer [3] Teacher
 [4] Data insufficient [5] None of the above
71. Which two are sitting together?
 [1] D and E [2] E and A [3] Teacher and Entrepreneur
 [4] Engineer and doctor [5] None of the above
72. Which of these represent the correct order of intelligence (in the decreasing sequence)?
 [1] BGD [2] CDF [3] ECB
 [4] BCF [5] None of the above
73. Which of the given statements in the question is definitely superfluous?
 [1] S2 [2] S6 [3] S11
 [4] S13 [5] None of the above

Directions (Qs. 74 to 78): Read the Information given below and answers the questions

There are five villages A, B, C, D and E. Two of these have post offices, three have schools and three are accessible by road. Two have population of more than 5000 each, two have population between 2000 and 5000 each, and one has a population of less than 2000. Two of these villages have electricity in addition to certain other facilities such as school and accessibility by road. One village with a population of less than 2000 has a school but neither has a post office nor is accessible by road while each of the villages with a population of more & than 5000 has a school. Of the two villages having population between 2000 and 5000 only one has a post office and is accessible by road. A is accessible by road. B has a population of more than 5000, D has a school and is accessible by road but does not have a post office, while E has a school but is not accessible by road. C does not have a post office.

74. Which village has a school and also a post office?
 [1] A [2] B [3] C
 [4] D [5] E
75. Which village does not have any of the facilities available to other villages?
 [1] A [2] B [3] C
 [4] D [5] E

76. Which two villages have electricity?
 [1] A, B [2] B, C [3] B,D
 [4] C, D [5] None of the above
77. Which three villages are accessible by road?
 [1] A, B, E [2] A, D, E [3] B, D, E
 [4] A, B, C [5] None of the above
78. Which village has a population of less than 2000?
 [1] B [2] C [3] D
 [4] A [5] None of the above
79. Sitting at a square table are a smuggler, a mafia boss, a bootlegger and a contract killer. Only two of these men, Mama and Kalia, are genuine criminals. The other two are CID officers posing as criminals. Mama is sitting opposite the Mafia boss; the junior CID officer is sitting to the left of the smuggler and the senior CID officer is sitting opposite the bootlegger, The junior officer disguised as
 [1] smuggler [2] mafia boss [3] bootlegger
 [4] contract killer [5] None of the above

Directions (Qs. 80 to 86): The data given below pertains to seven different industry sectors with respect to income, expenditure, profits. Study the data and answer the questions.

	Particulars	Chemical	Diversified	Electricity	Food	Machinery	Services	Textiles
1	Sales	498,476	128,125		82,808			56,401
2	Other Income	7303		2 [^] 74		2,887	6,097	1,705
3	Total Income= (1+2)		130,830			128,733		58,106
4	Raw material cost	338,683	78,237	31,060	48,188	54,994	81,600	33,738
5	Power & fuel expenses	18,467		4,865	2,003	1,973		
6	Salaries and wages	13,791	4,412		4,284	20,038	44371	4361
7	Depreciation	11,065	4,807	6,311		5,026	22,854	3,013
8	Interest payments	11,135	2,923	5,756			133,619	5,259
9	Other expenses		24,706	5,604	23,570	34,271	97,092	10368
10	Total expenses = (4+5+6+7+8+9)		119,316	58,769	80,750	120,557	385,694	
11	Profit Before Tax = (3-10)		11,514		3,814	8,176	50,484	
12	Tax paid	7,467		2394				0
13	Profit After Tax = (11-12)	19,861	8,887	8,501	2,538	5,001	32,698	-2,874

80. Which of the following statements is wrong?
 [1] Depreciation expense is the lowest for food industry
 [2] Power and fuel expenses are 5th largest item in the expenditure of diversified industries
 [3] Electricity industry earns more of other income' as a percentage of total income compared to other industries
 [4] Raw material cost is the largest item of expense in all industry sectors
 [5] None of the above

81. Depreciation as a percentage of total expenses is maximum in which industry sector?
 [1] Chemical [2] Diversified [3] Electricity
 [4] Machinery [5] Textiles
82. Which industry sector has 'salaries and wages' as 3rd largest item in its expenses?
 [1] Food [2] Services [3] Textiles & Food
 [4] Food & Machinery [5] None of the above
83. If the industry sectors are ranked on the basis of 'Tax paid as a proportion of sales' in the ascending order, then which industry will be placed at rank 3?
 [1] Machinery [2] Electricity [3] Food
 [4] Diversified [5] None of the above
84. If power and fuel charges are increased by 200% and the rankings are based on Profit Before Tax in the descending order, then which of the following statements is wrong?
 [1] The service industry retains its rank
 [2] Chemical changes its rank from 2nd to 6th
 [3] Diversified changes its rank from 3rd to 4th
 [4] Machinery and food industry improve their ranking
 [5] None of the above
85. If the ranking is based on Profit Before Tax in the descending order, subject to the condition that 'other expenses' of all the industry sectors equals zero, then which of the following statements is wrong?
 [1] Rank of chemical industry does not change
 [2] Rank of electricity industry declines
 [3] Diversified industry rank changes from 3rd to 4th
 [4] Rank of food industry changes from 5th to 6th.
 [5] Rank of textile industry does not change
86. If sales in all industries decrease by 10% and salaries & wages increase by 10%, which industry will fall in the middle of the ranks based on Profit Before Tax?
 [1] Textiles [2] Diversified [3] Electricity
 [4] Chemical [5] Machinery

Directions (Qs. 87 & 88): Answer the questions on the basis of relationships expressed through symbols. The symbols are explained below.

- ÷ = equal to
 × = not greater than
 + = less than
 φ = not less than
 > = greater than
 ≠ = not equal to

87. In $a \Delta b + c$ it does not imply that
 [1] $a \% b \times c$ [2] $a''b_i \% c$ [3] $a \phi b''c$
 [4] $a \times b \times c$ [5] $a + b''c$
88. If $a + b + c$, then it implies that
 [1] $a \div b \phi c$ [2] $a \times b \div c$ [3] $a \times b'' \times c$
 [4] $a \div b'' c$ [5] $a \phi b_i \% c$

89. If **WEEWTGOD** is the code for **CUCUMBER** using a particular coding algorithm, then **CPHKGUNK** is the code for
[1] FINALISE [2] ENTRANCE [3] TERRIBLE
[4] RESISTED [5] None of the above
90. If **DVHQVR** is the code for **SEASON** using a particular coding algorithm, then **FGHWHQ** is code for
[1] CARROT [2] TRYING [3] ENGAGE
[4] DECENT [5] None of the above
91. If **DCCDCECB** is the code for **ABBACABA** using a particular coding algorithm, then **C0CDCFC** code for
[1] CABABABA [2] BABABCBA [3] LALABACA
[4] BADABACA [5] None of the above

Directions (Qs. 92 to 93): Read the statement and answer the questions.

A cube is colored green on all sides. It is cut into 125 smaller cubes of equal size.

92. How many cubes are not colored on any face?
[1] 30 [2] 23 [3] 27
[4] 35 [5] None of the above
93. How many cubes are colored on three faces?
[1] 12 [2] 8 [3] 16
[4] 18 [5] None of the above

SECTION III

Directions (Qs. 94 to 122): Read the following five passages and answer the questions given at the end of each passage.

PASSAGE 1

Exsys CORVID is a revolutionary approach to developing and fielding online knowledge automation expert systems - for the Web, and as stand-alone systems, which can be delivered cross-platform. For the first time, it- is possible to convert complex problem - solving logic into a form that can be easily incorporated into a Web site.

Providing access to expert decision-making knowledge is the best way for businesses to attract and retain customers, realize efficiency gains, and have a significant competitive edge. For over 20 years EXSYS Inc. has been the leader in providing proven technology to build and deploy interactive knowledge automation expert systems, which deliver a company's most valuable asset, expert knowledge - to the people who need it, whenever they need it.

Distributed enterprise-wide, organizations are increasing productivity, cutting costs and improving customer relations - while creating new profit centers and achieving demonstrable return on investment. Exsys CORVID converts expert knowledge into a form that allows delivery of advice and recommendations to improve performance, capability and efficiency, while reducing training and costly errors. EXSYS products are used by over 50% of the Fortune 100 companies, many Government agencies, and thousands of businesses and organizations.

CORVID was developed by EXSYS Inc. - the company that first brought practical expert system development to the PC in 1983, and first brought expert systems to the Web in 1996. EXSYS Inc's

founder, Dustin Huntingdon, and the company's software developers have over 21 years experience in the artificial intelligence field and in designing practical expert system development tools. The original EXSYS Developer software is the longest lived such product on the market, with continuous use in business and industry for over 20 years.

Exsys CORVID resulted from a broad and intensive examination of what is needed to build and field expert systems in today's Internet oriented world. CORVID is designed to provide a unique powerful product that allows businesses and organizations to easily develop and field powerful online advisory applications, while still maintaining EXSYS's long support for other types of expert systems.

CORVID brings three revolutionary changes to knowledge automation expert system development.

- Understandable, Systematic Rule-Based Logic
- A Practical, Efficient Development Environment
- Easy, Cross-Platform Java-Based Web Deployment

In examining how to enable users build expert systems in the most effective manner, many approaches were considered. EXSYS products have traditionally used a pure rule-based approach to logic and this has proven to be extremely effective for thousands of users. Some other expert system tools have taken a rigorously object-oriented approach, which results in a much more difficult and complex development environment. An object-oriented approach is very effective for programming, but often does not work well for human decision-making processes. Most decisions are thought of and described by people as, "If,... Then..." type logic. Often this does not easily convert to a class hierarchy or an object-oriented approach, and does not match the way they think about the decision-making process.

While many decision-making problems are not easy to express in an object-oriented methodology, the are tremendous benefits in using object-structured components. This difference between true object-oriented programming and object-structured programming is what has made Microsoft's Visual Basic (V2. so popular. VB is not a true object-oriented programming language, though it provides many object-based features.

This simplification has allowed VB to be used by more programmers than practically all other languages combined. Exsys CORVID is based on the VB model. It provides an object structure that makes it easy to build systems using methods and properties of variable classes, while not requiring the developer to change the way they think and describe their decision-making steps and logic. The result is a very flexible and powerful development environment that can easily be learned.

CORVID has seven types of variables that provide a wide range of functions. The powerful collection variable allows data to be "collected" from multiple runs ...and enables many new capabilities. A variety of methods and properties for all of the variables allow them to be used in new and unique ways to solve problems and display results.

CORVID introduces a new concept in managing decision-making logic — Logic Blocks. In previous EXSYS products, there are tree logic diagrams, and individual 'If-Then' rules. Many systems required multiple trees and rules to collectively provide each decision-making step, with no consistent way to organize the related logic. CORVID's Logic Blocks are a superset of rules and trees, with some new features not found-in either. A Logic Block can be any combination of rules and trees that have a related function. This allows the logic to be organized into blocks that behave as objects. A Logic Block can be anything from an entire knowledge base to a single rule - it all depends on what the problem calls for. Logic Blocks can be run using forward or backward chaining. They can also be associated with a spreadsheet file to apply the logic in the block sequentially to each row. This enables a product selection system to be built that has all the "generic" logic in blocks, and the entire product details in a spreadsheet file. Updating and maintaining the system is as simple as changing the spreadsheet to have new data. Product selection problems have never been simpler - especially for situations where the product line or details are frequently changing, such as inventory or pricing.

Logic Blocks are built and maintained in a very visually oriented development environment that is easy to learn and use. The underlying knowledge representation in the block is still an If-Then rule, making it easy to read and understand, but a Logic Block provides a way to organize and use the rules in a way not previously possible.

94. What is Exsys CORVID?
- [1] Exsys CORVID is a knowledge automation expert system development software tool for capturing and disseminating decision-making expertise.
 - [2] Exsys CORVID represents a totally new paradigm for the distribution of online expertise that provides answers, not just information, to clients, prospects and employees.
 - [3] Exsys CORVID is designed to enable domain experts to quickly and easily develop decision support systems using everyday language without having to learn complex, arcane programming syntax.
 - [4] All the above statements are correct.
 - [5] None of the above statements are correct.
95. Why was Exsys product line developed?
- [1] To move forward from the earlier proven and successful tool, EXSYS Developer to knowledge automation expert system.
 - [2] To provide unique, interactive “experts” that deliver individualized decision-making knowledge from a Web page, or stand-alone systems.
 - [3] To allow expert knowledge to be captured in a form that makes it deliverable via the Web to improve performance, capability and efficiency, while reducing training and costly errors.
 - [4] To provide successful knowledge automation expert systems providing significant cost savings, increased profitability and a competitive edge to their Web sites.
 - [5] All the above statements are correct.
96. Who is Exsys?
- [1] Founded by Dustin Huntington, EXSYS Inc. brought practical expert system development to the PC in 1983, and was the first company to bring knowledge automation to the Web in 1996.
 - [2] It is a software solution provider, providing cost-effective software, training, support, and consultancy to help businesses and organizations deliver knowledge and decision-making expertise.
 - [3] EXSYS software is the longest lived such product on the market, with continuous use in business and industry.
 - [4] Both statements ‘A’ and ‘B’ are correct but statement ‘c’ is dubious.
 - [5] All the statements ‘A’, ‘B’ and ‘C’ are correct.
97. What does the term “CORVID” mean in the context of the passage?
- | | | |
|--------------|---------------|--------------|
| [1] An eagle | [2] A crow | [3] A magpie |
| [4] A lion | [5] A peacock | |
98. Author mentions Exsys CORVID as "Knowledge Automation Expert System". What does the term “knowledge” mean in the context?
- [1] Facts, truths, and beliefs, perspectives and concepts, judgments and expectations, methodologies and know-how.
 - [2] Accumulated and integrated pool held over time to handle specific situations and challenges.
 - [3] Facts and data organized to describe a particular situation or condition.
 - [4] Ability to determine what a specific situation means and application to interpret information about the situation and to decide how to handle it.
 - [5] None of the above statements describe the term in an appropriate fashion.

99. According to the author, what is the prime message or content of the passage?
- [1] Exsys CORVID provides knowledge representation that makes it easier to build systems, with out requiring the developer to change the way they think and describe their decision making steps and problem-solving logic.
 - [2] Exsys CORVID uses the approach” of directly delivering knowledge rather than data. The user is asked questions, and based on their input, they are provided with an analyzed decision specific to the individual situation.
 - [3] Unlike other decision “support approaches like data mining or case-based reasoning, EXSYS provides, the only interactive technology that always provides direct delivery of “best fit” recommendations to end-users.
 - [4] Both statements ‘A’ and ‘C’ convey the prime message but statement 'b' is dubious.
 - [5] All the statements ‘A’, ‘B’, and ‘C are conveying the prime messages of the passage.

PASSAGE II

At the time Jane Austen's novels were published — between 1811 and 1818—English literature was not part of any academic curriculum. In addition, fiction was under strenuous attack. Certain religious and political ‘groups felt novels had the power to make so-called immoral characters so interesting that young readers would identify with them: these groups also considered novels to be of little practical use. Even Coleridge, certainly no literary reactionary, spoke for many when he asserted that, “novel-reading occasions the destruction of mind’s powers.”

These altitudes towards novels help explain why Austen received little attention from early nineteenth-century literary critics. (In any case, a novelist published anonymously, as Austen was, would not be likely to receive much critical attention.) The literary response that was accorded to her, however, was often as incisive as twentieth-century criticism. In his attack in 1816 on novelistic portrayals “outside of ordinary experience,” for example, Scott made an insightful remark about the merits of Austen’s fiction. “Her novels”, wrote Scott, “present to the reader an accurate and exact picture of ordinary everyday people and places, reminisce/U of seventeenth-century Flemish painting”. Scott did not use the word “realism,” but he undoubtedly used a standard of realistic probability in judging novels. The critic, Whately, did not use the word “realism” either, but he expressed agreement with Scott’s evaluation, and went on to suggest the possibilities for moral instruction in what we have called Austen’s realistic method. Her characters, wrote Whately, are persuasive agents for moral truth since they are ordinary persons “so clearly evoked that we feel an interest in their fate as if it were our own.” Moral instruction, explained Whately, is more likely to be effective when conveyed through recognizably human and interesting characters than when imparted by a sermonising narrator. Whately especially praised Austen’s ability to create characters who “mingle goodness and villainy, weakness & and virtue, as in life they are always mingled.” Whately concluded his remarks by comparing Austen’s art of characterization to Dickens”, stating his preference for Austen’s.

Yet the response of nineteenth-century literary critics to Austen was not always so laudatory, and often anticipated the reservations of twentieth-century critics. An example of such a response was Lewes' complaint in 1859 that Austen’s range of subjects and characters was too narrow. Praising her verisimilitude, Lewes added that nonetheless her focus was too often upon only the unlofty and the commonplace. (Twentieth-century Marxists, on the other hand, were to complain about what they saw as her exclusive emphasis on a lofty upper-middle class.) In any case, having been re-cued by some literary critics from neglect and indeed gradually lionized by them, Austen steadily reached, by the mid-nineteenth century, the enviable pinnacle of being considered controversial.

Labelling Zora Neale Hurston “a writer of the Harlem Renaissance” is a characterization that may, at first glance, obscure, rather than clarify, the particularities of her career. The Harlem Renaissance was a spirit more than a movement, and because a spirit is ephemeral. Generalizations about the Harlem Renaissance and its writers are either too hard or too easy. They have come easily enough to a whole generation of critics, but their pithy summaries seldom reflect the wide divisions between Blacks and Whites, the Black

intelligentsia and Black workers, Black writers and their middle class audience, that marked the era. When one studies in depth, the phenomenon of what was then called the Negro Renaissance or the New Negro Renaissance, and what is now called the Harlem Renaissance, one comes away with a bewildering complex of notions, statements, affirmations, and manifestos. Although there is general agreement that the Harlem Renaissance is bounded by the 1918 armistice ending the First World War and the beginning of the Great Depression in 1930, some historians have stretched the boundaries to before the war (1914) and after Franklin Delano Roosevelt's second term (1941). There has been a widespread tendency to regard the Harlem Renaissance as a monolithic cultural movement, capable of reduction to one orthodoxy or another or to a set of characteristic principles. This presumption reflects the bias in most American scholarship that postulates Black people as united entity and then poses theories ignoring individuation of thought and feeling.

Sometimes, however, an individual career can be best assessed in the context of an age, and this is largely the case with the writer and anthropologist Zora Neale Hurston. She spends exactly two paragraphs on the Renaissance in her autobiography, and her other writing, public and private, offers very little discussion of what the Harlem Renaissance meant to her. Yet her part in the Renaissance is well-documented in the reminiscences of others, with unanimous agreement that she was one of the most memorable personages of the period. As Langston Hughes put it in *The Big Sea*, she "was certainly the most amusing" of the Harlem Renaissance artists, "full of side-splitting anecdotes, humorous tales, and tragicomic stories." Hughes's should not imply that she was solely an entertainer. Although she was independent and scornful of literary movements, she shared in the historical and cultural forces that made the Harlem Renaissance an identifiable moment in intellectual history, a part of a historical process that, as most critics recognize, altered Black life in America. She, in turn, responded to and helped to shape the aesthetic assumptions of that era. Between 1919 and 1930, Black writers were published in greater numbers than in any single decade in American life prior to the 1960s. Hurston's awareness of this literary ferment certainly contributed to her development as a writer.

100. The passage suggests that twentieth-century Marxists would have admired Jane Austen's novels more if the novels, as the Marxists understood them, had
- [1] described the values of upper-middle class society
 - [2] avoided moral instruction and sermonising.
 - [3] depicted ordinary society in a more flattering light.
 - [4] portrayed characters from more than one class of society.
 - [5] anticipated some of the controversial social problems of the twentieth century.
101. Which of the following, according to the passage, is the characteristic of a movement but not a spirit?
- [1] Individual statements of purpose
 - [2] Conflicts between rivals
 - [3] The cultivation of notoriety
 - [4] The development of new ideas
 - [5] An explicit ideology
102. Which of the following is an overlooked yet significant aspect of the Harlem Renaissance, according to the passage?
- [1] The similarity of the works produced by Black writers during the Harlem Renaissance
 - [2] The perceptions of the central figures of the Harlem Renaissance as recorded in autobiographies and letters
 - [3] The interdisciplinary nature of Hurston's work
 - [4] The nature of the relationship between Black artists and their audiences
 - [5] The effect of Roosevelt's policies on artists and writers

103. Which of the following facts mentioned, in the passage; supports the author's statement that the Harlem Renaissance was "an identifiable moment in American intellectual history"?
- [1] During this period, scholars who had previously been unaware of Black literary tradition began to assess that tradition.
 - [2] Widespread social reform took place during this period.
 - [3] During this period, Black people acted upon common concerns for the first time in the twentieth century.
 - [4] The number of published works by Black writers increased dramatically during this period.
 - [5] The armistice ending the First World War began a period of increased prosperity for Americans.
104. The lack of critical attention paid to Jane Austen can be explained by all of the following nineteenth-century attitudes towards the novel EXCEPT the
- [1] assurance felt by many people that novels weakened the mind
 - [2] certainty shared by many political commentators that the range of novels was too narrow.
 - [3] lack of interest shown by some critics in novels that were published anonymously
 - [4] fear exhibited by some religious and political groups that novels had the power to portray immoral characters attractively
 - [5] belief held by some religious and political groups that novels had no practical value.
105. What is the meaning of 'verisimilitude' in the above passage?
- [1] language quality and appeal
 - [2] presentation quality in writing.
 - [3] expressiveness of ideas
 - [4] quality of truth likeness in writing
 - [5] None of the above

PASSAGE III

Formal dispute settlement at the WTO is a last-resort option. Many differences between Members are unlikely ever to become an issue at the WTO, and even if they do, they will not necessarily trigger formal dispute settlement procedures. Some issues are settled at the committee level or defused in that context. The WTO Secretariat cannot challenge any Member. It has no right to prosecute. It is up to governments to decide whether or not to bring a dispute against another government to the WTO. And it is also entirely up to the complainant to argue its case. The dispute is only between governments, and only about alleged failures to comply with WTO agreements or commitments.

Setting disputes is the responsibility of the Dispute Settlement Body (DSB). The DSB has sole authority to establish "panels" of experts to consider the case, and to adopt the panels' findings or the results of an appeal. It monitors the implementation of the rulings and recommendations of panels and the Appellate Body, and has the power to authorise retaliation when a country does not comply with a ruling.

The World Trade Organization (WTO) is a relatively new international Organization. However, it is responsible for a system that is over 50 years old. Established on 1 January 1995, the WTO replaced the General Agreement on Tariffs and Trade (GATT) which dated back to 1948. One of the most profound changes introduced by the transition from GATT to WTO in 1995 was the agreement to implement a dispute settlement process that would be speedier and more "automatic", with fixed deadlines. This Agreement is set out in the WTO Understanding on Rules- and Procedures Governing the Settlement of Disputes (the "Dispute Settlement Understanding" or the "DSU"). It is more automatic in the sense that the dispute Settlement process, including the adoption of the final panel report and the authorization of sanctions in case of non-compliance, can only be blocked if there is a consensus to do so (sometimes referred to as "reversed consensus"). Previously, under the GAIT, it took a consensus among all countries to adopt the report -hence the "losing" party to the dispute could always' block an unfavourable ruling.

In a first stage, the DSU requires countries in dispute to consult with each other to see if they can settle their differences by themselves (for at least 60 days). Parties can also agree to ask the WTO Director-General to mediate. Mediation, conciliation and good offices may be requested at any time in parallel to the dispute settlement process. If the consultations between the parties fail, the complaining country can ask for a panel to be appointed.

Panels resemble arbitral tribunals, the composition of which is normally also under the control of the parties to the dispute. Only if the two sides cannot agree does the WTO director-general appoint them. Panels consist of three (occasionally five experts from different countries, who examine the evidence. Panel and Appellate Body findings have to be based on the arguments cited and should normally be given to the parties to the dispute within nine months from the establishment of the panel.

In general, after two hearings with the parties (and technical experts, if necessary), the panel submits the descriptive sections of its report (facts and arguments) for comments to the parties. This is followed by an "interim report" also submitted to the parties for review, and then, the final report, which is first submitted to the parties and then later circulated to all WTO Members. Subsequently, the final report is passed to the DSB, which can only reject the report by consensus. The report becomes the DSB's ruling or recommendation within 60 days and is posted on the WTO website.

Panel reports can be appealed. The Appellate Body can hear on appeal only points of law decided by panels. Generally, the Appellate Body is not allowed to review facts of the case as determined by the panel, or examine any evidence. Each appeal is heard by three members of a quasi-permanent seven-member Appellate Body set up by the DSB. The Appellate Body can uphold, modify or reverse the panel's legal findings and conclusions, and proceedings should normally not last more than 90 days. When a case has been appealed, the DSB has to adopt the reports of the Appellate Body and of the panel (as amended, reversed or upheld) within 30 days from the circulation of the Appellate Body report; rejection is only possible by consensus.

The Dispute Settlement Understanding stresses that "prompt compliance with recommendations or rulings of the DSB is essential in order to ensure effective resolution of disputes to the benefit of all Members". If a country is found to be at fault with the rules, it is expected to promptly correct the measure at issue. Moreover, it must state its intention to do so at a DSB meeting held within 30 days of the reports adoption. If immediate compliance with the recommendation proves impractical, the country will be allowed a "reasonable period of time". If it fails to act within this period, it has to enter into negotiations with the complaining country (or countries) in order to determine temporary compensation - for instance, tariff reductions in areas of particular interest to the complaining side. There is no financial compensation. If no satisfactory compensation is agreed, the complaining side may ask the DSB for permission to impose limited trade sanctions ("suspend concessions or obligations") against the other side. If requested the DSB must grant this authorization. WTO Arbitration on the level of such sanctions can also be requested if the parties do not agree.

The DSB monitors how adopted rulings are implemented, and an outstanding case remains on its agenda until the issue is resolved.

106. "Formal dispute settlement at the WTO is a last-resort option" means:

- I. Countries should solve their differences among themselves.
- II. Issues need not be reported to WTO if they can be sorted out bilaterally and multilaterally.
- III. Efforts should be made to sort out the issues at committee level.
- IV. WTO members should impose rules on members. Pick up the right option:
[1] I, and IV [2] II & III [3] II, III, and IV above
[4] All the four (I to IV) above [5] None, of the above

107. The Dispute Settlement Body can be approved only through:

- [1] Companies & Organizations [2] Governments [3] Private individuals
- [4] United Nations [5] None of the above

108. Dispute Settlement system under WTO is better than GATT because:
I. it is speedier & more automatic
II. it has less blockages
III. it is time bound
IV. it favours small and least developed countries Pick up the right option:
[1] I, II and IV [2] II, III and IV [3] I, II and III
[4] III and IV [5] None of the above
109. Effective resolution of disputes is ensured by:
[1] asking the defaulting country to promptly correct the measure at issue
[2] imposing the financial compensation
[3] with drawing that country's membership of WTO
[4] posting the DSB ruling on WTO website
[5] None of the above
110. Which of the following statements are true:
I. panelists have to strictly follow their governments instructions
II. mediation, conciliation & good offices is independent of consultations
III. panel reports can be appealed
IV. failure to act within a reasonable period entails compensation
Pick up the right option.
[1] I, II, III are true [2] Only I & II are true [3] Only II and III are true
[4] Only III and IV are true [5] None of the above
111. Match the following:
I. Conciliation A. Tariff reduction in areas of particular interest to the complaining side
II. Mediation B. Discussion with other party
III. Inquiry C. Third-party intervention put on a formal legal and institutionalized basis
IV. Compensation D. Active participation of (a state, international organization or individual) who is authorized and expected to transmit and interpret each party's proposals to the other and to advance his own proposals.
V. Negotiations E. Ascertaining disputed issues of fact.
[1] I-A, II-B, III-C, IV-D, V-E [2] I-B, II-D, III-A, IV-C, V-3
[3] I-D, II-E, III-B, IV-A, V-E [4] I-C, II-D, III-E, IV-A, V-B
[5] None of the above

PASSAGE IV

South of the Deccan plateau, the land between the hills of Venkatam and Kanyakumari is called Tamizhakam or Tamilaham. The Cheras, the Cholas and the Pandyas are three principal chiefdoms of Tamilaham. Our knowledge of these three South Indian kingdoms is based on the Sangam literature.

The Sangam literature was collected and classified at the three successive assemblies, the Sangams which were held in the town of Madurai during AD 100-250. However, the works of the last Sangam alone has survived. At the Sangams, eminent scholars in literature assembled and functioned as a board of censors, and the choicest literature was rendered in the nature of anthologies. Ettuttogai or the eight collections of poems and Pattupattu or the ten idylls are the two categories of anthologies that comprise heroic poems. The poems were orally composed and transmitted across a fairly long span of time, i.e. from about 2nd century BC to AD 3rd century before they were classified and compiled. The poems are the earliest

specimens of Dravidian language (barring aside a few short inscriptions). By and large, the Tamil heroic poems signify the tradition of bards referred to as the panar who roamed about singing the praise of their patron chiefs. However, all the poetic compositions were not by wandering bards. Some of them were composed by scholarly poets referred to as pulava, who followed the bardic tradition. Kapilar Pananar, Ayvayar and Gautamanar were some of the well known poets of the period. It is thus not the literature of any particular social group, but part of a common way of life.

The anthologies are divided into akam, dealing with themes of subjective experience like love or affection, and puram, dealing with themes of objective interest like raid or plunder. Akananuru, a collection of four hundred poems based on akam themes and Purananuru, a similar collection based on puram themes are two examples of the Ettuttogai category. Similarly there are examples of both akam and puram anthologies in the Pattupattu category. Apart from the heroic anthologies, the classified corpus of Sangam literature includes Tolkappiyam, the earliest treatise on Tamil grammar and Patinenkizkanakku, the eighteen didactic texts, Tirukkuval is another of the eighteen, didactic texts. Both Tolkappiyam and Patinenkizkanakku were composed after most of the Ettuttogai and Pattupattu poems had been composed. Tolkappiyam in its present form was written not earlier than the AD 3rd century, though the basic parts of the text could have been done slightly earlier. All the Kizkanakku texts belong to a period later than AD 3rd Century.

The heroic poems and other works of the Sangam tradition testify the prevalent-literary culture of the early Tamizhakam. They also indicate the linguistic maturity of the Tamils by the 3rd Century. The two epics, Silappadikaram and Manimekalai, written by Illango adigal and Sattanar respectively, were regarded by some scholars as contemporaneous with the heroic poems but now they are identified as works of a much later period. Incidentally, Manimekalai is the only important ancient work which gives glimpses of the development of fine arts in the Sangam age. The Sangam literature reflects the economy and society of the time fairly accurately, even though it does not give us sufficient information about the political life of the times, the organisation of political units and the chronological account of political events.

The Sangam literature tells us that the Tamilaham represented a combination of diverse ecological zones referred to as tinais, viz; hilly region, river valleys, coastal areas, grass lands, etc. Each had its own subsistence pattern, level of production, social division of labour and lifestyles. However, there was an interaction and interdependence between different eco-zones which led to the development of larger eco-zones. In different regions, power was wielded by chiefs who are known to us from poems written in their praise by bards. Among them, the chiefs of the Cholas, the Pandyas and the Cheras were like kings because they controlled the river valleys where agrarian settlements were expanding and also the coastal ports which were becoming prosperous because of lucrative trade. Besides, they derived considerable income from tributes termed as tirai, plunder and other means. A regular system of taxation does not seem to have been known. However, the Tamil literature mentions rai which seems to have been a more regular contribution than tirai. Unfortunately, not much is known about the rate and mode of collection of revenue. The rulers were often advised to be gentle and moderate in the collection of revenue. This seems to suggest that coercion and excesses were practiced by the authority in collecting their share from the cultivators.

The major concern of all the three ruling groups was the integration of the lesser chiefs under their subjugative and martial policies. War was a normal feature of the society, and was celebrated as a noble heroic act. It was even institutionalised. The cult of war was propagated through the praise of the courage of warriors whose memorials were made cult objects of worship. Wars must have led to destruction of resources and commitment of excesses against the poor peasants — grains and cattle were looted and what could not be carried away was destroyed, peasant settlements were set on fire and harvesting fields were devastated. The defenseless plight of the peasants and the way they were terrorised and exploited are attested by a number of songs of the Sangam anthologies.

Society in ancient Tamilaham was essentially tribal in character with its kingship organisation, totem worship, and tribal cults and practices. In all the tinais, tribal customs prevailed, but a change was gradually coming about in the predominantly agricultural region. In this region, social organisation was becoming complex. This was characterised by the gradual breaking up of old kingship ties and the introduction of the brahmanical varna concept. Social stratification or inequality appeared. Craft specialization was only rudimentary and was subsidiary to agricultural production. There is a mention of blacksmiths and carpenters. The extended family was their unit of production. Weaving was another major profession. The traders were prosperous, and were known after the particular commodity they traded. Thus, we hear of umanan (salt merchant), koglavaniyan (corn merchant), aruvai-vaniyan (textile merchant), ponvaniyan (gold merchant), etc. Tolkappiyam mentions that the traders belonged to the vaishya group in the Varna division. Down south, specially in the Pandya country, these traders; are found associated with some heterodox religious groups. They figure in early inscriptions of this region as donors-of cave dwellings to ascetics of the Jain or the Buddhist order.

The chiefs of all the three kingdoms as well as chiefs of other categories extended patronage to Brahmins, bards and other dependents. Thus, the political system of the early Tamil society varied from the simple chieftdom of clans to the complex chieftdom of ruling houses. A full-fledged state organisation was yet to take shape. The society was composed of unevenly developed components which shared a common culture. Apart from Brahmanism, Buddhism had also taken its roots in the society.

112. The passage suggests that agricultural regions of Tamizhakam have played a role in
- [1] Weakening of the central authority
 - [2] Strengthening of kingship ties
 - [3] Creating complex social organizations
 - [4] Creating war memorials
 - [5] None of the above
113. Which of the following statements is wrong?
- [1] Coercion and excesses were practised by the authority in collecting their share from the cultivators.
 - [2] Wars led to destruction of resources and commitment of excesses against the poor peasants-grains and cattle were looted and what could not be carried away was destroyed.
 - [3] The Sangam literature reflects the economy and society of the time fairly accurately.
 - [4] Rai is a regular source of income of the kingdoms; it was a form of an agricultural tax system.
 - [5] None of the above
114. Match the following:
- | | |
|-----------------------|------------------------|
| I. Ettuttogai | A. wandering bards |
| II. Patinenkizkanakku | B. Tirai |
| III. Manimekalai | C. collection of poems |
| IV Pannar | D. didactic text |
| V Pulavar | E. Sattanar |
| | R. Avvayar |
- [1] I-A, II-B, III-C, IV-D, V-E [2] I-C, II-B, III-C, IV-A, V-F .
[3] I-C, II-D, III-E, IV-A, V-F [4] I-A, II-D, III-E, IV-F, V-B
[5] I-QII-BJII-QIV-A.V-F
115. Which of the following statements is wrong?
- [1] Blacksmiths, weavers and carpenters used to live in the Tamizagam during Sangam literature age.
 - [2] The extended family was their unit of production.
 - [3] War was a normal feature of the society, and was celebrated as a noble heroic act. The cult of war was propagated through the praise of the courage of warriors whose memorials, were made cult objects of worship.

- [4] Silappadikaram and Manimekalai, are contemporaneous with the heroic poems
[5] None of the above

116. According to the passage, which of the following statements are true about 'Pattupattu'?

- I. Is one category of anthology
II. Also called as ten idylls
III. love or affection are themes of pattupattu
IV. raid or plunder are themes of pattupattu
V. These are sung by pannars

Pick up the right option.

- [1] I, II, Hand IV are true
[2] I, U, IV and V are true
[3] I, III, I V and V are true
[4] All the statements are true
[5] None of the above

117. Which of the following kizkanakku texts find mention in the passage?

- I. Silppadikaram
II. Patinenkizkanakku
III. Talkappiyam
IV. Manimekalai

Pick up the right option.

- [1] Only I and II. [2] Only II and III [3] II, III and IV
[4] Only III and IV [5] None of the above

PASSAGE V

"All media are extensions of some human faculty - psychic or physical. The wheel is an extension of the foot - the book is an extension of the eye - clothing an extension of the skin. Media, by altering the environment, evoke in us unique ratios of sense perceptions. The extension of any other sense alters the way we think and act - the way we perceive the world. When these ratios change, men change," says Marshall McLuhan, in 1964, in his book - "Understanding Media." Today, Internet, especially that portion known as the World Wide Web, has the potential to change radically the way businesses interact with their customers. The Web frees customers from their, traditionally passive-role as receivers of marketing Communications, gives them much greater control over the Information search and acquisition process, and allows them to become active participants in the marketing process.

The Internet operationalizes a model of distributed computing that facilitates, interactive multimedia many-to-many communication. As such, the Internet supports-discussion groups, multi-player games and Communications systems such as Multi-User Displays (MUDs), Internet Relay Chat (IR3., file transfer, electronic mail, and global information access and retrieval systems (e.g.archie, gopher, and the World Wide We2.. The World Wide Web contains a set of specific examples of hypermedia computer mediated environments (CMEs). The Web, also referred to as WWW or W3, is an Internet-based global Information initiative begun by Tim Berners-Lee at the European Laboratory for Particle Physics in Geneva, Switzerland. First proposed in 1989 and released to the Internet community in 1991, the Web represents the "universe of network-accessible Information, an embodiment of human knowledge" in hypertext and multimedia form.

In 1992, Steuer proposed a communication model. In Steuer's model of mediated communication, interactivity is "...the extent to which users can participate in modifying the form and content of a mediated environment in real time". The "machine-interactivity" is interaction with the environment (medium), rather than interaction through the environment (medium).

The mediated model proposed by Steuer, suggested that the primary relationship is not between the sender and the receiver, but rather with the “mediated environment” with which they interact. Steuer calls his model a “telepresence view” of mediated communication, where presence is “the natural perception of an environment”. Following Steuer, when interacting with a computer-mediated environment, the consumer perceives two environments: 1) the physical environment in which he or she is present, and 2) the environment defined by the hypermedia CME. The strength of the experience of telepresence is a function of the extent to which one feels present in the hypermedia CME, rather than in one's immediate physical environment.

Hypermedia is a philosophy of representation and access of Information. Its conceptual basis is the model of the Information space as a graph whose nodes store Information, and whose areas represent semantic relationships. The Information stored in a true hypermedia system should encompass all media that current computers can process, including text, graphics, animation, digitized pictures, and sound. Hypermedia thus combines the elements of radio (audio), television (moving images), newspapers and magazines (text), and the computer (video display terminal) with hypertext links to form the basis for a unique computer-mediated environment.

Nearly fifty-nine years ago, Bush in 1945, proposed a hypertext-like system called, “Memex,” which would consist of “a device in which an individual stores all his books, records, and Communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility.” Nelson, in 1967, discussed hypertext in terms of a network of paths and associations, with an emphasis upon approximating the way the human brain connects information. Hypertext suggests the concept of non-sequential writing of information that allows the user to connect information, together by means of different paths or links. The information in a hypertext system is in the form of nodes and links. It is non-sequential and hence, it is a seamless sequence of content. Seamless sequence of ideas and content referred to the inherent characteristic of the hypertext, which allows a greater control over the information flow by the user.

Multimedia uses a computer to integrate and provide interactive access to both static (text, image and graphics) and dynamic (audio, full-motion video and animation) content. Hypermedia combines the node-and-link access of hypertext with multimedia content to create an environment that is at once more than the simple additive combination of the components.

“Hypermedia” is described as a Multimedia Hypertext while “Hypermedia CME” is defined as a dynamic distributed network, potentially global in scope, together with associated hardware and software for accessing the network, which allows consumers and firms to

- a) provide and interactively access hypermedia content (i.e., machine interactivity);
- b) communicate through the medium (person interactivity).

As computers and networking technology increasingly penetrate our daily lives, a study exploring consumer experiences becomes more and more important for at least two reasons. First, the information technology provides human beings with an unprecedented opportunity for distributed communication. indeed the growth of interactions on the Internet indicates that people are taking advantage of these opportunities. Communicating in a distributed environment itself generates some unique experiences. Second, human beings now live in an information-intensive world, which creates impacts on human beings' experiences. It is believed that there is an emerging need for an in-depth exploration of human beings' experiences in this “information age”. The Flow concept provides a basis for understanding consumer navigation behaviour (CNB) in online environments.

Although consumer researchers have explored the role of play in the consumption experience, it is believed that the concept of Flow in a hypermedia CME holds wider applicability and underlies many crucial components of the consumer's interaction with the firm and its offerings. Simply stated, Flow is the “process of optimal experience” preceded by a set of antecedent conditions necessary for the experience to be achieved and followed by a set of consequences that occurs as a result of the process.

Flow in hypermedia is linked to the characteristics of hypertext. As stated earlier, hypertext suggests the concept of non-sequential writing of information that allows the user to connect information together by means of different paths or links. The information in a hypertext system is in the form of nodes and links. Hence, hypertext is a seamless sequence of information flow that allows branches and multiple paths to be selected by the reader. In other words, hypertext allows control by the reader and provides the linked arrangement of the information being presented. When hypertext is linked with machine interactivity and telepresence, it results in "Flow".

Flow concept in a hypermedia CME is defined as the state occurring during network navigation, which is (1) characterized by a seamless sequence of responses (hypertext) facilitated by machine interactivity and strength of telepresence, (2) intrinsically enjoyable, (3) accompanied by a loss of self-consciousness, and (4) self-reinforcing. Two primary antecedents must be present in sufficiently motivated users of a hypermedia CME for the Flow experience to occur. Consumers must focus their attention on the interaction, narrowing their focus of awareness so that irrelevant perceptions and thoughts are filtered out, and they must perceive a balance between their skills and the challenges of the interaction. "Skills" refer to the knowledge base of the consumers while accessing the Web. "Challenges" refer to the Web sites' potential of holding the consumer glued to them and thus, maximizing eyeball-contacts and repeat consumption behaviour.

The key consequences of the Flow experience for consumers are increased learning, exploratory and participatory behaviours, positive subjective experiences, and a perceived sense of control over their interactions in the hypermedia CME. When in the Flow state, irrelevant thoughts and perceptions are screened out and the consumer focuses entirely on the interaction. The Flow experience involves a merging of actions and awareness with intense concentration that there is little attention left to consider anything else. A consumer's action in the Flow state is experienced as a "unified flowing from one moment to the next, in which he/she is in control of his/her actions, and there is a little distinction between self and environment, between stimulus and response, or between past, present and future", self-consciousness disappears, the consumer's sense of time becomes distorted, and the resulting state of mind is extremely gratifying.

Flow emerges as a concept in hypermedia CME having relationships with Web marketing, hypermedia and CNB. It supports hypertext development, distinguishes hypermedia from traditional media and interactive multimedia on the basis of telepresence, network navigation and machine interactivity; and leads to an immersion and extremely gratifying state, which is characterized by self-reinforcement and loss of self-consciousness. The Flow concept has important implications for Web marketers, designers and researchers.

By exploring Web users' Flow experience provoked by Web activities, it then becomes possible to categorize the factors contributing to the occurrence of Flow. The knowledge obtained from the present study provides some basis for further exploration of this topic, and will justify the juxtaposition of the Web and the Flow concept as a powerful, timely and fruitful area of inquiry for both marketers and psychologists.

118. How do you define "Flow" in hypermedia CMEs?

- [1] Flow is a multidisciplinary construct. During Flow, irrelevant thoughts and perceptions are screened out and the consumer focuses entirely on the interaction.
- [2] Flow is a combination of peak performance and peak experience, and it is characterized as Perfect and Imperfect Flow, having relationships with Web marketing, hypermedia and CNB.
- [3] Flow concept in a hypermedia CME is the state of playfulness occurring during network navigation, which is characterized by a seamless sequence of responses facilitated by machine interactivity and strength of telepresence, intrinsically enjoyable, accompanied by a loss of self-consciousness, and self-reinforcing.
- [4] Both A and B
- [5] All of A, B and C

119. What is the meaning of 'repeat consumption behaviour' in the above passage?
[1] the mediated perception of an environment in hypermedia CME'
[2] consuming a product again and again in mediated environments
[3] repeat visits to hypermedia CME
[4] All A, B and C
[5] None of the above
120. What is Hypermedia?
[1] It is a multimedia with features of audio, visual, graphics, text, images etc,
[2] It is a marriage of multimedia and hypertext.
[3] It is a marriage of multimedia and virtual reality.
[4] It is a 3-D environment with large text and graphics scattered all over,
[5] None of these.
121. Depending on the Flow concept literature as mentioned in the passage, what "High-Flow" segment and "Low-Flow" segment consumers?
[1] "High-Flow" segment consumers experience and achieve Flow during experiential activities while "low Flow" segment consumers achieve Flow during task-oriented activities.
[2] "High-Flow" segment consumers experience and achieve Flow during goal directed activities while "low Flow" segment consumers achieve Flow during task-oriented activities.
[3] "High-Flow" segment consumers experience and achieve Flow during academic activities while "low Flow" segment consumers achieve Flow during non academic activities.
[4] All A, B and C.
[5] None of these.
122. What is/are the factors on which Flow depends?
[1] Telepresence [2] Hypertext [3] Machine interactivity
[4] Both A and C [5] All A, B and C

Directions (Qs.123 to 126): Write the letter of the pair of words related to each other in the same way as the word in tile capitalized pair.

123. POLEVAULTING : DECATHLON
[1] goalpost : football [2] arena : bullfight [3] bull pen: baseball
[4] calf-roping: rodeo [5] rink: ice hockey
124. NONAGENARIAN : LONGEVITY
[1] truant: attendance [2] zealot: enthusiasm [3] spendthrift: foresight
[4] chatterbox: silence [5] child: experience
125. HYPOSENSITIZE : SENSITIVE
[1] enlighten: knowledgeable [2] congratulate; proud [3] liberate: free
[4] demote : import ant [5] educate : independent
126. ARSON : FELONY
[1] treason : misdemeanor [2] white lie : perjury [3] contraband: arrest
[4] spy : espionage [5] hydrogen: element

Directions (Qs. 127 to 130): Pick up the nearest correct meaning of the words given below.

127. MENAGE
[1] suffocation [2] system [3] law
[4] household [5] plate

128. VARIEGATED
 [1] set type [2] multi-coloured [3] different
 [4] rejected [5] solved
129. ERSATZ
 [1] pleasure [2] freshness [3] liveliness
 [4] glaze [5] imitation
130. PERSIFLAGE
 [1] banter [2] oppression [3] sarcasm
 [4] bigotry [5] smile

Directions(Qs. 131 to 134): Choose the most suitable antonym of the given word below.

131. CHAGRIN
 [1] tempt [2] ascetic [3] swollen
 [4] pleased [5] lively
132. PERFIDIOUS
 [1] loyal [2] treacherous [3] religious
 [4] humane [5] innocuous
133. ENNUI
 [1] sticky [2] activity [3] start
 [4] yearly [5] old
134. SANGUINE
 [1] bloody [2] thin [3] happy
 [4] bilious [5] gloomy

Directions (Qs. 135 to 138): In the following questions, each passage consists of six sentences. The first and the sixth sentences are given in the beginning. The middle four sentences in each item have been removed and jumbled up. These are labeled P, Q, R and S. You are required to find out the proper sequence of the four sentences from the alternatives 1, 2, 3, 4 and 5.

135. S1 : Over the centuries the face of the earth has become crowded with monuments-and memorials.
 S6 : We must have more space for building new things and developing open countryside.
 P : Films, pictures and even miniature models can be made of the relics for posterity interested in knowing about them.
 Q : Some people, however, argued that antiquity should be preserved for future generations.
 R : If they were all to be preserved, we will have very little space for other, more useful things.
 S : Personally, I do not agree with the contention. The proper sequence should be:
 [1] QRSP [2] QRP [3] RQSP
 [4] RQPS [5] None of the above
136. S1 : For some time Abraham Lincoln worked as a postmaster at New Salem
 S6 : By the time he was twenty-eight he became a full fledged lawyer
 P : At this time he began to study law.
 Q : He used to read the newspapers before he delivered them
 R : For this purpose, he used to borrow law books from lawyers who were his friends.
 S : He carried the letters and newspapers in his has for distribution
 The proper sequence should be:
 [1] PSQR [2] SQPR [3] QRSP
 [4] RQPS [5] None of the above

137. S1 : Albert Schweitzer is nearing the age of thirty
S6 : Schweitzer decided that he would become a doctor and go to the Belgian Congo.
P : At first he thought of caring for neglected children, beggars and discharged prisoners.
Q : It contained an article telling of the need for medical workers in the Belgian Congo.
R : He began thinking how he could best serve humanity.
S : One day he happened to pick up a missionary magazine.
The proper sequence should be:
[1] PSQR [2] PRSQ [3] RSQP
[4] RPSQ [5] None of the above
138. S1 : Ever since Greek times there have been two views as to the way of producing true beliefs, and two corresponding, views as to the best form of government.
S6 : Consequently they-are subjected to penalties.
P : Similarly the two forms of government are that of authority and that of discussion.
Q : Those who oppose these opinions are held to be foolish or wicked or both
R : The two ways of producing true beliefs are (i) the way of authority, and (ii) and way of discussion.
S : Where the way of authority is adopted as the method of producing true beliefs, certain opinions are regarded as wide and good. The proper sequence should be:
[1] PRQS [2] RPSQ [3] RSQP
[4] PSRQ [5] None of the above

Directions (Qs. 139 to 140): Fill the best word from the options following the questions.

139. During the freedom struggle, Jawaharlal Nehru was the _____ for most young Indians.
[1] Darling [2] Lodestar [3] Idealist
[4] Facsimile [5] None of the above
140. Sales representatives do not lead a normal family life because their job compels them to be _____.
[1] Awa [2] Itinerant [3] Immobile
[4] Commuters [5] None of the above

Directions (Qs. 141 to 143): Define the italicized words below with the help of the appropriate word in the context.

141. At the bell, the pugilists moved to the centre of the ring & touched gloves. Pugilists are _____
[1] Complacments [2] Charitables [3] Prize fighters
[4] Benefactors [5] None of the above
142. The firm is still in business. Its "Going out of Business" last year was just hype Hype means _____
[1] Placidity
[2] Exaggeration
[3] Complacency
[4] Deceptive marketing communication
[5] None of the above
143. Ann has not connected with the ball today & it would mortify her to strike out again in full view at his crowd. Mortify means _____
[1] Forgive [2] Humiliate [3] Flatter
[4] Sympathize [5] None of the above
144. The gas which is used in cold storage plants for refrigeration is known as
[1] Chlorine [2] CO₂ [3] Ammonia [4] Hydrogen

145. 'Zero Hour' in the Parliament refers to the time
[1] for lunch hour
[2] when the Parliament is in a special session
[3] when the President is going to address the session
[4] To ask unscheduled question
146. The Kalinga Prize is given for excellence in the field of
[1] Popularization of Science and Technology
[2] Literature
[3] Cinematography
[4] Sports and games
147. Press Note 18 is related to
[1] rights of companies making FDI in India
[2] making right to work a fundamental one
[3] barring foreign publications from working in India
[4] the rights of the Press in India
148. Which business magazine has been declared a super brand by the Super brands organization?
[1] Business India [2] Business World [3] Business Today [4] All of these
149. Doping most commonly involves the use of
[1] Amphetamines and steroids [2] Aspartame
[3] Amphetamines and dopamines [4] None of these
150. Who has written "A Double Life"?
[1] Gita Piramal [2] Alyque Padamsee [3] M S Oberoi [4] None of these
151. 'Jeff Bezos' is founder of
[1] Yahoo.com [2] Amazon.com [3] Altavista.com [4] Webcrawler.com
152. Which of the following States will benefit from the multipurpose Sardar Sarovar Project?
[1] Only Maharashtra and Gujarat [2] Only Gujarat and Madhya Pradesh
[3] Only Rajasthan, Gujarat and Maharashtra [4] All the states mentioned above.
153. The WTO was created as a result of two conferences.
[1] Uruguay Round, Marrakesh Conference [2] Uruguay Round, Maastricht Treaty
[3] Maastricht Treaty, Marrakesh Conference [4] Brettenwoods Conference, Uruguay Round
154. Which among the following is the latest nation created?
[1] East Timor [2] Switzerland [3] Nauru [4] Tuvalu
155. Which of the following is not a South American country?
[1] Argentina [2] Bolivia [3] Colombia [4] Mexico
156. The latest satellite launched by India is named
[1] METSAT [2] EDUSAT [3] CETSAT [4] COMSAT
157. Which company has emerged as the first company in the country to cross, the magical Rs. 1,00,000 crore annual turn over mark with a Rs. 1, 13,480 figure?
[1] Infosys [2] Reliance Petroleum [3] IOC [4] Bharat Petroleum

