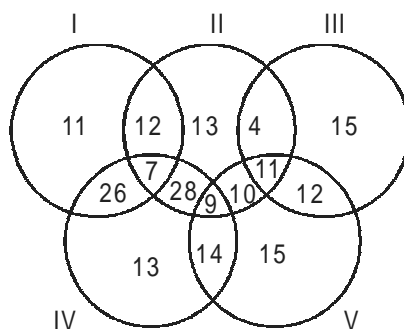


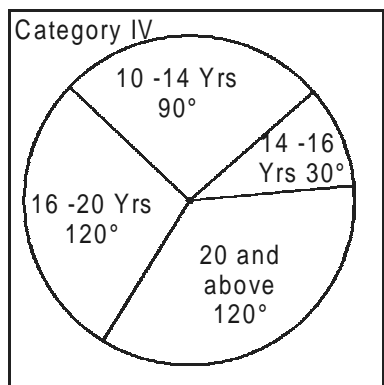
Section – I

Direction for Questions 1 to 4: Read the information given below and answer the questions that follow. The Venn diagram shown below represents the past-time habits of people of age 10 years and above in five different categories - smoking, drinking, playing golf, playing cards and chewing tobacco. The numbers given in each region represent the number of people in that category. For example, 28 represents the number of people who have the following past-time habits - drinking and playing cards.



- Category I → People who smoke
 Category II → People who drink
 Category III → People who play golf
 Category IV → People who play cards
 Category V → People who chew tobacco

The graph below provides additional information on further age group distribution for only category IV, which hold true for all the included regions individual as well (that is, common regions out of which at least one category is IV)

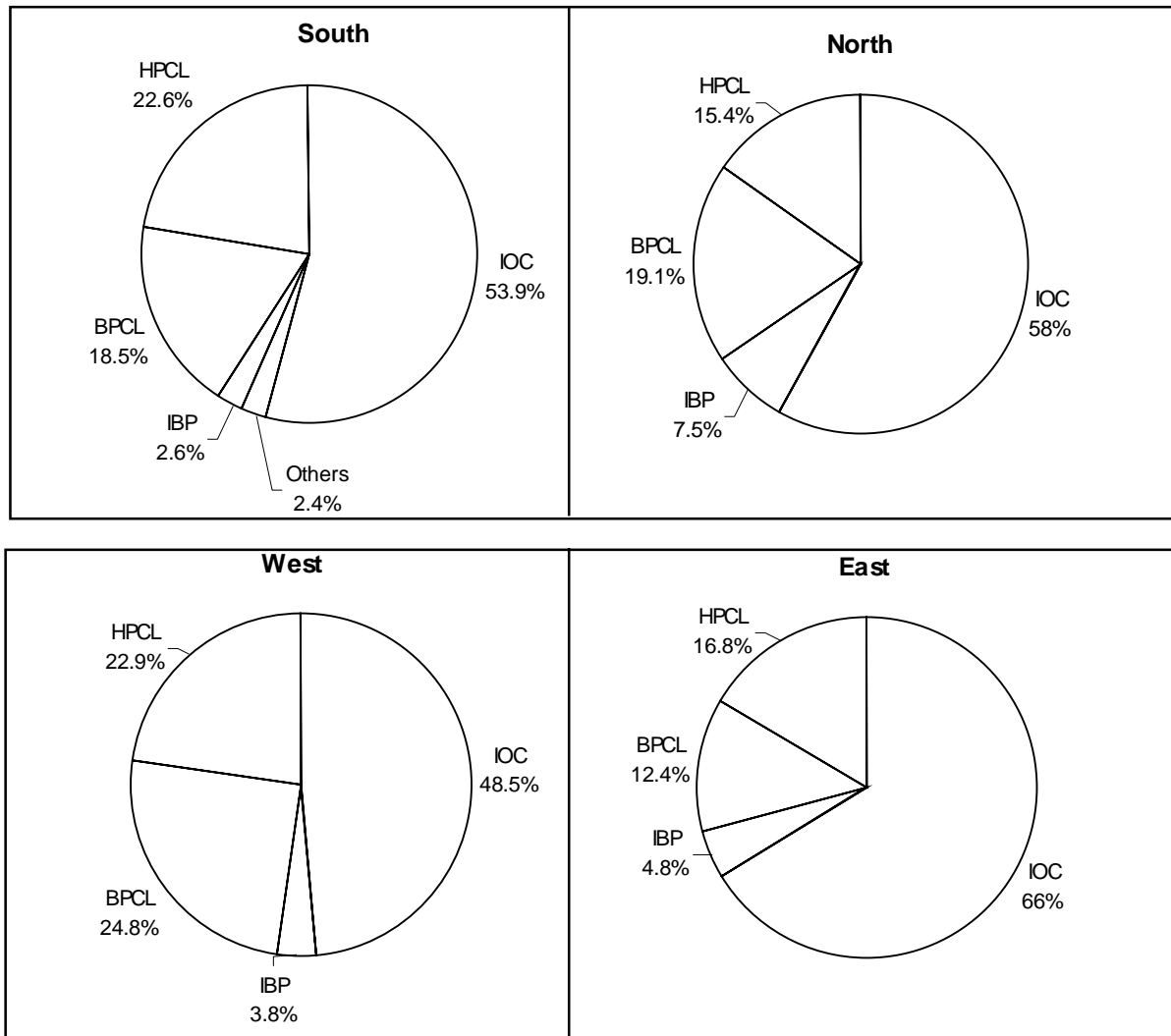


All fractions can be rounded off to the nearest natural number.

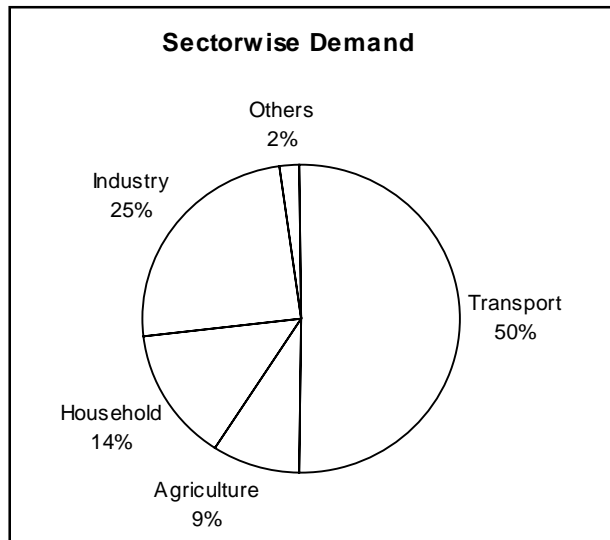
- How many people who play cards only or play golf only, belong to the age group 16-20 years ?
 a. 28 b. 30 c. 19 d. Data Insufficient
- How many people who smoke and play cards, belong to the age group 14-16 years ?
 a. 3 b. 33 c. 2 d. Data Insufficient
- How many people who play cards and chew tobacco, belong to the age group 10-14 years ?
 a. 4 b. 6 c. 23 d. Data Insufficient

4. If the age distribution of Category IV applies to all the five categories, then the total number of people (having these five past-time habits), who belong to the age group 20 and above, is
- a. 54 b. 32 c. 67 d. 49

Direction for Questions 5 to 9 : Refer to the graphs given below and answer the questions that follow. The following pie-charts show the market share break-up (by sales value) of the major oil producing companies in India across the four regions of the country in 1995. Except for the south region, all regions have only 4 oil producing companies - IOC, BPCL, HPCL and IBP. Among the regions, south accounts for 23% of the total sales, north accounts for 28% of the total sales, west accounts for 33% of the total sales and east accounts for 16% of the total sales. The total oil sales in India by all companies in 1995 was \$600 billion (where, \$1 billion = Rs. 3300 crores).



The following chart shows the sectorwise demand (by weight, kgs) for oil in 1995. The total demand for oil in 1995 was 100,000 crore kgs for the entire country.



5. If total sales (in kg), all over India, by the given oil companies in 1995 is 80 % of the total demand that year, the price of oil (on an average) in 1995 must have been
 a. Rs. 18.20/kg b. Rs. 13.60/ kg c. Rs. 15.84/ kg d. None of these
6. It can be inferred from the graph that :
 a. IOC is the largest oil company in India .
 b. IBP is the smallest oil company in India.
 c. The greatest consumption of oil is by the 'transport' sector.
 d. None of the above
7. In 1995, the sales of HPCL in West region exceeded the sales of BPCL in North region by
 a. Rs. 3,397 crores b. Rs. 43,725 crores c. Rs. 5,479 crores d. \$ 4.3 billion
8. The 'agriculture' sector demand in 1995 exceeded twenty times the market share of others (in Kg, taking the same percentage numbers as given for sales in the pie-charts) in South region by (Note: data from the previous questions may be used)
 a. 168 crore kgs b. 120 lakh kgs c. 120 million kgs d. 8,558 crore kgs
9. The total all-India sales of IOC in 1995 was approximately :
 a. \$ 300 billion b. \$ 310 billion c. \$ 331.2 billion d. \$ 340.1 billion

Direction for Questions 10 to 14 : Read the data given below and answer the questions that follow.
 A market survey was conducted to ascertain brand switching parameters among toothpaste users. The initial and the current usage of the 4 brands of toothpaste - Close Up, Cibaca, Pepsodent and Colgate were checked out and presented as follows :

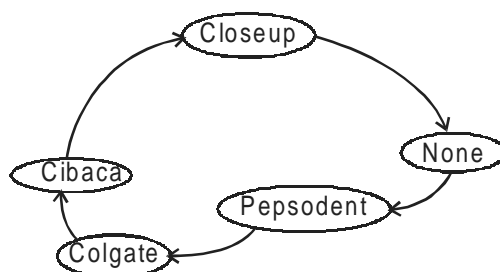
	Current	Initial
Close up	80	74
Cibaca	26	30
Pepsodent	72	10
Colgate	49	60
No toothpaste	25	16
Total	252	190

The people surveyed were known to use only one brand of toothpaste per person.

10. In the sample surveyed, what is the increase in the number of people using the brand Close Up as percentage of the total current sample population?
 a. 6% b. 2.38% c. -4.5% d. -7%
11. If the total number of people using any of these 4 brands of toothpaste is defined as the size of the toothpaste market, what has been the increase in the size of the toothpaste market, based on the data obtained in the survey?
 a. 30.45 % b. 15.55 % c. 20.6 % d. 33.33 %

Additional directions for Questions 12 to 14 : Read the following information and answer the questions that follow.

The diagram given below represents the brand switching pattern from one brand to another for the sample surveyed. For example, people have switched from Colgate to Cibaca only and also those users of Cibaca who have switched brands have switched only to Close Up. This diagram does not include the additional 62 people included in the sample survey and represent only for initial 190 people.



12. Which toothpaste brand was most likely chosen by the new people included in the current sample survey?
 a. Colgate b. Cibaca c. Pepsodent d. Close Up
13. If, in the sample surveyed, 10 people switched from Pepsodent to Colgate, how many people switched from Cibaca to Close Up?
 a. 21 b. 25 c. 19 d. Data insufficient
14. Using the data from question 13, what is the ratio of the number of people who switched from Pepsodent to Colgate and those who switched from None to Pepsodent?
 a. 0.5 b. 2.1 c. 0.4 d. 1.0

Direction for Questions 15 to 18 : Read the passages given below and answer the questions that follow.

Five Universities Ambrosia, Euphoria, Inferia, Ostentia and Utopia select candidates for their M B A programmes on basis J A T (Joint Admission Test) conducted by an educational consultancy service. Selection to the interview prior to admission into any of the Universities is done on the basis of:

- (a) Academic aggregate marks of the candidate.
- (b) Performance in J A T
- (c) Performance in a common group discussion conducted by the consultancy service.

The J A T has a total of 200 marks. G D performance is rated in a scale of 80 points. The selection standards exercised by five Universities are given in Table – 1. The result of J A T in a particular batch of candidates are given in Table – 2.

University	Cut off marks in		
	Academics (1000)	JAT (200)	GD (80)
Ambrosia	500	125	40
Euphoria	550	150	60
Inferia	400	75	30
Ostentia	600	125	60
Utopia	800	180	80

In written Test (JAT)	In GD					
	Below 20	20–29	30–39	40–59	60 and above	Total
Below 50	122	200	254	280	236	1092
50–74	138	264	348	389	281	1420
75–79	202	259	426	486	461	1934
100–124	92	210	110	180	108	700
125–149	92	198	100	160	104	654
150 and above	163	247	298	258	109	1075
Total	809	1478	1536	1753	1299	6875

15. At least what percentage of those scoring 75% or above in the J A T will fail to make it to the interview in Ostentia University ?
a. 90% b. 87% c. 85% d. Cannot be determined
16. 70 % of those who clear the JAT in the highest marks category (150 and above) in second table, have over 80 % marks in their academic grades and are also in the highest marks category for GD. What percentage of such students will qualify for the interview at Utopia ?
a. 14% b. 10% c. Not less than 10% d. Cannot be determined
17. If 20 % of those in the highest marks category for GD obtain 100 % marks in GD and 10 % of those who are in the highest marks category for the JAT, score 180 and above in JAT, how many will be eligible for the interview in the Utopia University?
a. 260 b. 107 c. 367 d. Cannot be determined
18. The Ostentia University wanted to admit 30 candidates without altering its requirement standards. All candidates who qualified the JAT and GD cut-off requirements for this University, met the required academic cut-off of that University, out of which 90 % secured and accepted admission into Universities another than Ostentia. What percentage of seats went vacant in Ostentia ?
a. 5 to 10 b. 20 to 25 c. 26 to 30 d. 10 to 12

Direction for the Questions 19 to 22: Read the following information and answer the questions that follow.

Five of the integers from 1 to 16 have been placed in the various squares of a 4 × 4 grid as shown.

		3	
14			
	6		12
			7

The remaining integers from 1 to 16 are to be placed in the remaining squares of the grid, subject to the following conditions:

1. No even number into placed in the first or fourth row.
2. No multiple of 5 is to be placed in the first and fourth column.
3. The sum of the integers in one of the diagonals is 18.
4. No square or cube of an integer is to be placed in third column.
5. The sum of the integers in the column which contains 10, should not be less than sum of integers in the column containing 1.
6. No more than one square of an integer is to be placed in any diagonal.
7. The sum of the integers in the first row is equal to 30.

Based on the above information, answer the questions below by identifying the integers to be placed in each row, where the numbers in the options indicate their position in the row from left to right (excluding the integers already shown in the grid)

19. The integers which are to be placed in the remaining squares of the first row are
a. 5, 9, 13 b. 1, 15, 11 c. 11, 15, 9 d. 5, 13, 1
20. The integers which are to be placed in the remaining squares of the second row are
a. 2, 4, 10, b. 2, 8, 10 c. 4, 10, 16 d. 8, 10, 16
21. The integers which are to be placed in the remaining squares of the third row are
a. 2, 8 b. 4, 2 c. 2, 16 d. 4, 10
22. The integers which are to be placed in the remaining squares of the fourth row are
a. 15, 11, 1 b. 1, 9, 13 c. 9, 5, 13 d. 5, 13, 11

Direction for Questions 23 to 27: On 1st August, 2004, a survey was conducted in a restaurant regarding flow of customer, type of customer, collection of money at the counter. The results are compiled in the table below.

Time of the day	No. of single customers	No. of customers in group	Average bill amount for a customer or a group of customer (Rs.)		No. of bills per time interval
			When single	When in group	
8 am – 10 am	210	80	6	5.2	230
10 am –12 noon	120	50	4.8	4.3	130
12 noon – 2 pm	50	28	4	4	57
2 pm - 4pm	60	30	4.2	3.9	70
4 pm – 6 pm	180	100	5.8	5.5	200
6 pm – 8 pm	130	72	6.1	6	154

Only one bill is issued per single customer or per customer group. Group here means more than one customer at one time. This represents a typical day's scenario and all working days of the month will show the same data on each day.

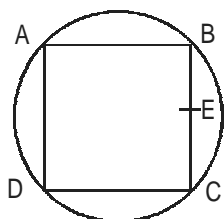
23. What is the total number of groups of customers between 8 am and 12 noon in one day?
a. 30 b. 25 c. 20 d. 28

24. The average number of customers in a group is
 a. 2 b. 5 c. 4 d. 6
25. The average bill amount spend by customer in a group is approximately _____ times that spent by a customer when single ?
 a. 0.9 b. 0.5 c. 1.2 d. 0.7
26. During which 2-hour interval during the day is the collection amount maximum ?
 a. 8 am – 10 am b. 4 pm – 6 pm c. 2 pm – 4 pm d. 6 pm – 8 pm
27. If restaurant makes a profit of 5 % on the selling price of each item and is open 25 days in the month of August, what is the approximate profit amount in August?
 a. Rs. 5000 b. Rs. 8000 c. Rs. 6000 d. Rs. 7500

Directions for questions 28 to 37: Each question consists of a question and two statements, I and II.

Choose

- a. if one of the two statements (I or II) alone is sufficient to answer the question, but cannot be answered by using the other statement alone.
 b. if each statement alone is sufficient to answer the question asked.
 c. if I and II together are sufficient to answer the question but neither statement alone is sufficient.
 d. if even I and II together are not sufficient to answer the question.
28. In the following figure, the vertices of the parallelogram ABCD lie on the circumference of a circle. What is the ratio of length of AC to length of AE, if the radius of the circle is 1 cm?



- I. Quadrilateral ABCD is a rhombus.
 II. The ratio of length of BE to the length of AB is 1 : 2.
29. $y = ax^2 + bx + c$. If a graph of y is plotted with the values of x on the X axis and the value of y on the Y axis, at how many points does the graph cut the X-axis?
 I. The point (4, -5) lies on the graph.
 II. $\frac{a}{b^2 + c^2} > 0$, where $b^2 + c^2$ is not equal to zero.
30. What is the numerical value of $\frac{a - 2c}{b - 2d}$?
 I. $a = 2 \times c$
 II. $\frac{a}{c} = \frac{b}{d} = \frac{1}{2}$

31. Amol goes to his office from home usually at a speed of s and reaches office on time. What is the value of s in kmph?
- I. If Amol leaves his home at same time as usual but goes to his office at a speed of $\frac{3}{4}s$, he reaches his office 4 minutes late.
- II. If Amol leaves his home at same time as usual but goes to his office at a speed of $\frac{4}{3}s$, he reaches his office 3 minutes early.
32. A game is played between two intelligent students, A and B. The student who starts has to pick out one folded chit out of eight chits each with one number between 1 to 8 (both inclusive) and then the other student can speak out any number by adding any natural number 1 to 8 to the number picked last. The students continue speaking out numbers in this manner by adding 1 to 8 to the number last spoken. The student who speaks 100 first wins the game. Who wins the game?
- I. A starts the game and picks chit with number 1.
- II. B speaks second and speaks 10.
33. Books numbered 1, 2, 3 and 4 are placed in racks 1, 2, 3 and 4 not in that order such that there is one book in each rack, and every even numbered book is in an odd numbered rack. What is the exact way in which books are placed?
- I. Rack numbered 3 has book 2.
- II. Rack numbered 2 has book 3.
34. How much cardboard will it take to make an open cubical box with no top?
- I. The area of the bottom of the box is 4 square feet.
- II. The volume of the box is 8 cubic feet.
35. If ' $*$ ' represents one of the operation '+' addition, '-' subtraction and ' \times ' multiplication, is $a^3 * (b^3 - c^3) = (a^3 * b^3) - c^3$ for all positive integers a , b and c ?
- I. $a^2 * b^2 = -(b^2 * a^2)$
- II. $a * b = b * a$
36. If $x + y + z > 0$, is $z > 1$?
- I. $z > x + y + 1$
- II. $x + y + 1 < 0$
37. Is X greater than 2? (You may assume Y is not equal to zero).
- I. $\left(\frac{X}{Y}\right)$ is greater than 2.
- II. $\left(\frac{1}{Y}\right)$ is less than 1.

Direction for questions 38 to 41: Read the information given below and answer the questions that follow.

CIA always sends messages in a coded format. The code is based on the relative positioning of English alphabets. Position of A is taken by another letter which is a few places away from A and the position of B will be taken by a letter which is exactly the same number of places away from B as the letter replacing A was from A and so on. Of course, the code is case sensitive. Even the solution key to break the codes in order to decipher the messages is in the form of paragraph and the solution key is hidden somewhere in the paragraph. On 22nd of December, 2020 CIA released a solution key in form of paragraph which was "The places by which the alphabets have moved can be found by reading the following equalities (original word = coded word):

BOIXNG = SONATH, BOCCER = SOFFERS, TOPPED = KOSSTE, INDIAN = DHGLNO

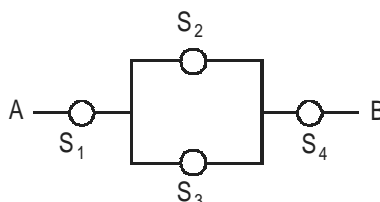
In the above equalities only one letter in the left-hand side (LHS) and the corresponding letter in the right-hand side (RHS) gives the relative positioning of letters in the solution key. For the correct solution key, it will satisfy all four equalities".

38. The word 'Water' in CIA coded form will be written as
a. xhufs b. Vzsdq c. vzs dq d. Xbufs
39. The word 'EnCYcloPaeDia' will be coded by CIA as
a. FoDZdmPQBfEjb b. FoDZdmPQBfEjb c. FoDZdmpQbfEjb d. FoDZdmpQbFEjb
40. The word 'chintu' after coding becomes a word whose letters are juggled and various words are formed. Which among the following CANNOT be one of the words?
a. dijouv b. douijv c. oiurdj d. uoivdj
41. A coded word 'DIBNJZB' was received from CIA. What would be the decoded word?
a. EJCOKAC b. CHAMIYA c. BGZLHXZ d. None of these

Direction for questions 42 to 45: Read the information given below and answer the questions that follow. Sunil Chandra runs a bakery manufacturing bread pastries, biscuits, dinner rolls and buns. He has devised a method wherein he makes a mixture of water, flour and sugar which he called 'supermix'. By varying the proportion of ingredients in it, he can generate various products. Everyday he needs 30 m³ of supermix to manufacture bread, 28 m³ to make biscuits, 51 m³ for pastries, 72 m³ for dinner rolls and 38 m³ for buns. Supermix for bread has 1 part sugar, 4 parts water and 5 parts flour by volume. Similarly the supermix for biscuits is 4 parts sugar, 5 parts water and 5 parts flour. The pastry supermix is 6 parts flour, 7 parts sugar and 4 parts water. Dinner rolls have sugar, water and flour mixed in proportion 7 : 7 : 10 and the buns have these in the proportion 1 : 8 : 10. He uses only two kinds of flour for his manufacturing purposes — Captain cook and Trupti. 40% of the flour used in the bread is Captain Cook, 55% flour in the biscuits is Trupti, 45% flour in the pastries is Captain cook, the dinner rolls use 75% Captain cook flour and the buns are made completely out of Trupti flour.

42. What is the total daily consumption of Captain cook flour?
a. 51.9 m³ b. 41.1 m³ c. 93 m³ d. None of these
43. What percentage of total supermix for the day is used for pastries?
a. 23% b. 33% c. 43% d. 53%
44. The ratio of volume of Captain cook flour to that of Trupti flour consumed daily is:
a. 0.60 b. 0.70 c. 0.80 d. 0.90

45. On the basis of customer survey, Chandra decides to increase the sugar content in the pastries by 100% and reduce the flour content by two thirds and water content by $\frac{3}{4}$. What will now be the total volume of the daily consumption of sugar and flour respectively in m^3 ?
 a. 76 and 81 b. 81 and 76 c. 93 and 93 d. 110 and 62
46. In the given figure, an electric circuit is fitted with 4 switches, S_1 , S_2 , S_3 and S_4 . A current flows in a circuit only when all the switches on any path are in 'ON' position. When will the current flow in the given circuit?



(A switch can be in either of the two positions – ON or OFF)

Condition 1: When S_1 is ON and S_2 is ON. Other switches are OFF.

Condition 2: When both S_1 and S_4 are ON. Other switches are OFF.

Condition 3: When S_3 and S_4 are ON. Other switches are off.

Condition 4: There will be no current flow in the given circuit.

- a. Condition 1 b. Condition 2 c. Condition 3 d. Condition 4

Direction for questions 47 to 50: Read the passage given below and answer the questions that follow:

There were 6 gentlemen who were out at Megacity Shopping Mall. Each one of them bought one item only. The 6 gentlemen are – Mr. Gupta, Mr. Pandey, Mr. Sharma, Mr. Chowbey, Mr. Haathi, Mr. Handa. The items bought (not necessarily in the order) were – Dress, Sweater, Dresser, Telephone, Tires, Bicycle. The original prices of these items (not necessarily in the order) was – Rs. 200, Rs. 1500, Rs. 300, Rs. 2000, Rs. 900 and Rs. 1200 and the prices paid (after various discounts) were – Rs. 800, Rs. 600, Rs. 1200, Rs. 1000, Rs. 75, Rs. 50. The following information is available to us:

1. Mr. Gupta found a clothing item.
2. The bicycle was bought at 50% off the buyer name starts with H.
3. Mr. Chowbey bought the item priced at Rs. 1500 for $\frac{4}{5}$ th of the amount.
4. The tires set was sold for Rs. 100 less than the asking price.
5. The item that was sold for Rs. 50 was an article of clothing.
6. Mr. Pandey spent Rs. 400 less than Mr. Chowbey.
7. Mr. Haathi paid for the dress with a Rs. 100 note (value equal to 50% the original price) and received Rs. 25 in change.
8. Mr. Gupta spent less for the item, than Mr. Sharma, who spent less than Mr. Pandey.
9. The item originally priced the highest did not sell for the highest price. Nor did the lowest priced item sell for the lowest amount.
10. The paid price for telephone was more than the dresser.

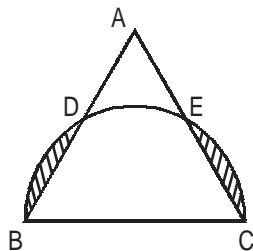
47. Who bought the dresser?
 a. Mr. Gupta b. Mr. Pandey c. Mr. Sharma d. Mr. Handa

48. Who paid the highest price?
a. Mr. Sharma b. Mr. Handa c. Mr. Haathi d. Mr. Chowbey
49. What did Mr. Handa buy?
a. The dresser b. The sweater c. The tires d. The bicycle
50. What was the percentage discount on the highest original price item?
a. 70% b. 50% c. 25% d. 75%

Section – II

51. S_1 and S_2 are two sets of parallel lines. The number of lines in S_1 is greater than the number of lines in S_2 . They intersect at 12 points. The number of parallelograms that S_1 and S_2 may form is
a. 12 or 6 b. 8 or 4 c. 18 d. 18 or 15
52. If $3^p = 4^q = 12^r$, then $(p + q) r$ is equal to
a. pq b. qr c. pr d. None of these
53. An army code consists of 4 letters, the first two of which are numbers and the last two are alphabets. Find the total number of codes that can be generated.
a. 84656 b. 60840 c. 56346 d. 67600
54. When the air-conditioner is on, a typist can type X pages per hour. However, when the air-conditioner is off, she can type at 65 % of the earlier efficiency (when the air-conditioner is on). How many hours would she take to type out 575 pages when the air-conditioner is off?
a. $375.4 X$ b. $884.6 X^{-1}$ c. $36.5 X$ d. $454.3 X^{-1}$
55. Value of the following summation $\frac{1}{\log_2 x} + \frac{1}{\log_3 x} + \dots + \frac{1}{\log_{43} x}$ is equal to
a. $\frac{1}{\log_e x}$ b. $\frac{1}{e}$ c. $\frac{1}{\log_{(43!)} x}$ d. $\frac{43!}{\log_x e}$
56. The perimeter of an isosceles triangle is A cm and each of the two equal sides is B cm longer than the third unequal side. Which of the following is the length of the equal sides?
a. $\frac{(A - B)}{3}$ b. $A + \frac{A}{B}$ c. $\frac{(A + B)}{3}$ d. $\frac{A}{3} + B$
57. In an automated plant assembly line, the rate of rejection of components was 10% on July 1st and 6% on July 2nd. The combined rate of rejection for the two days was 9%. The ratio of production volumes on July 1st and on July 2nd is
a. 2 : 1 b. 3 : 2 c. 3 : 1 d. 2 : 5
58. There are nine distinct numbers of which five numbers are positive and four numbers are negative. Three numbers are chosen at random and the product of these numbers is found. How many of these products are positive?
a. 48 b. 300 c. 40 d. 90
59. ABCDEF is a regular hexagon of side a. P is a point inside the hexagon. If PG, PH, PI, PJ, PK, PL are drawn perpendicular to the sides AB, BC, CD, DE, EF, FA, respectively, then the value of $PG + PH + PI + PJ + PK + PL$ is equal to
a. $6\sqrt{3} a$ b. $3\sqrt{3} a$ c. 3a d. None of these

60. $\triangle ABC$ is an equilateral triangle of side 14 cm. A semi circle on BC as diameter is drawn to meet AB at D, and AC at E. Find the area of the shaded region.



- a. $49\left(\frac{\pi}{2} - \sqrt{3}\right) \text{ cm}^2$ b. $49\left(\frac{\pi}{3} - \frac{\sqrt{3}}{2}\right) \text{ cm}^2$ c. 49 cm^2 d. None of these
61. Let a , b and c be the sides of a triangle ABC . Given $(a + b + c)(b + c - a) = kbc$, then k will lie between.
- a. -1 and 1 b. -4 and 4 c. 0 and 4 d. 4 and 6
62. Find the possible coordinates of the vertices of a triangle if the coordinates of the centroid are $X = \frac{(7+3-5)}{12}$ and $Y = \frac{(1+9-8)}{6}$
- a. $\left(\frac{7}{3}, 1\right), \left(1, \frac{9}{3}\right), \left(-\frac{5}{3}, -\frac{8}{3}\right)$ b. $(7, 1), (3, 9), (-5, -8)$
c. $\left(\frac{7}{4}, \frac{1}{2}\right), \left(\frac{3}{4}, \frac{9}{2}\right), \left(-\frac{5}{4}, -\frac{8}{2}\right)$ d. $\left(\frac{7}{4}, \frac{1}{2}\right), \left(\frac{3}{4}, \frac{9}{2}\right), \left(-5, -\frac{8}{2}\right)$
63. The product of two real numbers is 1. Therefore their sum is
- a. > 2 b. ≥ 2 c. < -2 d. ≥ 2 or ≤ -2
64. If $(x, y, z) \in \mathbb{R}$ and $x \neq 0$, $y \neq 0$ and $z \neq 0$, then which of the following statements is necessarily true?
- I. If $x > y$ then $\frac{1}{x} < \frac{1}{y}$
II. If $x > y$ and $z > 0$ then $\frac{x}{z} > \frac{y}{z}$
- a. Only statement I b. Only statement II
c. Both the statements I and II d. Neither of the statements I, II
65. If the integers m and n are chosen at random from integers 1 to 100 with replacement, then the probability that a number of the form $7^m + 7^n$ is divisible by 5 equals
- a. $\frac{1}{4}$ b. $\frac{1}{7}$ c. $\frac{1}{8}$ d. $\frac{1}{49}$

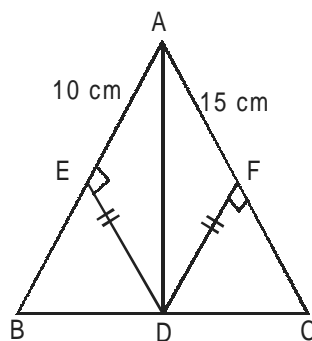
66. The probabilities that a student pass in Mathematics, Physics and Chemistry are m, p, c respectively. Of these subjects the student has a 75 % chance of passing in at least one, a 50% chance of passing in at least two and 40 % chance of passing in exactly two. Which of the following relations are true ?
- a. $p + m + c = \frac{19}{20}$ b. $p + m + c = \frac{27}{20}$ c. $pmc = \frac{1}{10}$ d. $pmc = \frac{1}{4}$
67. If 16 oranges are distributed among 4 children such that each gets at least 3 oranges, the number of ways of distributing them is
- a. 30 b. 210 c. 15 d. 35
68. When $((32)^{32})^{32}$ is divided by 7, the remainder is
- a. 1 b. 2 c. 4 d. 5
69. $f(x) = \frac{ax + d}{cx + b}$, $x \neq -\frac{b}{c}$ and $f[f(x)] = x$ for all real values of x . If c, d are positive real numbers which of the following conditions is true?
- a. $cx^2 + x(b - c) - d = 0$ b. $a + b = 0$
c. at least one of (a) and (b) d. $c + d = 0$
70. The number of solutions for the equation in $\log_e x + x - 1 = 0$ is
- a. 1 b. 2 c. 4 d. None of the above
71. The sum of the first 100 common terms of the two series 17, 21, 25 ... and 16, 21, 26 ... is
- a. 101100 b. 101010 c. 46650 d. None of these
72. If p, q and r are distinct numbers in geometric progression, then $\frac{q+p}{q-p} + \frac{q+r}{q-r}$ is equal to
- a. 1 b. 3 c. 2 d. 0
73. In a heptagon not more than two diagonals intersect at any point other than the vertices, then the number of points of intersection of the diagonals is (excluding the vertices of this heptagon)
- a. 35 b. 70 c. 49 d. 91
74. Four students of class X, five students of class XI and six students of class XII sit in a row. The number of ways they can sit in a row, so that students belonging to the same class are together is
- a. $3! 4! 5! 6!$ b. $3. 4! 5! 6!$ c. $4! 5! 6!$ d. $\frac{15!}{4! 5! 6!}$
75. A positive integer N is selected such that $100 < N < 200$. The probability that it is divisible neither by 4 nor by 7 is
- a. $\frac{34}{99}$ b. $\frac{65}{99}$ c. $\frac{31}{50}$ d. $\frac{17}{50}$

76. If a, b, c are the sides of a triangle, then $\frac{a^2 + b^2}{c^2} > k$, where k is
- a. 1 b. 2 c. $\frac{1}{2}$ d. $\frac{1}{3}$
77. If p, q, r and s are distinct integers in the range 10 to 15 (both inclusive), the greatest value of $(p + q)(r + s)$ is
- a. 750 b. 731 c. 729 d. 700
78. If $f(x) = \sum_{n=0}^{\infty} x^n = a, -1 < x < 1$ then $f(-x)$ is
- a. $\frac{a}{2a+1}$ b. a c. $\frac{a}{2a-1}$ d. None of the above
79. If a, b , and c are real numbers such that no two are equal. If $a + \frac{1}{b} = b + \frac{1}{c} = c + \frac{1}{a}$ then $a \times b \times c =$
- a. +1 b. -1 c. ± 1 d. 2
80. If $a, b, c, d > 0$ and $a + b + c + d = 1$, then $\sqrt{4a+1} + \sqrt{4b+1} + \sqrt{4c+1} + \sqrt{4d+1} \leq k$. What is the minimum value of k for this inequality to be universally true?
- a. 6 b. 5 c. 4 d. 8
81. A man has 7 relatives, 4 of them are ladies and 3 gentlemen. His wife has also 7 relatives, 3 of them are ladies and 4 gentlemen. In how many ways can they invite a dinner party of 3 ladies and 3 gentlemen so that there are 3 of the man's relatives and 3 of the wife's relatives?
- a. 485 b. 497 c. 625 d. None of above
82. $[x]$ stands for the greatest integer less than or equal to x . $f(x) = 2[x] + 3$ and $g(x) = 2[x - 2] + 5$. Then for all integer values of x , $f(x) + g(x)$ is equal to
- a. $4(x + 1)$ b. $2(x - 1)$ c. $4x + 1$ d. None of the above
83. A bunch of keys containing 10 keys of which only one key can open a door. A key is chosen at random. If at each trial the wrong key is discarded, the probability that the door is opened on the fifth trial is
- a. $\frac{1}{10}$ b. $\frac{2}{10}$ c. $\frac{3}{10}$ d. None of the above
84. The coefficient x^{28} in the expansion of $(2 - x^3 + x^6)^{30}$ is
- a. 0 b. 1 c. 14 d. 28
85. In how many ways can we select a pair of co-prime numbers a and b (not necessarily distinct) from $\{1, 2, 3, 4, 5, 6\}$? (a, b being different from (b, a)).
- a. 23 b. 24 c. 25 d. 26

86. If a, b, c, d, e and f are non negative real numbers such that $a + b + c + d + e + f = 1$, then the maximum value of $ab + bc + cd + de + ef$ is
- a. $\frac{1}{6}$ b. 1 c. 6 d. $\frac{1}{4}$
87. If $\max [a, b, c]$ = largest of a, b, c and $\min [a, b, c]$ = smallest of a, b, c , then $\max [\min [3, 2, 5], \max [-3, -5, -1], 3] =$
- a. 2 b. 1 c. -1 d. 3
88. Two guys A and B are walking down an escalator in the direction of the motion of the escalator. A takes two steps on the same time when B takes one step. When A covers 60 steps he gets out of the escalator while B takes 40 steps to get out of the escalator. Find the number of steps in the escalator when it is stationary?
- a. 80 b. 90 c. 120 d. 150
89. If all the binary numbers from 100 to 1000000 are written, find the total number of 1s in it?
- a. 128 b. 129 c. 189 d. 65

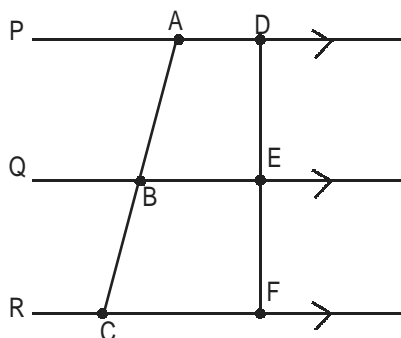
Directions for questions 90 and 91: A starts from home for his office. He travels downhill, then on flat ground and then uphill to reach his office. It takes him 3 hrs to reach the office. On the way back home A takes 3 hrs 10 min to reach home along the same route. The speeds downhill is 60 km/hr, on flat ground is 48 km/hr and uphill is 40 km/hr.

90. What is the distance between A's home and his office?
- a. 144 km b. 148 km c. 154 km d. Data insufficient
91. By what distance should his office be shifted so that the time taken to go to the office is same as time taken to reach home from the office?
- a. 20 km b. 30 km c. 40 km d. Data insufficient.
92. What is the sum of all numbers from 1 to 200, which are divisible by at least one of 5, 15, 45 and 75?
- a. 8200 b. 4100 c. 2000 d. None of these
93. Two runners P and Q start from A, P along AB in the anticlockwise direction and Q along AC in the clockwise direction. They meet at a point D. What is the ratio of the speeds of P and Q in that order? $AB = 10$ cm, $AC = 15$ cm and $DE = DF$.



- a. 3 : 2 b. 2 : 3 c. 3 : 4 d. Data insufficient

94. What is the area enclosed by the graphs $y = |x + a|$ and $y = 5$?
 a. 25 sq. units b. 50 sq. units c. 75 sq. units d. Data insufficient.
95. What are the common roots of the expressions
 $y = x^3 + x^2 + 4x + 5$ and $y = x^3 + 9x - 1$?
 a. 3 b. 2 c. Both 3 and 2 d. No common root exists
96. P, Q, R are three parallel lines. AC and DF are transversals. If $AB : BC = 2 : 1$. Find the ratio of DE : EF.



- a. 2 : 1 b. 4 : 1 c. None of these d. Data insufficient

Directions for questions 97 and 98: abcd is a 4-digit number in base of 7 such that $2(abcd) = bcda$ ($a, b \neq 0$)

97. Find the value of a.
 a. 1 b. 2 c. 3 d. Data insufficient
98. Find the value of $abcd \times 3$ in base 7 system.
 a. 3642 b. 25134 c. 11253 d. Data insufficient
99. If the roots of $\frac{1}{x+a} + \frac{1}{x+b} = \frac{1}{c}$ are equal in magnitude but opposite in sign, then the product of the roots is
 a. 1 b. $\frac{a+b}{2}$ c. $-(a^2 + b^2)$ d. $-\frac{1}{2}(a^2 + b^2)$
100. If $a^p = b^q = c^r = d^s$, then $\log_a(bcd)$ is equal to
 a. $p(\frac{1}{q} + \frac{1}{r} + \frac{1}{s})$ b. 1 c. $\frac{1}{q} + \frac{1}{r} + \frac{1}{s}$ d. 0

Section – III

Directions for questions 101 to 105: In the following sentences, infer the meaning of the underlined word and then select the option that is the best synonym for the word.

101. The exegetic quality of his writings makes him my favourite writer.
a. exemplary b. philosophic c. explanatory d. sketchy
102. A desultory approach to research is opposed to the scientific method of inquiry.
a. unfocused b. logical c. desolate d. detrimental
103. The Panchatantra Tales are didactic in nature.
a. dynamic b. infirmity c. instructive d. excoriating
104. A captious boss can make life hell even in your favourite job.
a. capricious b. cautious c. censorious d. careless
105. One look at the poor furniture in his room revealed his impecunious existence.
a. indigent b. impolite c. opulent d. indent

Directions for questions 106 to 110: In the following questions, sentences of a paragraph are given in random order. Select the option that contains the correct sequence of the sentences to form a coherent paragraph.

106. A. What function do they serve?
B. This conceals its body from the eyes of hungry predators.
C. The traditional explanation is that the stripes act as a camouflage, which break up the shape of the animal.
D. Despite their vivid appearance in bright sunlight in an open grassland.
E. The zebras are well camouflaged at dawn and dusk.
F. The predators are active during these times when the light is dim.
a. ABDCEF b. ACBDEF c. CEBDFA d. FCBEDA
107. A. Indians are among the fastest growing immigrant groups in the US.
B. Mr. Ramanathan is one of them.
C. In a 0% unemployment economy, corporates are using everything to attract the right candidates.
D. According to a US Census Bureau, above 44% of Indians who work there hold managerial jobs.
E. He is among the thousands wooed right out of University campuses by companies.
F. It could range from an attractive signing bonus to personalised hand holders.
a. FCDBEA b. AFDCBE c. ADBECF d. ADEBCF

108. A. We always think of returns before taking up anything.
 B. Can we imagine what would happen if our mothers thought similarly?
 C. None of us are as selfless as a mother is.
 D. Most transactions of our lives are based on "give and take".
 E. Probably none of us would have been here.
 a. AEDCB b. DACBE c. DBCAE d. ACBDE
109. A. One turn on the left and I reach a different place altogether.
 B. I am easily guided through the ticket counter to the platform.
 C. I, too, stand there in childish anticipation of the unknown.
 D. There is chaos all around with vehicles honking all over.
 E. Other expectant faces greet me as I wait to begin my first journey on the metro train.
 a. ABCDE b. DBACE c. BDAEC d. DABEC
110. A. It is of prime importance for normal growth and development.
 B. Despite these facts, malnutrition is widely prevalent in many parts of the world.
 C. It also plays a vital role in the prevention of disease and promotion of health.
 D. It is one of the greatest international health problems of the day.
 E. Good nutrition is the basic component of health.
 a. EACBD b. ACBDE c. BDACE d. CABDE

Directions for questions 111 to 115: In the following questions, the same sentence is written in four different ways. Select the option which is grammatically most correct.

111. a. When two people live together, there are bound to be skirmishes, but living peacefully together alone can ensure a long lasting relationship.
 b. Two people living together are bound to quarrel occasionally, but a peaceful co-existence is important for a lasting relationship.
 c. A couple living under the same roof will quarrel everyday but for a long relationship they will have to live peacefully together.
 d. Two people coexisting together, despite fights, are bound to have a long lasting relationships, which only a peaceful life can ensure.
112. a. The delay in providing succour to the quake-hit people forced them to live under abominable conditions.
 b. The succour sent for the people hit by the quake didn't reach them and they were forced to live in conditions, which were abominable.
 c. The quake hit people were forced to live under abominable conditions due to the delay in the succour reaching them.
 d. The succour meant for the quake-hit people did not reach them on time because of which they had to live in abominable living conditions.

113. a. Stress management should be a part of the school curriculum, so that youngsters are equipped to face challenges in life.
 b. Stress management should be a part of school curriculum so that it can equip youngsters to face challenges in life.
 c. It is essential for school curriculum to have stress management as a part of it so that youngsters are equipped to face challenges in life.
 d. Youngsters will be better equipped to face challenges in life only when stress management will be made a part of the school curriculum.
114. a. The high levels of stress in today's life have people seeking relief in the Art of Living and meditation.
 b. People suffering from high stress are seeking relief in the Art of Living and meditation.
 c. The Art of Living and meditation have been providing relief to people suffering from stress levels which are high.
 d. High stress levels today has people seeking relief in the Art of Living and meditation.
115. a. Elections will have no meaning in India till the masses learn to discern between genuine commitments and false promises.
 b. Till the masses fail to discern between genuine commitments and false promises, elections will remain meaningless.
 c. The election process has no meaning in India till the time the masses can learn to differentiate between genuine commitments and false promises.
 d. Election in India will start having meaning when the masses will become intelligent enough to differentiate between genuine commitments and false promises.

Directions for questions 116 to 121: In the following questions, a short paragraph is given. The paragraph has three blanks. Select the most suitable words from the given options to fill in the blanks.

Having achieved this ...116... agreement, the other provisions of which stupefied Europe even without ...117... of the secret protocol, Hitler thought that Germany could attack Poland with no danger of Soviet or British intervention and gave orders for the invasion to start on August 26. News of the signing, on August 25, of a formal treaty of mutual assistance between Great Britain and Poland (to ...118... a previous though temporary agreement) caused him to postpone the start of hostilities for a few days. He was still determined, however, to ignore the diplomatic efforts of the western powers to restrain him.

116. a. cynical b. trustful c. descriptive d. candid
117. a. misleading b. recitation c. divulgence d. opposing
118. a. match b. supersede c. slam d. chastise

Introduced diseases ...119... a terrible toll and probably killed many more Aborigines than did direct conflict. The disappearance of the Aborigines in southeast Australia was so rapid that the belief arose that they would all soon die out. Growing humanitarian concerns and reactions to frontier excesses led the Australian colonies to pass laws, beginning in 1856 in Victoria, concerning the care and protection of

Aborigines. They were put onto ...120... and given food and clothing, to “smooth the dying pillow” as they awaited what the Europeans took to be cultural ...121....

119. a. dogged b. unmitigated c. gave d. exacted
120. a. bulk b. dearth c. tarn d. reserves
121. a. extinction b. assimilation c. destiny d. crowning

Directions for questions 122 to 125: In the following questions, the same word is used in four different ways. Choose the option in which the word is used incorrectly.

122. Move
- a. He moved the motion at court in today’s proceedings; let’s wait and watch now.
 - b. Naomi Campbell must have thoroughly planned her moves in a match against Vishwanathan Anand.
 - c. As I moved through the film, I lost all sense of time and ended up missing the meeting.
 - d. The old woman’s tragic story moved even my brother to tears.
123. Control
- a. On a ship, the captain is the one who calls the shots — control, power and responsibility, all rest with him.
 - b. She has absolute control over the English language and she never fails to use this to her advantage.
 - c. My father controls my voice — I cannot utter a word without his permission.
 - d. I must learn to control my temper or it will land me into serious trouble some day.
124. Play
- a. Beethoven began to play music from an infantile age; his genius was a product of poverty.
 - b. He seemed to be lost and found it was difficult to make out what he had been playing with his mind.
 - c. Men choose to play with the feelings of women; as a consequence they enjoy neither trust nor true love.
 - d. Even after 50 years of marriage, whenever the woman made a flirtatious remark, the man would play along and continue the conversation as if they had just met.
125. Match
- a. It was difficult to believe that the two had never met — without knowing each other they looked so matching.
 - b. His contributions to the family income match her efforts to make their house a home.
 - c. The police had to rely on the witness; they had no way of matching his statement.
 - d. In marriage he had finally met his match.

Directions for questions 126 to 150: Read the given passages and answer the questions that follow, choosing the most appropriate options.

PASSAGE – 1

You see, society feels that it must control or discipline the citizen, shape his mind according to certain religious, social, moral and economic patterns. One of our most difficult problems is what we call discipline, and it is really very complex. Now, is discipline necessary at all? Most of us feel, especially while we are young, that there should be no discipline, that we should be allowed to do whatever we like, and we think that is freedom. But merely to say that we should or should not have discipline, that we should be free, and so on, has very little meaning without understanding the whole problem of discipline. The keen athlete is disciplining himself all the time, is he not? His joy in playing games and the very necessity to keep fit makes him go to bed early, refrain from smoking, eat the right food and generally observe the rules of good health. His discipline is not an imposition or a conflict, but a natural outcome of his enjoyment of athletics. Now, does discipline increase or decrease human energy? Human beings throughout the world, in every religion, in every school of thought, impose discipline on the mind, which implies control, resistance, adjustment, suppression; and is all this necessary? If discipline brings about a greater output of human energy, then it is worthwhile, then it has meaning; but if it merely suppresses human energy, it is very harmful and destructive. All of us have energy, and the question is whether through discipline that energy can be made vital, rich and abundant, or whether discipline destroys whatever energy we have. I think this is the central issue. Many human beings do not have a great deal of energy, and what little energy they have is soon smothered and destroyed by the controls, threats and taboos of their particular society with its so-called education; so they become imitative, lifeless citizens of that society. And does discipline give increased energy to the individual who has a little more to begin with? Does it make his life rich and full of vitality?

When you are very young, as you all are, you are full of energy, are you not? You want to play, to rush about, to talk — you can't sit still, you are full of life. Then what happens? As you grow up your teachers begin to curtail that energy by shaping it, directing it into various moulds; and when at last you become men and women the little energy you have left is soon smothered by society, which says that you must be proper citizens, you must behave in a certain way. Through so-called education and the compulsion of society this abounding energy you have when you are young is gradually destroyed.

Now, can the energy you have at present be made more vital through discipline? If you have only a little energy, can discipline increase it? If it can, then discipline has meaning; but if discipline really destroys one's energy, then discipline must obviously be put aside.

What is this energy which we all have? This energy is thinking, feeling; it is interest, enthusiasm, greed, passion, lust, ambition, and hate. Painting pictures, inventing machines, building bridges, making roads, cultivating the fields, playing games, writing poems, singing, dancing, going to the temple, worshipping — these are all expressions of energy; and energy also creates illusion, mischief and misery. The very finest and the most destructive qualities are equally the expressions of human energy. But, you see, the process of controlling or disciplining this energy and letting it out in one direction and restricting it in another becomes merely a social convenience; the mind is shaped according to the pattern of a particular culture, and thereby its energy is gradually dissipated.

So, our problem is, can this energy, which in one degree or another we all possess, be increased, given greater vitality — and if so, to do what? What is energy for? Is it the purpose of energy to make war? Is it to invent jet planes and innumerable other machines, to pursue some guru, to pass examinations, to have children, to worry endlessly over this problem and that? Or can energy be used in a different way so that all our activities have significance in relation to something which transcends them all? Surely, if the human mind, which is capable of such astonishing energy, is not seeking reality or God, then every expression of its energy becomes a means of destruction and misery. To seek reality requires immense energy; and if man is not doing that, he dissipates his energy in ways which create mischief, and therefore society has to control him. Now, is it possible to liberate energy in seeking God or truth and, in the process of discovering what is true, to be a citizen who understands the fundamental issues of life and whom society cannot destroy? Are you following this, or is it a little bit too complex? You see, man is energy, and if man does not seek truth, this energy becomes destructive; therefore society controls and shapes the individual, which smothers this energy. That is what has happened to the majority of grown-up people all over the world. And perhaps you have noticed another interesting and very simple fact: that the moment you really want to do something, you have the energy to do it. What happens when you are keen to play a game? You immediately have energy, do you not? And that very energy becomes the means of controlling itself, so you don't need outside discipline. In the search for reality, energy creates its own discipline. The man who is seeking reality spontaneously becomes the right kind of citizen, which is not according to the pattern of any particular society or government.

126. The athlete's example proves that
 - a. When discipline is in-born we enjoy it
 - b. Games create discipline naturally
 - c. When one really enjoys doing something, discipline will follow as a natural outcome
 - d. Athletes do not need the imposition of discipline, they are naturally disciplined
127. As per the passage, the general effect of education is
 - a. An organized society
 - b. Destruction of energy
 - c. Resistance and suppression
 - d. None of the above
128. The author believes that the discipline that exists in society is
 - a. Merely a social gimmick
 - b. Merely a social convenience at the cost of human potential
 - c. A necessary evil
 - d. Totally undesirable
129. According to the author, energy is
 - a. Greed
 - b. Lust
 - c. Enthusiasm
 - d. All of the above
130. The author is least likely to agree with the idea that
 - a. Discipline is useless if it cannot augment the meagre reserves of energy
 - b. Cultural patterns are a major determinant of how energy is dissipated
 - c. A man is necessarily moulded according to the type of society he lives in
 - d. None of the above

PASSAGE – 2

Conscious of her approaching death, she has broken at last a lifetime's practice of concealment, of stashing the truth away in the manner of the papers and mementoes mouldering in her battered travel trunk. The woman in her eighties (her bones aching in the humid heat of summer, her step cautious in winter's frozen treachery) unwinds the past, sends it twisting and spiralling in an unstoppable black flow across the pages. The urgency of the project is insistent: impending foreclosure flays her on, reopening old wounds, forcing her to confront life in all its bewilderment and pain.

This, in the sparest of terms, is the framework of *The Blind Assassin*, the novel which has won for the Canadian writer, Margaret Atwood this year's Booker Prize. Her previous near-winners were *The Handmaid's Tale*, *Cat's Eye*, and *Alias Grace*. In her latest book Atwood explores again a theme central to her fictional universe: what happens to relationships, to human potential, to the possibility of happiness when women are kept subordinate, stultified by their inferior status and locked in silence.

Iris Chase, the woman who unravels her past across the pages of *The Blind Assassin*, is at first sight an improbable victim of history. The granddaughter of an entrepreneur who built an empire out of the manufacture of buttons and cheap clothing for the masses, she has lived for the most part of her life, cocooned from economic hardship. In her narrative, she conjures up the whimsical splendours of Avilion, the evocatively titled domain her grandparents built in celebration of their new wealth and status and the place where she spent her childhood. Reliving her marriage to a young tycoon with political ambitions, she takes us into the sumptuous between-the-Wars world of the highly moneyed: the fur-draped fashions, the dinner parties, the Atlantic crossings on luxury liners. Such landscapes, replete with nostalgia, have in our own times yielded rich pickings to advertisers and commercial film-makers aware of the power of the past. In Atwood's case, however, evoking a class experience characterized by profligacy and privilege is not done to beguile us or set the book on course for film rights. Rather, it establishes a polarity between material advantage and emotional poverty, between the possibilities opened up by access to plenty and the reality of futile, empty lives. In a real sense this is not only a political novel but also a morality tale.

In the book's opening pages, information is thrown at the reader from a variety of sources: from a narrative we do not yet understand to be Iris', from newspaper clippings, and from a book written by Laura Chase (Iris' sister). The last carries immediate poignancy, for we already know Laura to be dead, her car having plunged from a bridge; there is speculation that it was suicide.

This choice of structure allows Atwood to introduce from the start, a sense of the contended nature of experience: there is a world of difference between the clipped prose of the pro-establishment local paper and the dead Laura's unfolding of emotion (her novel is a high-intensity story of unmarried love which generated shock waves following its publication in the late 1940s). The structure also builds in elasticity, enabling the writer not only to throw the past against the present but also to change pace, to intensify and then release in a way that tightens her hold on our sensibilities, propelling us deeper into the mystery.

There is a further dimension to this structure: through it we, the readers, find ourselves repeatedly revising the assumptions we formed at the novel's beginning. In the manner of a landscape viewed from a moving vantage point, the story shifts, rearranges itself, discloses elements once hidden from view. To specify the

changes would be to give away too much of the plot, reducing the novel's capacity to surprise and challenge. What Atwood is attempting, one senses, is not a bid for authorial cleverness designed to leave the reader stunned and bemused, but rather a journey towards the truth which invites her reader to question, reformulate and reinterpret. Despite its old technology form, this is an interactive novel.

For the reader who accepts the invitation, this is a journey into pain. Atwood wields her pen like the most deadly and delicate of knives, cutting through to the raw edge of emotion, exposing our areas of greatest vulnerability: our relationships with others. Part of the stiletto sharpness of her writing derives from a use of language that is precise and alive to the sheer potency of words.

Atwood's use of analogy, too, can bring the reader up short. When Iris' father, lamed and broken, returns home in his uniform from the First World War, his medals "are like holes shot in the cloth, through which the dull gleam of his real, metal body can be seen". On board a ship at the start of her honeymoon, Iris watches professional dancers perform a passionless tango accompanied by music that is "... jagged, hobbled — like a four-legged animal lurching on three legs; a crippled bull with its head down, lunging". This is also a book rich in tongue-in-cheek humour that at several points had me laughing out loud. In a narrative that has a strong aural quality to it, a pervasive sense of voice play, Atwood makes artful use of the character of Renee, the housekeeper at the ancestral home to whom Iris and Laura, having lost their own mother, turn for maternal attention. A working class woman with a no-nonsense outlook on life, Renee offers, through her repertoire of proverbs, sayings and catch-phrases, a running commentary on events that both entertains and unsettles. But the primary source of humour is Iris herself: curmudgeonly and difficult in old age, she is possessed of a capacity for wry observation, an ability to lay bare the incongruities of life, with humour jostling the sadness.

131. If medals "are like holes shot in the cloth", then Atwood is a critic of
- | | |
|-------------------------|--------------------------|
| a. Perpetrators of war | b. Third grade tailoring |
| c. Glorification of war | d. War and its effects |
132. Pick the odd one out:
- a. A sense of contended nature of experience
 - b. This is an interactive novel
 - c. A moving vantage point
 - d. A capacity for wry observation
133. Infer, what the 'contended nature of experience' stands for:
- a. That quality of experience which makes us satisfied with our lot
 - b. Contextual nature of experience
 - c. Contradictory nature of experience
 - d. None of the above
134. *The Blind Assassin* is a political novel because
- a. It recognizes class divisions and examines some of them closely
 - b. It examines stark contrasts in the economic states of people
 - c. It is an allegory of exploitative capitalism
 - d. All of the above

135. Identify the central theme of Atwood's novel:
- a. Presence of the past in the working of the present
 - b. Potential effects of female-subjugation
 - c. Communality of human experience
 - d. None of the above

PASSAGE – 3

Attempts to explain prophecy must make suppositions about the future. The most fundamental supposition is that events in the future do not yet exist and cannot therefore, produce effects in the present. The path of explanation that stems from this view leads necessarily, to various ideas of the future as a potential that somehow exists in the present.

In their simplest form these ideas follow the analogy of the seed and flower. A gardener can examine a seed and predict what flower it will produce. Some premonitions may indeed stem from clues scarcely noticed in a conscious way. An unfamiliar noise in a car, for example, may give rise to an accurate premonition of danger. The weakness of the theory, in this form, is that it requires of the precogniser an uncanny ability to analyze signs and indications that are not only imperceptible to the ordinary eye but also impossible to deduce theoretically. What clues in a dreamer's environment could prompt an accurate precognition of a disaster six months and 3,000 miles away? Some extraordinary suggestions have been made to explain how the future may be unrealized but cognizable in the present. One such suggestion, by Gerhard Dietrich Wasserman, a mathematical physicist at the University of Durliam in England, is that all events exist as timeless mental patterns, with which every living and non-living particle in the universe is associated.

This idea owes something to the ancient belief that the universe — the macrocosm — contains innumerable microcosms, each recapitulating the features and order of the large whole. Thus man was seen as a microcosm of the earth, his veins and arteries corresponding to streams and rivers, and so on.

By the end of the 17th century the idea had undergone many transformations but was still potent. The great philosopher and mathematician Baron Gottfried Wilhelm von Leibniz, for example wrote, "All the different classes of being which taken together make up the universe are, in the ideas of God who knows distinctly their essential graduations, only so many ordinates of a single curve so closely united that it would be impossible to place others between any two of them, since that would imply disorder and imperfection."

Accordingly, the various orders of beings, animate and inanimate, so gradually approximate each other in their attributes and properties that they form a single chain, "so closely linked one to another that it is impossible to determine precisely the point at which one ends and the next begins." In this concept of a "chain of being" then, the animate, and therefore the spiritual or psychic, are connected with the inanimate by a gradation of shared attributes. For Leibniz the implication was that someone with enough insight "would see the future in the present as in a mirror." Another version of the idea that the future lies hidden in the present was advanced by Adrian Dobbs, a mathematician and physicist at the University of Cambridge, in 1965. As events unfold, he proposed, they actualize a relatively small number of the possibilities for change that exist at a subatomic level. In the process disturbances are caused that create another dimension of time or what Dobbs calls a psitronic wave-front. This wave-front can be registered by the brain's neurons, at least in certain especially sensitive people, and be interpreted. A metaphor may help to clarify the process.

Imagine a pond, at one side of which a toy ship is launched, at the other side of the pond is very small person. He is unable to see the ship, but as the ship travels forward, the waves it makes reach the shore on which he stands. As they travel across the pond, these waves pass around certain objects — weeds, leaves, a log — that are fixed or slowly drifting on its surface. The objects thus create disturbances in the wave-front, which the small person, who has a lifetime's experience in these things, is able to note in fine detail. From what he learns of the wave-fronts he not only obtains an image of the objects that produced them but also calculates how long it will be before they drift to the shore.

In this metaphor the toy ship represents an event unfolding in time. Its course across the pond represents one of many paths it might take and the dimension of time it occurs in. The pond itself represents Dobbs's "psitronic wave-front," and the small person is, of course, the neuronal apparatus that receives the wave-front and converts it to a prediction. Granting that Dobbs's theory is purely hypothetical and that no psitronic wave has been discovered, the difficulty is in suggesting a neuronal mechanism by which the observer distinguishes the wave-front of a particular event from the presumable maelstrom of wave-fronts produced by simultaneously unfolding events. Again, the farther away the event is in the future, the more numerous the wave-fronts and the more complex the problem.

Such in general, are some of the theories that regard the future as being, in some way, a potential implicitly accessible in the present, and such are the difficulties and limitations attending them.

136. All of the following are the intricacies of making correct premonitions except that
- a. Extraordinary perception skills may be required as in the car example
 - b. The future is not yet realized
 - c. Tremendous insight is required
 - d. Psitronic fronts are extremely elusive and stay hidden
137. In the toy ship example, the author is least likely to agree with the statement that
- a. It is not possible for several events to unfold simultaneously
 - b. Seemingly intangible wave-fronts can be converted to tangible predictions
 - c. The toy ship could have followed different paths in the pond
 - d. An analogy to Dobbs wave-front can be drawn
138. Which of the following is not correct as per the passage?
- a. Leibniz was not ready to superimpose other beings on the "chain of being"
 - b. Leibniz was convinced that animate beings resemble only animate ones
 - c. Animate beings as per Leibniz, share attributes with inanimate ones
 - d. None of above
139. The word "uncanny" in the passage specifically refers to:
- a. The innumerable microcosms each recapitulating the features and order of the large whole
 - b. The ability to analyse symptoms and indications that are not visible to the ordinary eye
 - c. Dobbs version of the idea that the future lies hidden in the present
 - d. Some premonitions which surely originate from hints hardly noticed in a conscious way

140. The central idea being followed in the passage is regarding
- a. The impossibility of deducing the nature of the “future” in the “present”
 - b. The impossibility of analysing the causal link between “future” and the “present”
 - c. The complex nature of the causal link between the “future” and the “present”
 - d. The scientific way of enjoying the “future” and the “present”

PASSAGE – 4

Battle poetry has always had an interesting variety of verses. These poems were in full praise for the warrior and the war. From my Old-Norse textbook back home in Iceland, I had become familiar with battle poetry rooted in sea-robber experiences and the warlike spirit of petty Scandinavian kings, the so called Skaldic poetry. Most of it is composed by Icelandic Skalds (poets or bards) either itinerant or engaged as house poets of kings and pirates.

This is poetry of grim beauty composed by happy warriors in the most intricate of metres. It is considered by encyclopaedists to contain some of the most beautiful verses inspired by fighting in any age and any nation. Modern battle descriptions, including death-rolls make pale reading to Icelanders compared to the Skaldic accounts of the famous battles of yore in which a great hero is dying a formidable death in almost every verse and battle is praised as the acme of human existence, war as the consummate glory of man.

This poetry is very particular about light and colour in a battle, and about the right hour of the day to fight. The hour before daybreak is all right because it lends to the crimson of liquid blood a nice mixture of an azure sky and the silvery grey of a fading moon. Most good battles take place at dawn when you may behold the blue of your naked steel reddened by your worthy enemy's blood in perfect juxtaposition with the golden radiance of the rising sun. You delight in the frolics of blue colliding edges, accompanied by that seething din which this poetry holds to be characteristic of lethal wounds. Spears sing and skulls crack with a thundering sound. The flower of the wound is one of the beautiful names given to a sword.

A battle is the 'divine service'; it is also the fun of swords; a happy bout of carnage; a killing spree. In all the poems the names of places where famous battles were fought are given; so are the names of chieftains and prominent heroes. A single poem might record a few dozen battles; one mentions fifty. Battles and heroes may or may not have their origin in reality. But you are left in the dark why all these battles were fought. This question seems never to have arisen. For all you know they might have been fought for the fun of those who were actually slain! But for the many others who were supposed to hear the story and learn the poem it is significant that a Skaldic poem never misses one elaborate passage of big joy, that is, the joy of the hungry raven and the eagle and the swift moving wolves amidst the fresh-reeking carrion of the battlefield. At times you might think that the only idea of all the wars was to produce plenty of 'warm prey' for empty-stomached scavengers.

In the Norse war-poetry you will note that a battle story never stands as a substitute, symbol or exemplum for anything outside itself, it never tries to put over you any moral or give you tips about how to change the world for the better or save it. Evidently these poets were living in a perfect world.

To them war is the real thing; it is the thing of which it is always real fun to hear the news, the game of games, the Super Olympics of which other Olympics are a substitute or a symbol.

The situation has not changed much since Skaldic times; anything to do with war still makes good copy. As our ancestors, we have the feeling that war is always with us, as a *casus belli* is always round the corner. There are always plenty of facile 'because' for war. You open a war with someone because you think he is weaker than you or because he is your equal or because you fear that he is stronger than you — all equally natural and legitimate arguments in favour of declaring war that let us go ahead and kill. If you are afraid of being killed yourself, you are a scoundrel and a coward.

In our Western cultures, male adulthood means being ripe for a killing spree. This is called the conscription age. Nice people say war is all right as long as only young men are sent off to die honourably on the battlefield, but think it is immoral to kill girls, old men and kids. Why?

In this case, as so often in ethnology, we do not have the rationale. Some enlightening stories about this thing may be read in fairy tales, mythology and poetry; even in the Bible, Saul killed one thousand and David killed ten thousand. Prophets and scientists, students of this syndrome, have several explanations about why only young men should be shot, but not girls, etc. but each one of their conclusions is disputed by the next bunch of experts.

Looking at the matter from the outside, for instance from the moon, which might be as good a place for wisdom as any (or Iceland, for that matter), war looks like the fulfilment of a pact between two partners, of manually executing each other's young men. In recent years there have been symptoms, even foreboding, of a conceivable reverse in the situation. If wonderful young men with the future in their shining eyes should take over one of these days as they threaten to do, let us pray that they don't march us old devils off to die honourably in some faraway hell of which you do not even know the name, still less the number of the hill on the top of which you are going to be killed.

141. According to the author, a war is fought because of which of the following reasons?

- a. Because one fears one is weaker than the other
- b. Because one is equal to the other
- c. Because one thinks that one is stronger than the other
- d. All of the above

142. The writer of the passage most likely:

- | | |
|--------------------------|-----------------------|
| a. Wrote war poetry | b. Is not a young man |
| c. Is a biblical scholar | d. None of the above |

143. It is the belief of the writer that

- | | |
|----------------------------------|-------------------------------|
| a. Only cowards refuse to fight | b. War is the only real thing |
| c. People love to read about war | d. War is necessary |

144. The tone of the last paragraph in the passage is
a. Satirical b. Sympathetic c. Angry d. Matter of fact
145. According to the information given in the passage, which of the following is not true about Skaldic poetry?
a. It is written in intricate metres b. It is particular about light and colour
c. It includes one passage on joy d. It was written in the sixteenth century

PASSAGE – 5

In order to look at how advertisers try to appeal to both children and adults, it is important to see how advertising has changed over time. According to Goodrum (1990), shop signs — the earliest billboards — have been in use in European and American colonies since the early 1600's. The first daily newspaper, which began in 1784, had 10 columns of advertising in a paper of 16 columns. It is important to note the difference in the purpose of the advertisements. 80% of the copy covered land, slaves, and transportation. The other 20% covered goods offered by local merchants and descriptions of newly published books. Goodrum says that the 1800's was an important time for advertising.

As industrial production increased, the need for advertising also increased. The reason for this is because more and more goods were made in distant places, so advertising allowed manufacturers to advertise to different communities. Due to the increase of competition between advertisers, the need for advertising agencies became important. Businesses needed help in locating newspapers in other communities; they used advertising agencies to make this possible. Agents bought space in newspapers at a discounted rate and then sold the space to advertisers at full price. Advertisers saw their loyalty tied to the newspapers. By the end of the nineteenth century, advertisers started helping write the advertisements. The agencies were now allies with the advertisers trying to get the best possible deals from the newspapers. This is similar to the way advertising agencies still work today. The confusion over whose side an advertising agency was on is still a back and forth issue right up until the present. Up until this point, advertisements were just a couple of lines in the newspaper. By the end of the nineteenth century the advertisements were larger and involved various styles of print.

Goodrum shows how the Civil War also had a major role in shaping the development of advertising. The need to produce hundreds of thousands of uniforms helped in stimulating the mass production of clothing. With the men away at war, the women got out of the house and went to work in the clothing factories. Since women now had to work, they did not have time to be at home and do all the chores. It became more acceptable for women just to go out and buy the things they needed. This also led food and other household products to be pre-packaged, making it easier for the working woman. Another role that advertising played was the introduction of new products. By the end of the War, advertisements went from being black and white to colour.

Goodrum goes on to say that another event that affected advertising was the Great Depression. During this time advertisers started to use research to help sell their products. 25% of the country was unemployed, there was little money to be spent and therefore few goods were sold. Since not a lot of people were buying

products, advertisers had to figure out who was buying the products. This is how advertising research started, and is still used today.

Goodrum says that television also shaped how advertisers sold their products. From the research that was done in the thirties and the early forties, advertisers were able to design advertisements that “looked like” the identified audience and “talked like” them. The first commercials on television were more expensive than print advertisements, and lasted for two minutes. As television advertisements became more and more expensive, advertisers had to cut and shorten the message so that the story was told in seconds rather than minutes. This changed advertising because advertisers had less time to influence a person to buy their product. This is how the use of catchy slogans and jingles came to be popular. It was a quick and effective way to get consumers to remember a product. This technique is still used today. As products became mass produced, there was competition between the companies that were making the products. Now two or more companies were trying to sell to the same group of people.

Advertising has become an important part of our society. Hall (1984) states that: “The average American watches six hours of television every day. A great deal of what is seen during this time is commercials. Commercial television, as its name suggests, owes its existence to its sponsors. It hardly matters to advertisers what type of nonsensical programmes are aired by the networks, as long as consumers continue to watch.”

This study asks if there are differences between the ways advertisers try to get a child to buy a product compared to an adult. Ever since advertising began in the 1600's, adults have been the focus of advertising. This is mainly because adults are the ones who make the money, so they are usually the ones who buy most of the products. One technique advertisers use is to try and persuade the consumer to buy their product. The idea of persuasion is an important aspect in advertising because it tries to get the consumer to want to buy a product. Advertisers want consumers to choose their product, and seek to persuade them that it is something that they need. Chaudhuri says that “...the consumer comes to associate the brand as a status instrument that obtains rewards and stays punishments”. This means that if the consumer chooses their product, it will make the life of the consumer easier. Saying that the product will make the consumer's life easier, helps to persuade the consumer that it is something that he really need. Advertisers also try to persuade the consumer that their particular product is better than the others. This is true for advertisements aimed at both children and adults.

146. According to the passage, advertising began in the
a. 15th century b. 16th century c. 17th century d. 19th century
147. Slogans and jingles in advertising became popular because
a. Music has a vast and long-lasting appeal
b. Short and crispy was the in thing
c. They were supposed to be more creative
d. To save on the running time of the advertisement

148. Need for advertising agencies increased because
- a. Of the civil war
 - b. The products needed to reach the customers
 - c. Of the demands of the consumers
 - d. Of the increase in competition between advertisers
149. Which of the following is not true according to the passage?
- a. Goodrum is the father of advertising
 - b. By end of Civil War, advertising went from black and white to colour
 - c. Advertising research started during the Great Depression
 - d. None of these
150. The common feature/s between advertising in the past and advertising in the present is/are
- a. The use of jingles and catchy slogans
 - b. The importance of research in advertising
 - c. Agencies tying up with newspapers for buying advertising space
 - d. All of the above