

SNAP Full Length Test 1

Test ID: 7 7 1 3 8 8

FLT-0006/10

Please read the following instructions carefully. Do not open the seal until the Invigilator instructs you to open.

Instructions

1. This booklet contains 24 pages including the blank ones. Immediately after opening the booklet, verify that all the pages are printed properly.
2. Use only a HB - pencil to darken circles on Answer OMR Sheet.
3. The break up of subject wise questions with their marking scheme are as follows:

Section	No. of Questions	No. of Questions	Total Questions	Total Marks
	Mark-1 each	Marks-2 each		
Quantitative & Data Interpretation & Data Sufficiency	40	—	40	40
Analytical & Logical Reasoning	—	30	30	60
General Awareness, General Knowledge, Current Affairs, Business	40	—	40	40
General English	40	—	40	40
Total	120	30	150	180

4. For every wrong answer, you will score 25% negative marks. You will be given 120 minutes to complete the test.
5. Do not attempt to copy nor allow or help others in copying. Any malpractice will invalidate your candidature.
6. Do not leave the hall at any point of time without handing over your Answer Sheet to the Invigilator.
7. You may take the question paper back with you.
8. Once you go out of the hall, re-entry is not permitted.

ANY CANDIDATE GIVING / SEEKING / RECEIVING ASSISTANCE OR FOUND COPYING WILL BE IMMEDIATELY DISQUALIFIED.

Name: _____ Enrollment ID: _____

Centre: _____ Batch: _____

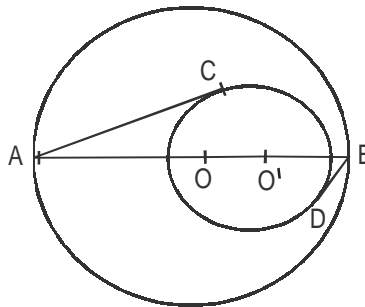
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Best Wishes!

Section – I

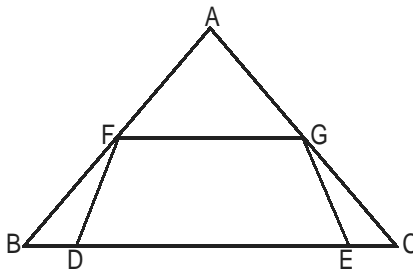
For all questions in this section, correct answers carry 1 mark each.

- 50 litres of a cocktail of vodka and 'lime cordial' contains 32 litres of vodka. In the first round 10 litres of the cocktail is taken out and is replaced by water. In the second round 20 litres of cocktail is taken out and is replaced by lime cordial. The percentage of vodka in the final concoctions is
a. 17.28% b. 20.56% c. 28.8% d. 30.72%
- Anna has to prepare a full meal consisting of two breads out of the five breads namely A, B, C, D and E; one curry out of the three curries namely F, G and H or two vegetables out of three vegetables namely I, J and K; one curd out of the three curds namely L, M and N; one dessert out of the three desserts namely O, P and Q and one type of rice out of the three types of rice namely R, S and T. The number of ways in which Anna can prepare a full meal is
a. $({}^3C_1)^4 \times {}^5C_2 \times {}^3C_2$ b. $({}^3C_1)^3 \times {}^5C_2 \times ({}^3C_2 + {}^3C_1)$
c. $({}^3P_1)^4 \times {}^5P_2 \times {}^3P_2$ d. $3 \times ({}^3C_1) + {}^5C_2 + ({}^3C_2 \times {}^3C_1)$
- In the figure given below, AB is the diameter of the circle with center at the point O. AC and BD are tangents to the circle with center at the point O'. If AC = 13 cm, BD = 5 cm and OO' = 2 cm, then the radius of the larger circle is



- a. 15 cm b. 18 cm c. 22 cm d. 20 cm
- 20% of the students in a class failed in an examination. Out of the students who failed, 75% were males. Male students who failed constitute 90% of the economically poor students in the class. What is the ratio of the number of economically poor students to the number of students in the class?
a. 1 : 6 b. 1 : 4 c. 1 : 5 d. 5 : 6
- In an equilateral triangle ABC, a perpendicular is drawn from the orthocentre O meeting the side BC at D such that OD = 4 cm. What is the area of the triangle ABC?
a. $24\sqrt{3} \text{ cm}^2$ b. $48\sqrt{3} \text{ cm}^2$ c. 24 cm^2 d. $12\sqrt{3} \text{ cm}^2$
- In a square PQRS, the mid-point T of side PQ is joined to the mid-point U of side RS. Also, the point T is joined to the mid-point V of the side QR. What is the ratio of the area of the quadrilateral TVRU to the area of square PQRS?
a. 3 : 8 b. 1 : 2 c. 3 : 4 d. 5 : 8

7. Find the missing term in the given series 16, 23, 28, 38, ?, 62, 70
 a. 52 b. 49 c. 48 d. 50
8. There are a total of 500 pages in a book. In other words there are 250 sheets in the book. One sheet constitutes 2 pages. Few pages were found to be missing from the book. Which of the following cannot be the number of the pages that were missing from the book as a percentage of the total number of pages in the book?
 a. 0.4% b. 5% c. 5.2% d. 2%
9. What is the total number of ways in which Robert can distribute 9 distinct chocolates among his 8 sons such that each son gets at least one chocolate?
 a. $72 \times 8!$ b. $36 \times 8!$ c. $144 \times 8!$ d. $9!$
10. Find the number of spherical balls, each of diameter 1 mm that can be made from a solid sphere of radius 4 cm.
 a. 5120 b. 512000 c. 51200 d. 25600
11. If 'a' and 'b' are prime numbers, then what is the H.C.F. of the numbers $(a^2 + b^2)$, $(a + b + 1)$ and $(a^2 + b^2 - 1)$?
 a. 2 b. 3 c. 1 d. 4
12. In the given figure below, $\triangle ABC$ is an equilateral triangle with each side equal to 6 units. A trapezium FGED is drawn inside the triangle such that F and G are the midpoints of sides AB and AC. If $BD = EC$ and area of the trapezium FGED = 5 sq. units, then what is the length of BD?



- a. $\frac{7}{2} - \frac{10}{2\sqrt{3}}$ units b. $4 - \frac{10}{3\sqrt{3}}$ units c. $\frac{9}{2} - \frac{10}{3\sqrt{3}}$ units d. $3\sqrt{3}$ units
13. The value of a car depreciates at the rate of 10% per annum. If its present value is Rs. 1,21,500, then what was the value of the car 2 years ago?
 a. Rs.1,00,000 b. Rs.1, 50,000 c. Rs.2,00,000 d. Rs.2,50,000
14. Three brothers Rohan, Mohan and Sohan were asked to guess their grandmother's age which is an integral number in years. Rohan said "she is above 65 but not more than 72 years old. Mohan said "she is above 63 but not more than 70 years old". Finally Sohan said "she cannot be older than 69 years". If all three of them are correct in their estimations, what is the average of the probable ages of their grandmother?
 a. 68 years b. 68.5 years c. 67.5 years d. Data Insufficient

Directions for questions 15 to 18: Each question is followed by two statements, A and B. Answer each question using the following instructions:

- Mark (a) if the question can be answered by using any one of the statements alone.
Mark (b) if the question can be answered by using either of the statements alone.
Mark (c) if the question can be answered by using both the statements together but not by either of the statements alone.
Mark (d) if the question cannot be answered on the basis of the two statements.

15. Exactly 40% of all the students who enquired about different courses at IWSB, filled application form for the admission to IWSB. What percentage of all the students who enquired were admitted to IWSB? Assume that if an application form is not rejected, it means that the application form is approved.
A: At IWSB, 25% of all the application forms for admission were rejected.
B: Out of all the students whose application form for admission are approved, 90% of the students are finally admitted to IWSB.
16. Four lectures Arithmetic, Biology, Chemistry and Dermatology were scheduled, one on each day on four consecutive days, but not necessarily in that order. On which day was Chemistry scheduled?
A: The first lecture was scheduled on Monday, 14th January 2008 and was followed by Dermatology.
B: Arithmetic was not scheduled on 16th January 2008 and there was a gap of one day between Arithmetic and Biology.
17. If x, y, z are integers, then what is the value of x ?
A: $xyz = 30, x > y > z$
B: $x + y + z = 10, x > z$
18. If p and q are real numbers, then find the minimum possible value of the expression $(p^3q + q^3p)$.
A: $p = 3, p > q$.
B: Either of p or $q = 0$.
19. The following table provides information about the price of a commodity in 3 years namely 1996, 1997 and 1998. Which of the following options best describes the rate of growth of the price of the commodity in the given period?

Year	1996	1997	1998
Price (in Rs.)	80	88	96.8

- a. Simple growth rate of 8% per annum.
b. Compounded growth rate of 8% per annum.
c. Simple growth rate of 10% per annum.
d. Compounded growth rate of 10% per annum.
20. There are only four books viz. A, B, C and D that are available on a book shelf and a reader must select at least one of these four books. The probabilities that a reader will pick up only book A, only book B, only book C and only book D form four consecutive terms of an arithmetic progression. What is the probability that a reader will select either book B or book C?
- a. $\frac{1}{2}$ b. $\frac{1}{3}$ c. $\frac{1}{4}$ d. Cannot be determined

21. The following table provides information about the percentage change in the price and the quantity of a commodity in 3 different years namely 1996, 1997 and 1998. If expenditure is equal to the product of the price and the quantity of a commodity, then what is the ratio the expenditure in the year 1998 to that in the year 1995?

Percentage Change	1996	1997	1998
Quantity	10%	–20%	30%
Price	–20%	10%	20%

- a. 6 : 5 b. 8 : 5 c. 7 : 3 d. 9 : 5
22. Each blank cell in the grid shown below is to be filled with one of the numbers – 1, 0 and 1 in such a way that each row as well as each column has exactly one 0 and the sum of the four numbers in each row and each column of the grid is equal to 1. What is the value of $(x + y)$?

		1	–1
	1		
	x		0
	y		1

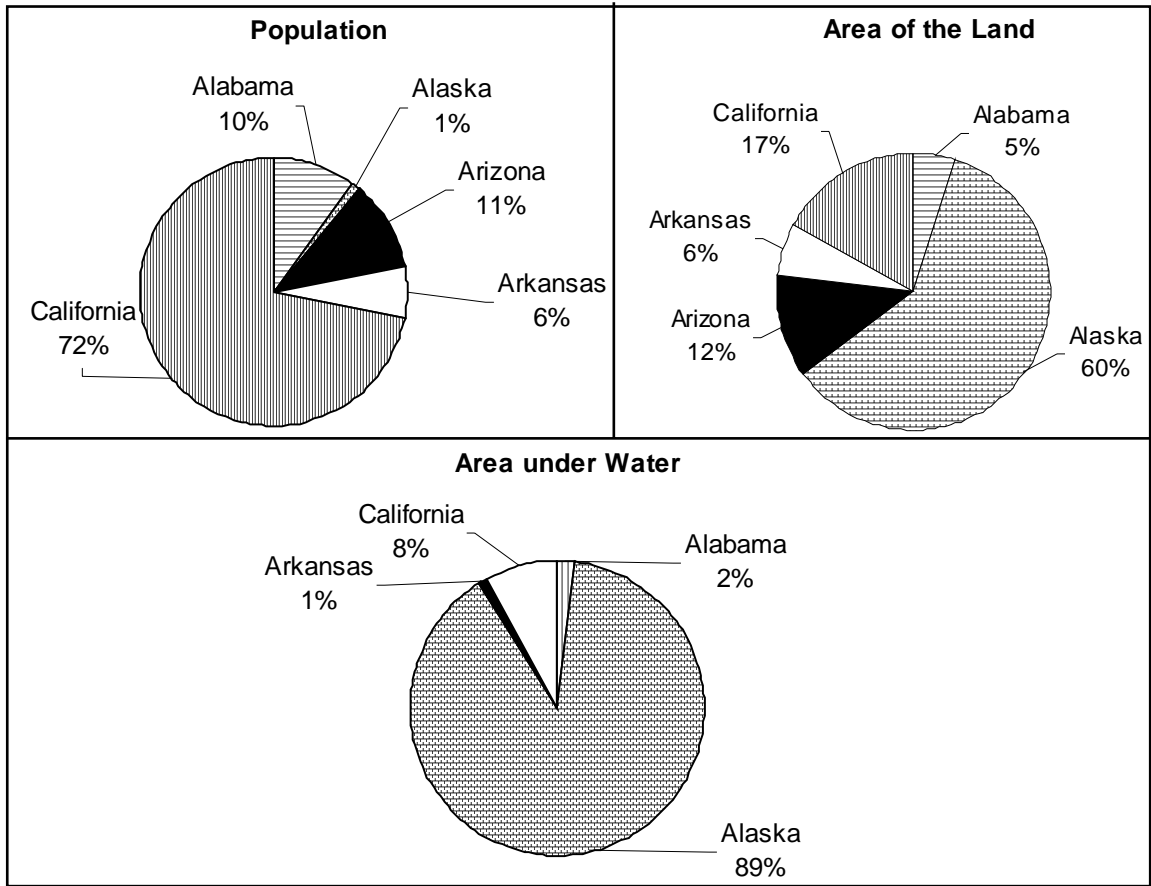
- a. 0 b. 1 c. –1 d. 0 or –1
23. Out of the 6 consecutive terms of an increasing arithmetic progression (A.P.), the first 3 terms are negative and the remaining 3 terms are positive. If the common difference of the A.P. is an integer not greater than 4 and if one of the 6 terms of the given A.P. is –1, then the difference between the maximum and the minimum possible value of the arithmetic means of the distinct A.P's satisfying the given condition is
- a. 0 b. 1 c. 2 d. Cannot be determined
24. There are 6 students in a class. The ages (in years) of exactly three students are prime numbers and the ages (in years) of the other three students are even numbers. If the ages (in years) of all the 6 students in the class is in an arithmetic progression, then what is the average age (in years) of the students in the class?
- a. 5.5 b. 6 c. 4.5 d. 6.5
25. Two positive integers 'a' and 'b' satisfy $\frac{(a+b)}{x} = \text{HCF}(a,b)$. Which of the following two numbers sum up to 'x'?
- a. 13 and 52 b. 132 and 96 c. 18 and 126 d. 56 and 45
26. A bag contains 4 red balls and 6 green balls. Two balls are drawn at random. Find the probability that they are of the same colour.
- a. $\frac{7}{15}$ b. $\frac{1}{3}$ c. $\frac{1}{2}$ d. None of these

Directions for questions 27 to 31: Answer the questions on the basis of the information given below. The following table provides information about the number of runs scored by the eleven batsmen of the Indian Cricket team against six different countries namely Bangladesh, Australia, Pakistan, Sri Lanka, West Indies and New Zealand.

	Bangladesh	Australia	Pakistan	Sri Lanka	West Indies	New Zealand
Sachin	54	178	56	23	50	45
Robin	13	59	34	67	23	19
Sehwag	28	39	43	28	32	31
Yuvraj	187	34	121	13	28	11
Raina	43	47	199	134	35	28
Dhoni	23	56	23	187	34	187
Irfan	189	32	46	145	32	67
Rohit	32	45	47	43	67	99
Kaif	17	11	37	47	87	187
Saurav	23	43	67	123	34	43
Rahul	27	11	111	12	43	44

27. Which of these eleven batsmen scored maximum number of aggregate runs against the six countries stated?
 a. Sachin b. Dhoni c. Raina d. Irfan
28. The average number of runs scored by Saurav against these six countries is
 a. 55.5 b. 54.5 c. 53.5 d. 52.5
29. Against which of these six countries the minimum number of runs were scored by the entire Indian cricket team consisting of the 11 players mentioned, is
 a. Australia b. Bangladesh c. New Zealand d. None of these
30. How many batsmen scored more number of runs than that scored by Robin but lesser number of runs than that scored by Rohit, against these six countries?
 a. 0 b. 1 c. 2 d. 3
31. The number of runs scored by Yuvraj against Pakistan as a percentage of the total number of runs scored by him against these six countries.
 a. 23.75% b. 26.65% c. 30.71% d. 34.61%

Directions for questions 32 to 35: Answer the questions on the basis of the information given below. The three pie charts given below represent three quantities viz. "Population", "Area of the Land" and the "Area under Water" of five US states viz. Alabama, Arkansas, Arizona, Alaska and California as a percentage of the respective total values of the three mentioned quantities of the five states. "Population Density" is defined as the number of persons living in one sq. mile area of land.



32. If the total value of "Area of the Land" and the "Population" of the five states is 944,357 sq. miles and 46,749,712 respectively, then the population density of the state Alabama is approximately
 - a. 94
 - b. 106
 - c. 95
 - d. 99
33. If "Population Density" of the state Arizona is 17.3 and its "Area of the Land" is 68,181 sq. miles, then find the "Population Density" of Alaska.
 - a. 3.1
 - b. 0.3
 - c. 1.7
 - d. 1.9
34. Which of these five states has the highest value of "Population Density"?
 - a. Alabama
 - b. Arizona
 - c. Alaska
 - d. California
35. If "Area of the Land" of Alaska is 98,282 sq. miles and the sum of "Area under Water" of the five states is 102,201 sq. miles, then what is the sum of "Area of the Land" of states Arizona, Arkansas and California?
 - a. 58959 sq. miles
 - b. 66529 sq. miles
 - c. 95268 sq. miles
 - d. 68758 sq. miles

Pappu and Munna are the only criminals active in the regions Boriwali, Rewtinagar, Pinchori and Sarita Nagar. They execute crimes in these regions and earn money for each crime as per their contracts in the respective region. The region wise percentage break- up of money earned by them and the region wise percentage break-up of the number of crimes committed by them is given in the table for the year 2007. Both have committed crimes only in these regions in the year 2006 and 2007. The table also shows the region wise percentage increase in the money earned and percentage increase in the number of crimes committed by Pappu and Munna in the year 2007 over the year 2006.

Region	Criminal	Earnings	Number of Crimes committed	Increase in Earnings	Increase in Number of crimes committed
Boriwali	Pappu	30%	25%	10%	20%
	Munna	15%	20%	20%	0%
Rewtinagar	Pappu	35%	25%	20%	15%
	Munna	20%	25%	15%	25%
Pinchori	Pappu	15%	20%	15%	0%
	Munna	30%	25%	10%	5%
Sarita Nagar	Pappu	20%	30%	10%	20%
	Munna	35%	30%	10%	10%

36. If Pappu executes 20% lesser crimes as compared to Munna in the given regions and earns the same total amount as Munna does in the year 2007, then who earns the maximum average amount per crime committed and in which region?
 - a. Munna, Sarita Nagar
 - b. Pappu, Rewtinagar
 - c. Munna, Pinchori
 - d. Pappu, Boriwali
37. Munna earns the least amount per crime in which of the regions in the year 2007?
 - a. Sarita Nagar
 - b. Boriwali
 - c. Rewtinagar
 - d. Pinchori
38. In how many regions, Pappu's earning per crime committed has shown an increase in the year 2007 over the year 2006?
 - a. 2
 - b. 3
 - c. 4
 - d. 1
39. In which of the following regions Munna committed the maximum number of crimes in the year 2006?
 - a. Sarita Nagar
 - b. Boriwali
 - c. Rewtinagar
 - d. Pinchori
40. As compared to the year 2006, the greatest increase in the number of crimes was observed for the year 2007 by
 - a. Munna in Sarita Nagar
 - b. Pappu in Rewtinagar
 - c. Munna in Pinchori
 - d. Cannot be determined

Section – II

For all questions in this section, correct answers carry 2 marks each.

Directions for questions 41 to 43: In each question a main statement is followed by four statements: A, B, C and D. Choose the ordered pair of statements where the first statement implies the second, and the two statements are logically consistent with the main statement.

41. The grass is not yellow when the river overflows.
A. The grass is yellow
B. The grass is not yellow.
C. The river overflows.
D. The river does not overflow.
a. DA b. DB c. AD d. CA
42. Ravan goes to hell only if the bat crows.
A. Ravan goes to hell.
B. Ravan does not go to hell.
C. The bat crows.
D. The bat does not crow.
a. DA b. CA c. AC d. BD
43. Tagheur gives a Car along with a watch.
A. Tagheur gives a Car.
B. Tagheur does not give a Car.
C. Tagheur gives a watch.
D. Tagheur does not give a watch.
a. AC b. DB c. CA d. CB

Directions for questions 44 to 47: Read the arguments and answer the questions that follow.

44. A person's culture plays a very strong role in determining how they will perceive emotions and needs to be considered when interpreting facial expressions.
These cultural differences are even noticeable in computer emoticons, which are used to convey a writer's emotions over email and text messaging. Consistent with the research findings, the Japanese emoticons for happiness and sadness vary in terms of how the eyes are depicted, while American emoticons vary with the direction of the mouth. In the United States the emoticons :) and :-) denote a happy face, whereas the emoticons :(or : - (denote a sad face. However, Japanese tend to use the symbol (^_^) to indicate a happy face, and (;_;) to indicate a sad face.

From the above we can conclude that:

- a. Focus is placed on the eyes to interpret emotions.
b. A writer's emotions can be deciphered through email and text messaging.
c. Society is a determining factor when interpreting facial sentiments.
d. Culture can resolve how people distinguish emotions expressed in their own way.

45. It is paradoxical that as teachers we appreciate and enjoy non-scholastic abilities in our students but do little to identify and nurture them. None of our evaluation systems gives due weightage to these abilities.

Which of the following is appropriate for the above passage?

- a. Non-scholastic abilities are 'must have' qualities.
- b. Effort must go into nurturing non-scholastic abilities.
- c. Anything, which is not evaluated, is never learnt properly.
- d. Evaluation will also give the student an opportunity to know where he needs to improve.

46. Decision making can be hard. Almost any decision involves some conflicts or dissatisfaction. The difficult part is to pick one solution where the positive outcome can outweigh possible losses. Avoiding decisions often seems easier. Yet, making your own decisions and accepting the consequences is the only way to stay in control of your time, your success, and your life.

Which of the following CANNOT be concluded from the passage?

- a. Determine the cons and pros of each alternative.
- b. Examine the inconsistencies.
- c. Decision making is a key component of time management skills.
- d. An effective decision making strategy is to let your intuition take over.

47. Drugs sometimes cause serious injuries to the livers of patients, with loss of hepatic function leading to illness, disability, hospitalization, and even life threatening liver failure and death or need for liver transplantation. As our aging world population uses more and more drugs, as well as self-prescribed over-the-counter medications, so-called "dietary supplements," special diets, alcohol, and is exposed also to environmental chemicals, chances of such injury are rising.

It can be logically concluded from the above passage that.

- a. Drugs are dangerous.
- b. All medication is debilitating.
- c. Self-medication can be hazardous.
- d. Dietary supplements cause liver failure.

Directions for questions 48 and 49: Answer the questions on the basis of the information given below. Gautam's room has two sets of identical 'tube light fittings', one ceiling fan with 3 blades and a CFL. The ceiling fan and the CFL are located between the two sets of "tube light fittings". One day he goes to shop for colorful fittings so that he could jazz up his room. He finds that the tube light fittings, the fan blades and the CFL are available in the following colors namely Red, Blue, Green and Yellow.

48. Find the number of ways in which Gautam can jazz up his room, if all the fan blades are of the same color.
- | | | | |
|--------|--------|--------|--------|
| a. 128 | b. 384 | c. 512 | d. 256 |
|--------|--------|--------|--------|
49. Find the number of ways in which Gautam can jazz up his room, if all the fan blades are of different color.
- | | | | |
|--------|---------|---------|---------|
| a. 512 | b. 1024 | c. 1536 | d. 2048 |
|--------|---------|---------|---------|

Directions for questions 50 to 52: Answer the questions on the basis of the information given below. Manky is given a puzzle called “Prime Game” by his mathematics teacher. He is required to determine a prime number which is written on one out of the four cards namely “a”, “b”, “c” and “d”. The four cards are lying on a table starting from his left to his right. Three out of the four cards have even numbers written on them. He can take help of a super computer “Param” which can be given a four-digit binary code as the input. The super computer multiplies each digit of the binary code to the respective number on the card from left to right.

For example:

If computer is given 1011 as the input then it completes multiplication in the following order:

$$1 \times a + 0 \times b + 1 \times c + 1 \times d$$

where a, b, c and d are the numbers written on cards “a”, “b”, “c” and “d” respectively.

The super computer then gives the above output in the decimal notation. Manky can see both the input as well as the output on the super computer.

50. One of the options below shows the set of values in decimal notation , whose binary equivalent as input to the computer would be sufficient to determine the prime number written on one of the cards. Which of the following is the required set of values ?
 a. 1, 2, 4 and 8 b. 7, 5, 1 and 2 c. 3, 2, 1 and 4 d. 3, 3, 1 and 2
51. If Manky sends binary equivalent of 15 as input to the super computer and gets 25 as the output, then the prime number thus obtained by Manky is
 a. 3 b. 5 c. 2 d. 7
52. After analyzing the information given in the above question, Manky intends to know the card on which the prime number is written. He sends 1001 as the input and gets 10 as the output. On which of the following cards is the prime number written?
 a. “a” b. “b” c. “c” d. Cannot be determined

Directions for questions 53 and 54: Answer the questions on the basis of the information given below. There are five seats in a park numbered as 1, 2, 3, 4 and 5 from left to right. There are 5 school kids namely A, B, C, D and E whose preference for a particular seat is given below.

A	B	C	D	E
2	2	3	3	4

This means, given an opportunity these kids would like to occupy the above seat numbers. If the preference of a seat for a particular kid is already occupied, then when given a chance to sit he/she can randomly occupy any other seat.

53. Given that the order in which the kids are allowed to occupy the seats is C, B, A, D, E. In how many ways the kids can occupy the seats?
 a. 4 b. 8 c. 2 d. 6

54. Out of the given orders, in which order should the kids occupy the seats to ensure minimum number of clashes of their preferences for a particular seat?
1. ACEBD
 2. AECDB
 3. ACDEB
 4. EACDB
- a. 1, 2 and 4 b. 1, 2 c. 2, 3 d. 1, 4
55. If TABLE is coded as 40 and CHAIR is coded as 39, then what is the code for DESK?
- a. 49 b. 39 c. 29 d. 59
56. If ENTER is coded as DMSDQ and WELCOME is coded as VDKBNLD, then what will be the code for ENJOYMENT?
- a. DIMNXDLMS b. DMNIXLDSM c. DMINXLDSM d. DMINLXDMS
57. The word ARABIA is coded as AIBARA and word RAMPUR is coded as RUPMAR. What is the correct code for the word NANDGAON?
- a. NOAGDNAN b. NAAGDNON c. ANOGDNAN d. NOADGNAN
58. If PHILANTHROPY is coded as NALHPYPORHT, then what is the code for the word PLEBISCITE?
- a. BIELPETICS b. IBELEPTICS c. SBELPETICI d. IBELPETICS

Directions for questions 59 and 60: Following steps are used to convert a given messages in a certain code language.

- Step 1:** The vowels used in the original message are replaced by their immediately next alphabets.
- Step 2:** Starting from the alphabet A, alternate alphabet is always put in the upper case (Capital Letters). All other letters are kept in lower case (small letters) irrespective of their position in the original message.
- Step 3:** After executing steps 1 and 2, the codes obtained for each word in the original message are reversed.

59. What is the code for the message "Come as you are"?
- a. cPmF sB VPY FrB
 - b. FmPc VPY sB FrB
 - c. FrB sB VPY FrB
 - d. FmPc sB VPY FrB
60. What is the code for the message "Swim across to moon"?
- a. swJm ssPRcB PT NPPm
 - b. mJws ssPRcB PT NPPm
 - c. mwJs ssRPcB PT NPPm
 - d. NPPm ssPRcB PT mJws
61. Find the missing term in the following series?
- 23 26 32 35 ? 44 48....
- a. 38 b. 40 c. 43 d. 36

62. What is the numerical value of the missing term in the following sequence?
1.5, 2.5, 3.5, 5.5, ?, 8.5, 9.5.....
a. 7.5 b. 6.25 c. 7.25 d. 6.5
63. Find the missing term in the given series.
3, 8, 15, 24, ?, 48, 63
a. 30 b. 28 c. 35 d. 45
64. What is the value of the missing term in the given sequence?
9, 28, 65, ?, 217, 344
a. 89 b. 151 c. 126 d. 195
65. Find the missing term in the following series.
101, 1111, 11211, 112211, ?, 1122211
a. 1122211 b. 112211 c. 1112211 d. 11222111

Directions for questions 66 and 67: Answer the questions on the basis of the information given below. There is a (3 × 3) grid which have cells numbered from 1 to 9. The cells of the grid have to be filled as per the information provided below.

1	2	3
4	5	6
7	8	9

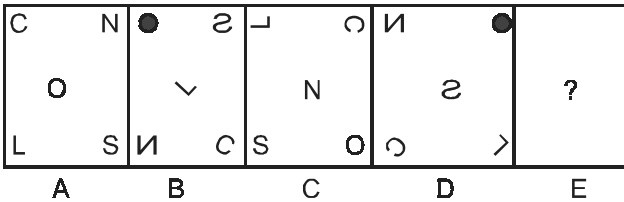
- Across - 1 : A three-digit perfect cube having its sum of digits equal to 18.
Across - 4 : A three-digit perfect cube.
Down - 1 : A three-digit number divisible by 25.
Down - 3 : A three-digit prime number having 9 as its unit's digit.

Note: Across - 1 means the number should be filled in the grid horizontally starting from the cell number 1. Similarly, Down - 1 means the number should be filled in the grid vertically starting from the cell number 1.

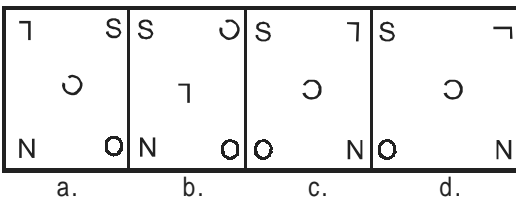
66. The sum of the digits filled in cell number 1 and cell number 6 is
a. 9 b. 13 c. 16 d. 4
67. What could be the possible value of the digit filled in the cell number 8, if the number filled in Down - 2 is a prime number?
a. 1 b. 3 c. 7 d. 9
68. Two schools compete against each other in a lawn tennis tournament. Each school is represented by 10 students. Every game played in the tournament is a double's game (Double's game is a game in which 2 players from each side play in a single game), and every possible pair of students from the first school must play one game against every possible pair of students from the second school. How many games will each student play in the tournament?
a. 450 b. 300 c. 250 d. 405

69. In the following problem there are four "Problem Figures" marked A, B, C and D and four "Answer Figures" marked a, b, c and d. You have to choose an option from the "Answer Figures" to replace the question mark, so that the series given in the "Problem Figure" is continued.

Problem Figures

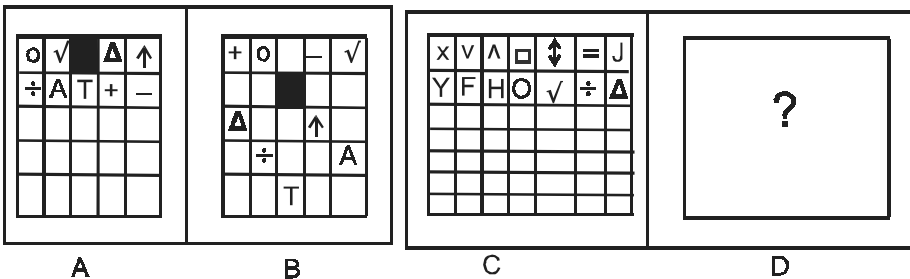


Answer Figures

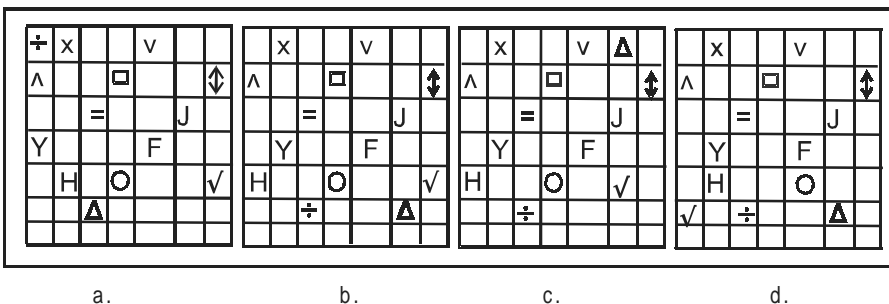


70. In the following question there are two sets of figures. Figures A, B, C and D constitute the Problem Set while figures a, b, c and d constitute the Answer Set. There is a definite relationship between figures A and B. Establish a similar relationship between figures C and D by choosing a suitable figure from the Answer Set.

Problem Figures



Answer Figures



Section – III

For all questions in this section, correct answers carry 1 mark each.

71. Which of the following represents the year in which the national song of India, *Vande Mataram* was sung for the first time on a political occasion?
a. 1866 b. 1876 c. 1886 d. 1896
72. Which of the following is NOT TRUE about Ramon Magsay Award?
a. This award is given in five categories
b. This award was instituted in 1957
c. This award is also known as Asia's Nobel Prize
d. This award is given by Philippines
73. Which of the following is NOT one of the existing TV channels from the stable of MTV Networks Asia Pacific in India?
a. VH1 b. Nickeldeon c. MTV d. Pogo
74. National Rural Employment Guarantee Act was enacted in ...
a. 2004 b. 2005 c. 2006 d. 2007
75. As per the 11th plan the targeted Agricultural growth rate per annum is...
a. 3% b. 3.5% c. 4% d. 4.5%
76. Which of the following represents the venue of the 2014 FIFA World cup?
a. Japan b. Brazil c. Italy d. U.S.A.
77. She is the newly appointed chairperson of Children Film Society of India (CFSI). Name her from the given options.
a. Nafisa Ali b. Nadita Das c. Hema Malini d. Amal Allana
78. CNG is mainly composed of...
a. Butane b. Propane c. Methane d. None of these
79. Vimal is the brand that belongs to the stable of ...
a. Madura Garments b. Arvind Mills c. S. Kumars d. Reliance Industries Ltd.
80. Which of the following personalities is the Present Deputy speaker of the Lok Sabha?
a. K. Rehman Khan b. Karia Munda
c. C.S. Atwal d. Buta Singh
81. Which of the following companies you would associate with the initiation of the concept of Six Sigma?
a. Philips b. Siemens c. Motorola d. General Electric

96. Pleurisy is a disease that affects the...
a. eyes b. kidneys c. lungs d. skin
97. Which of the following days is celebrated as the World Literacy Day?
a. March 8 b. April 8 c. September 8 d. December 8
98. Y.S Rajshekhar Reddy died in a tragic air accident recently. He was the chief minister of ...
a. Karnataka b. Kerala c. Andhra Pradesh d. Tamil Nadu
99. Shivaji was given the title of Chhatrapati in ...
a. 1652 b. 1668 c. 1674 d. 1686
100. Which of the following represents the year in which Chauri Chaura incident took place?
a. 1918 b. 1920 c. 1921 d. 1922
101. Can you identify the name of the first manned mission to moon?
a. Sputnik -I b. Apollo -11 c. Discovery-I d. None of these
102. Which of the following represents the expansion of 'D' in 'NASDAQ'?
a. Derivatives b. Dealers c. Development d. Demutualised
103. *Prevention* and *Travel Plus* are the names of the magazines that belongs to the stable of ...
a. HT Media Ltd. b. India Today Group
c. Anand Bazar Patrika Group d. Indian Express Group
104. 'Experience our expertise', is the tag line that you would associate with ...
a. ICICI Bank b. HDFC Bank c. Yes Bank d. None of these
105. Which of the following is the highest capital city of the world?
a. Ulan Bator b. La Paz c. Ottawa d. Vienna
106. Laura Chinchilla is the first woman president of which of the following countries?
a. Panama b. Nicaragua c. Costa Rica d. Guatemala
107. In which of the following country are the largest users of internet?
a. India b. China c. Japan d. Germany
108. With which of the following is NATGRID related?
a. Computer software b. Power transmission
c. Telecommunication d. Internal Security & Intelligence
109. Who among the following is the new chairman of Public Accounts Committee of Lok Sabha?
a. Yashwant Sinha b. Somnath Chatterjee
c. Gopinath Munde d. Kapil Sibal
110. Where is located India's first petroleum, chemical and petrochemical investment region?
a. Mathura b. Vizag c. Kochi d. Mumbai

Section – IV

For all questions in this section, correct answers carry 1 mark each.

Directions for questions 111 to 113: Each question below consists of a word, followed by four words. Choose the word that is most nearly **SAME** in meaning to the word in the question. Since some of the questions require you to distinguish fine shades of meaning, be sure to consider all the choices before deciding which one is the best.

111. agglomerate
a. prepare b. obliterate c. garner d. assimilate
112. compunction
a. cohesion b. dejection c. exposition d. contrition
113. expostulate
a. challenge b. arrogate c. concede d. denounce

Directions for questions 114 and 115: The following questions consist of two words each that have a certain relationship with each other followed by alternatives. Select the alternative that has the same relationship as depicted in the original pair of words.

114. LYRIC: SONG
a. verse: tune b. sonnet : words
c. stage: artists d. dialogue : drama
115. OASIS: DESERT
a. ship: camel b. reflection: phantasm
c. whirlpool : water d. image: vertical

Directions for questions 116 to 119: Read the passage carefully and answer the questions that follow.

The world is fast running out of water after decades of unsustainable over-pumping of aquifers to expand food production to feed a growing world population. Water tables have fallen sharply and rapidly in scores of countries including China, India and the United States, which together produce nearly half of the world's grain. Other more populous countries with depleted aquifers include Pakistan, Iran and Mexico. As water tables fall, rivers fail to reach the sea, lakes disappear and wells dry up.

Conventional industrial agriculture is extremely water-intensive. It takes 1000 tonnes of water to produce a tonne of grain. Worldwide, 70 % of all the water diverted from rivers or pumped from underground is used for irrigation; 20% is used by industry and 10% for residential purposes.

Growing needs of industry is diverting irrigation water from agriculture, and countries are turning to grain imports to make up for the shortfall. A person drinks 4 litres of water a day and an additional 2 000 litres is needed to produce the food eaten. In rich countries where grain is consumed to feed livestock, the water needed to produce food per person can easily reach 4 000 litres a day.

Water shortages are generating conflicts between upstream and downstream claimants.

Another challenge facing farmers to keep up productivity is global warming. The 16 warmest years since record -keeping began in 1880 all occurred from 1980 onwards, the three warmest years were 1998, 2001 and 2003. Crops are facing heat stresses that are without precedent.

As the temperature rises above 34 C, photosynthesis slows down, dropping to zero for many crops at 37 C. At that temperature, corn plants in the US Corn Belt suffer from heat shock and dehydration, shrinking the harvest. Researchers at the International Rice Research Institute in the Philippines and the US Department of Agriculture developed a rule of thumb that each deg C rise in temperature above the optimum during the growing season reduces grain yields by 10%. Thus, according to projections of the IPCC – which some say is already an underestimate - grain harvests in tropical regions could be reduced by an average of 5-11 percent by 2020 and 11-46 percent by 2050.

Research at Ohio State University indicates that as temperature rises, photosynthesis increases until 20C, and then plateaus until 35C when it begins to decline, ceasing entirely at 40C. At that temperature, the plant is in thermal shock, simply trying to survive.

The most vulnerable part of the life cycle is at fertilization. Corn silk dries out rapidly in the heat, and prevents pollen tubes from reaching the kernels. Similarly, the fertility of rice falls from 100% at 34C to nearly zero at 40C. In north India, a 1C rise in temperature did not reduce wheat yields, but a 2C rise lowered yields at almost all of 10 sites. There was a decline in irrigated wheat yields ranging from 37 to 58% from heat alone; and when increased CO₂ was factored in – which tends to increase photosynthesis - the decline ranged from 8 to 38%.

The problems of water shortage and increased temperatures are already hitting grain yields. Grain production has been declining in some smaller countries; but it is now falling in China, the most populous country in the world. Over the past five years, China's grain harvest has dropped from 390 million to 340 million tonnes – a drop equal to the grain harvest of Canada.

Sooner or later, says Lester Brown, China will enter the world grain market for imports, and that will cause food prices to rise, especially as world grain reserves are at an all time low.

In 2002, the world grain harvest of 1 807 million tonnes fell short of the world grain consumption by 100 million tonnes, or 5 percent. This shortfall, the largest on record, marked the third consecutive year of grain deficits, bringing stocks to the lowest level in a generation.

In such a situation, the first to suffer will be the world's poorest and hungriest. The United Nations Food and Agriculture Organisation (FAO) latest estimates, based on data from the years 1998-2000, put the number of undernourished people in the world at 840 million. But since 1998-2000, world grain production has fallen 5 percent, suggesting that the ranks of the hungry may be swelling.

"Food is fast becoming a national security issue as growth in the world harvest slows and as falling water tables and rising temperatures hint at future shortages," says Lester Brown.

116. According to the passage the world is fast running out of water due to:
- Expanding food production.
 - Decades of over pumping of aquifers.
 - Growth rate in China.
 - Disappearing water bodies.

117. Conventional industrial agriculture takes up:
- 2000 tonnes of water to produce a tonne of grain.
 - 4000 tonnes of water to produce a tonne of grain.
 - 1000 tonnes of water to produce a tonne of grain.
 - 5000 tonnes of water to produce a tonne of grain.
118. Rising temperatures result in:
- Gradual water shortages.
 - Slowing down of photosynthesis.
 - Plateaus in grain production.
 - Record productivity.
119. The drop in China's grain harvest equals:
- The combined produce of rest of Asia.
 - Wheat production in North India.
 - Grain harvest of Canada.
 - The imports of Philippines.

Directions for questions 120 and 121: From the list of punctuation errors given below, choose the correct punctuation mark that is missing in the following sentences:

- inverted commas
- semicolon
- comma
- hyphen

120. He looked for his shoes but he couldn't find it.

121. She screamed, Put the book back on the table.

122. Quintessential is
- | | | | |
|--------------------|-------------------|-------------------|------------------|
| a. perfect example | b. very essential | c. needed for use | d. not essential |
|--------------------|-------------------|-------------------|------------------|
123. Choose the odd one out:
- | | | | |
|-----------|--------------|------------|-----------|
| a. berate | b. castigate | c. acclaim | d. rebuke |
|-----------|--------------|------------|-----------|

Directions for Questions 124 and 125: Identify the figures of speech:

124. Life is a journey
- | | | | |
|-----------|-------------|--------------------|------------|
| a. Simile | b. Metaphor | c. Personification | d. Epigram |
|-----------|-------------|--------------------|------------|
125. Peck of pickled peppers
- | | | | |
|-----------------|---------------|-----------|---------------|
| a. Alliteration | b. Apostrophe | c. Climax | d. Anticlimax |
|-----------------|---------------|-----------|---------------|

126. Which of the following two sentences convey the same idea?

1. All the students were delighted but Rimi and Sanya.
2. All the students were delighted for Rimi and Sanya.
3. All the students were delighted as Rimi and Sanya.
4. All the students were delighted except Rimi and Sanya.

a. 1, 2 b. 1, 3 c. 2,3 d. 1, 4

127. Choose the correct option:

You like chocolates,_____?

a. do you b. didn't you c. don't you d. did you

Directions for questions 128 and 129: The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a letter A, B, C and D. Choose the most logical order of sentences among the given choices to construct a coherent paragraph.

128. A. The scent molecules produced by flowers in a less polluted environment, such as in the 1800s, could travel for roughly 1,000 to 1,200 metres.
B. The heavily polluted air of cities is destroying the fresh scents of flowers.
C. In turn this affects the plants, which are less likely to be fertilised.
D. The discovery could explain why bees and other pollinating insects are in decline: the lack of scent means they cannot find the flowers, which provide the nectar needed for food.

a. BDCA b. ADCB c. CADB d. CDBA

129. A. A troop of 40 macaque monkeys are being groomed to undertake a journey to the red planet, ahead of a human mission.
B. The macaques will be the first to experience the radiation that poses cancer risk to astronauts if they spend too long in space.
C. Monkeys may become the first earthlings to set foot on Mars.
D. People and monkeys have approximately identical sensitivity to small and large radiation doses.

a. ABCD b. ADCB c. CADB d. CDBA

Directions for questions 130 to 133: Each question below consists of a word, followed by four words. Choose the word that is most nearly **OPPOSITE** in meaning to the word in the question. Since some of the questions require you to distinguish fine shades of meaning, be sure to consider all the choices before deciding which one is the best.

130. Punctilious

a. conscientious b. feckless c. punctual d. despot

131. Ravenous

a. abstemious b. excessive c. calm d. apostle

132. Fatuous

a. insensate b. wise c. anxious d. beneficial

133. Callow

a. mature b. jejune c. puerile d. callous

Directions for questions 134 and 135: Choose the option in which the word has the correct spelling.

134. a. incendiary b. incandiar c. incendiery d. incendary
135. a. luminscence b. luminescence c. luminscence d. luminesence

Directions for questions 136 to 139: Fill in the blank with the appropriate preposition / phrase.

136. Then she made the secret signal that had been agreed _____ between Ozma and her.
a. by b. with c. upon d. to
137. Philander says that we can exist indefinitely on the wild fruit and nuts, which abound _____ the jungle.
a. in b. on c. within d. at
138. The girls arranged the books in _____.
a. pie and apple manner b. green apple order
c. apple pie order d. pie apple manner.
139. It is foolish to depend on a _____.
a. false weather friend. b. fair weather friend.
c. fairly good friend. d. weathered friend.

Directions for questions 140 to 145: Choose the most appropriate sentence which can replace the sentence in 'Bold'.

140. **The Glimpses of World History are written by Jawaharlal Nehru.**
a. The Glimpses of World History is written by Jawaharlal Nehru.
b. The Glimpses of World History were written by Jawaharlal Nehru.
c. The Glimpses of World History have been written by Jawaharlal Nehru.
d. The Glimpses of World History are written by Jawaharlal Nehru.
141. **The basics of grammar is essential for a good speaker.**
a. The basic of grammar was essential for a good speaker.
b. The basics of grammar is essential for a good speaker.
c. The basic of grammar is essential for a good speaker.
d. The basics of grammar are essential for a good speaker.
142. **He explained the matter clearly, with care, compellingly and successfully.**
a. He explained the matter clearly, with care, compellingly and successfully.
b. He explained the matter clearly, carefully, with compulsion and successfully.
c. He explained the matter clearly, carefully, compellingly and successfully.
d. He explained the matter clearly, with care, compulsion and successfully.
143. **The school and what its prospects are of great importance to me.**
a. The school and its prospects are of great importance to me.
b. The school and whatever its prospects are of great importance to me.
c. The school and what its prospects are of great importance to me.
d. The school and what the prospects are of great importance to me.

144. **Mahatma Gandhi, the father of the nation was a great freedom fighter.**

- a. Mahatma Gandhi the father of the nation was a great freedom fighter.
- b. Mahatma Gandhi the father of the nation, was a great, freedom fighter.
- c. Mahatma Gandhi the father, of the nation was a, great freedom fighter.
- d. Mahatma Gandhi, the father of the nation, was a great freedom fighter.

145. **Men may come, and men may go but, I go on forever.**

- a. Men, may come and men may go, but I go on forever.
- b. Men may come, and men may go, but I go on forever.
- c. Men may, come and men may go but I, go on forever.
- d. Men may come and men may, go but I go, on forever.

Directions for questions 146 and 147: Match the items in column I with those in column II. Choose the correct combination from the options given below.

146. Match the several meanings of the word CONCEIVE with their appropriate usages.

Meaning

- 1. to form
- 2. to hold an opinion
- 3. to experience
- 4. originate

- a. 1–7, 2–8, 3–6, 4–5
- c. 1–6, 2–5, 3–7, 4–8

Usage

- 5. A new nation will conceive in liberty.
- 6. They could conceive a great love for music.
- 7. He did conceive the plan on a break.
- 8. I can't conceive that it would be of any use.

- b. 1–8, 2–7, 3–5, 4–6
- d. 1–8, 2–5, 3–6, 4–7

147. Match the several meanings of the word ANNUAL with their appropriate usages.

Meaning

- 1. pertaining to a year
- 2. occurring once a year
- 3. growing only one season
- 4. executed during a year

- a. 1–7, 2–8, 3–6, 4–5
- c. 1–8, 2–7, 3–5, 4–6

Usage

- 5. Corn is an annual crop.
- 6. The annual course of the sun is unchanged.
- 7. The annual celebration was postponed.
- 8. His annual salary has taken a hit.

- b. 1–6, 2–5, 3–8, 4–7
- d. 1–6, 2–8, 3–7, 4–5

148. Match the items in column I with those in column II. Choose the correct answer combination given below:

Column I

1. as busy as
2. as hot as
3. as bold as
4. as black as

- a. 1–8, 2–7, 3–6, 4–5
- c. 1–5, 2–6, 3–8, 4–7

Column II

5. hell
6. pitch
7. brass
8. beaver

- b. 1–6, 2–7, 3–8, 4–5
- d. 1–8, 2–5, 3–7, 4–6

Directions for Questions 149 and 150: Choose the correct option to fill the blank for correct grammatical use:

149. Savita lives ____ Calcutta ____ 153, Kingsway Camp.

- a. in, at b. at, in c. in, in d. in, on

150. The cat jumped _____ the table.

- a. on b. onto c. across d. at