

Section 1 - Section 1

Question No.1

4.00

Bookmark ☐

What is the maximum number of arguments that can be passed in a single function in C?

- ☐ 8
- ☐ 253
- ☐ 361
- ☐ 127

Question No.2

4.00

Bookmark ☐

Identify the adverb in the following sentence:

We looked upwards and saw a bright shooting star

- ☐ upwards
- ☐ shooting
- ☐ looked
- ☐ bright

Question No.3

4.00

Bookmark ☐

Which of the following is characteristic of Processed Data ?

- ☐ Data is ready for analysis
- ☐ All steps should be noted
- ☐ Hard to use for data analysis
- ☐ None of the mentioned

Question No.4

4.00

Bookmark ☐

Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse is observed from the ships are 30° and 45° respectively. If the lighthouse is 100 m high, the distance between the two ships is:

- ☐ 273 m
- ☐ 300 m
- ☐ 200 m
- ☐ 173 m

Question No.5

4.00

Bookmark ☐

Which of the following logical formulas is logically equivalent to $(p \rightarrow r) \wedge (q \rightarrow r)$? \rightarrow represents the logical IMPLIES connective, \wedge represents the logical AND connective and \vee represents the logical OR connective.

- ☐ $(p \wedge q) \rightarrow r$
- ☐ $(p \vee q) \rightarrow r$
- ☐ $r \rightarrow (p \wedge q)$
- ☐ $r \rightarrow (p \vee q)$

Question No.6

4.00

Bookmark ☐

Choose the missing term: SHG, RIF, QJE, PKD, ?

- ☐ OLC
- ☐ OLD
- ☐ MLB
- ☐ NMD

Question No.7

4.00

Bookmark ☐

Which of the following true about FILE *fp

- ☐ FILE is a buffered stream
- ☐ FILE is a keyword in C for representing files and fp is a variable of FILE type
- ☐ FILE is a structure and fp is a pointer to the structure of FILE type
- ☐ FILE is a stream

Question No.8

4.00

Bookmark ☐

In the context of "break" and "continue" statements in C, pick the best statement.

- ☐ "break" can be used in "for", "while" and "do-while" loop body.
- ☐ "break" and "continue" can be used in "for", "while", "do-while" loop body and "switch" body.
- ☐ "continue" can be used in "for", "while" and "do-while" loop body.
- ☐ "break" and "continue" can be used in "for", "while" and "do-while" loop body. But only "break" can be used in "switch" body.

Question No.9

4.00

Bookmark ☐

A user can get files from another computer on the internet by using

- ☐ utp
- ☐ telnet
- ☐ http
- ☐ ftp

Question No.10

4.00

Bookmark ☐

Median of 7, 6, 4, 8, 2, 5, 11 is

- ☐ 4
- ☐ 8
- ☐ 12
- ☐ 11

Question No.11

4.00

Bookmark ☐

What does the following C-statement declare? `int (*f)(int*) ;`

- ☐ A function that takes an integer pointer as argument and returns an integer
- ☐ A function that takes an integer pointer as argument and returns a function pointer
- ☐ A pointer to a function that takes an integer pointer as argument and returns an integer.
- ☐ A function that takes an integer as argument and returns an integer pointer.

Question No.12

4.00

Bookmark ☐

$(1010.011)_2$

- ☐ $(11.365)_{10}$
- ☐ $(10.365)_{10}$
- ☐ $(10.375)_{10}$
- ☐ $(11.375)_{10}$

Question No.13

4.00

Bookmark ☐

Which of the following is a comment on the line of code below?

`const int *ptr;`

- ☐ You cannot change the pointer ptr itself.
- ☐ You can change the pointer as well as the value pointed by it.
- ☐ You may or may not change the value pointed by ptr.

☐ You cannot change the value pointed by ptr.

Question No.14

4.00

Bookmark ☐

Pointing to a photograph, a woman says, "This man's son's sister is my mother-in-law." How is the woman's husband related to the man in the photograph?

- ☐ Son-in-law
- ☐ Nephew
- ☐ Grandson
- ☐ Son

Question No.15

4.00

Bookmark ☐

The contrapositive of the conditional statement $p \rightarrow q$ (\rightarrow means the logical IMPLIES connective) is

- ☐ $\neg q \rightarrow \neg p.$
- ☐ $\neg p \rightarrow \neg q.$
- ☐ $q \rightarrow p.$
- ☐ $\neg q \rightarrow p.$

Question No.16

4.00

Bookmark ☐

Predict output of the C code given below

```
#include <stdio.h>
int main()
{
    float f1 = 0.1;
    if (f1 == 0.1)
        printf("equal\n");
    else
        printf("not equal\n");
}
```

- ☐ Equal
- ☐ Not equal
- ☐ Output depends on the compiler
- ☐ Code does not compile

Question No.17

4.00

Bookmark ☐

Which of the following is true about arrays in C.

- ☐ For every type T, there can be an array of T
- ☐ 2D arrays are stored in column major form

- ☐ When an array is passed to a function, C compiler creates a copy of array.
- ☐ For every type T except void and function type, there can be an array of T.

Question No.18

4.00

Bookmark ☐

In fopen(), the open mode "wx" is sometimes preferred over "w" because. 1) Use of wx is more efficient. 2) If w is used, old contents of file are erased and a new empty file is created. When wx is used, fopen() returns NULL if file already exists.

- ☐ only 2
- ☐ Both 1 and 2
- ☐ Only 1
- ☐ neither 1 and 2

Question No.19

4.00

Bookmark ☐

What does error 404 or Not Found error while accessing a URL mean?

- ☐ The requested HTML file does not have sufficient permissions
- ☐ Requested HTML file is not available
- ☐ The server could not find the requested URL
- ☐ The path to the interpreter of the script is not valid

Question No.20

4.00

Bookmark ☐

How many solutions does the equation $x_1 + x_2 + x_3 = 11$ have, where x_1, x_2 and x_3 are non-negative integers?

- ☐ 68
- ☐ 58
- ☐ 78
- ☐ 88

Question No.21

4.00

Bookmark ☐

In C programming language, # define is a

- ☐ Function
- ☐ Operator
- ☐ Pre-processor
- ☐ None of these

Question No.22

4.00

Bookmark ☐

Suppose a C program has floating constant 1.414, what's the best way to convert this as "float" data type?

- ☐ 1.414 itself of "float" data type i.e. nothing else required.
- ☐ (float)1.414
- ☐ float(1.414)
- ☐ 1.414f or 1.414F

Question No.23

4.00

Bookmark ☐

The reason for using pointers in a C program is

- ☐ Pointers allow different functions to share and modify their local variables.
- ☐ To pass large structures so that complete copy of the structure can be avoided.
- ☐ Pointers enable complex "linked" data structures like linked lists and binary trees.
- ☐ All of the Above

Question No.24

4.00

Bookmark ☐

Compute the next item in the series: 5, 8, 13, 21, 34, ?

- ☐ 55
- ☐ 56
- ☐ 88
- ☐ None of the above

Question No.25

4.00

Bookmark ☐

Are logical operators in C evaluated with shortcut evaluation?

- ☐ Depends on compiler
- ☐ No
- ☐ Depends on platform
- ☐ Yes

Question No.26

4.00

Bookmark ☐

Anand is heavier than Gopal. Mohan is lighter than Jagan. Pandian is heavier than Jagan but lighter than Gopal. Who is the heaviest of all ?

- ☐ Anand
- ☐ Pandian
- ☐ Gopal
- ☐ Jagan

Question No.27

4.00

Bookmark ☐

In the game of Sudoku, let the predicate $p(i, j, n)$ represent that the cell in row i and column j contains value n . Which of the following formulas asserts that every column contains all the numbers? \wedge represents logical AND, \vee represents logical OR.

- ☐ $\bigwedge_{i=1}^9 \bigwedge_{n=1}^9 \bigvee_{j=1}^9 p(i, j, n)$
- ☐ $\bigwedge_{j=1}^9 \bigwedge_{n=1}^9 \bigvee_{i=1}^9 p(i, j, n)$
- ☐ $\bigvee_{j=1}^9 \bigwedge_{n=1}^9 \bigvee_{i=1}^9 p(i, j, n)$
- ☐ $\bigwedge_{j=1}^9 \bigwedge_{n=1}^9 \bigwedge_{i=1}^9 p(i, j, n)$

Question No.28

4.00

Bookmark ☐

In the following question, the first two words (given in italics) have a definite relationship. Choose one word out of the given four alternatives which will fill the blank space and show the same relationship with the third word as between the first two.

Truthfulness is to Liar as Loyalty is to?.....

- ☐ Worker
- ☐ Falsehood
- ☐ Traitor
- ☐ Devotion

Question No.29

4.00

Bookmark ☐

Let A be a set, Φ represent the empty set and let \times represent the Cartesian product operation over sets. Which of the following is equivalent to $\Phi \times A$?

☐ We cannot take the Cartesian product of a set A with the empty set.

☐ Φ

☐ $A \times A$

☐ A

Question No.30

4.00

Bookmark ☐

What is the cardinality of the set $\{a, \{a\}, \{a, \{a\}\}\}$?

☐ Two

☐ Three

☐ Four

☐ This is not a set

Question No.31

4.00

Bookmark ☐

Which of the following is a list of data protocols that are used in IoT applications?

☐ 6LowPAN, IPv4/IPv6

☐ TCP/IP, UDP

☐ WiFi, Bluetooth

☐ MQTT, CoAP, AMQP

Question No.32

4.00

Bookmark ☐

The first network that planted the seeds of internet was

☐ ARPANET

☐ NSFNet

☐ Vnet

☐ None of the mentioned

Question No.33

4.00

Bookmark ☐

Which of the following is used to covert URL in to IP address?

☐ CSS

☐ DNS

☐ AJAX

☐ None of these

Question No.34

4.00

Bookmark ☐

stderr is similar to which of the following?

☐ stdout

☐ Not similar to any of the above

☐ Both stdout and stdin

☐ stdin

Question No.35

4.00

Bookmark ☐

Identify the odd item

☐ PASCAL

☐ FORTRAN

☐ COBOL

☐ OS/2

Question No.36

4.00

Bookmark ☐

Which of the following operators can be applied on structure variables?

- ☐ Equality comparison (==)
- ☐ Assignment (=)
- ☐ < and >
- ☐ None of the Mentioned

Question No.37

4.00

Bookmark ☐

Which of the following Linux Distribution(s) is/are developed in India with focus on Indian Language Interface?

- ☐ Ubuntu
- ☐ RedHat
- ☐ BOSS
- ☐ None of these

Question No.38

4.00

Bookmark ☐

In binary logic, complement of the expression $A'B + CD'$ is

- ☐ $(A' + B)(C' + D)$
- ☐ $(A + B')(C' + D)$
- ☐ $(A' + B)(C + D')$
- ☐ $(A + B')(C + D')$

Question No.39

4.00

Bookmark ☐

Let A , B and C be sets. Which of the following is equivalent to $\overline{(A \cup (B \cap C))}$?
 \overline{A} represents the complement of the set A .

- ☐ $(\overline{C} \cap \overline{B}) \cup \overline{A}$
- ☐ $(\overline{C} \cup \overline{B}) \cap \overline{A}$
- ☐ $(\overline{A} \cup \overline{B}) \cap (\overline{A} \cup \overline{C})$
- ☐ $(\overline{A} \cap \overline{B}) \cup (\overline{A} \cap \overline{C})$

Question No.40

4.00

Bookmark ☐

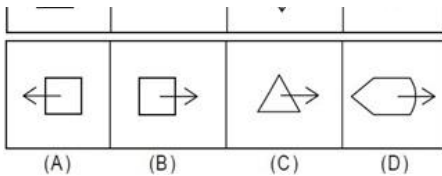
pragma startup is primarily used for which of the following?

- ☐ Cleaning memory before program execution starts
- ☐ Informing the operating system about a crash
- ☐ Execute a function before the main function
- ☐ Execute a function soon after the main function

Question No.41

4.00

Bookmark ☐



- (A) ☐ D
 (B) ☐ B
 (C) ☐ C
 (D) ☐ A

Question No.42

4.00

Bookmark ☐

Suppose n and p are unsigned int variables in a C program. We wish to set p to nC_3 . If n is large, which of the following statements is most likely to set p correctly?

- ☐ $p = n * (n-1) * (n-2) / 6.0;$
☐ $p = n * (n-1) / 2 * (n-2) / 3;$
☐ $p = n * (n-1) * (n-2) / 6;$
☐ $p = n * (n-1) / 3 * (n-2) / 2;$

Question No.43

4.00

Bookmark ☐

Which of the following is true about the logical formula $(p \wedge q) \rightarrow (p \vee q)$?

- ☐ It is not a well-formed formula.
☐ It is just a satisfiable formula.
☐ It is a contradiction
☐ It is a tautology

Question No.44

4.00

Bookmark ☐

How many Permutations of the letters of the word APPLE are there?

- ☐ 60
☐ 240
☐ 120
☐ 600

Question No.45

4.00

Bookmark ☐

Three matrices A , B and C have to be multiplied. Which of the following represents a sequence of dimensions of the three matrices for which their multiplication is well-defined?

- ☐ A is a $m \times n$ matrix, B is a $n \times n$ matrix and C is a $m \times m$ matrix.
☐ A is a $m \times n$ matrix, B is a $m \times n$ matrix and C is a $n \times m$ matrix.
☐ A is a $m \times n$ matrix, B is a $m \times k$ matrix and C is a $m \times p$ matrix.
☐ A is a $m \times n$ matrix, B is a $n \times k$ matrix and C is a $k \times p$ matrix.

Question No.46

4.00

Bookmark ☐

Situation in which not a single row is linear combination of remaining rows is classified as

- ☐ identity dependence
☐ linearly dependant
☐ linearly independent
☐ identity independence

Question No.47

4.00

Bookmark ☐

If Milk is water, water is sugar, sugar is road, road is sky and sky is track where do aeroplanes fly?

- ☐ Milk
☐ Sky
☐ Sugar

☐ Road

Question No.48

4.00

Bookmark ☐

Which of the following machine learning algorithm works with continuous data?

- ☐ Classification
- ☐ Dimensionality reduction
- ☐ Clustering
- ☐ Regression

Question No.49

4.00

Bookmark ☐

Which of the following is associated with Block chain technology?

- ☐ Bitcoin
- ☐ Worm
- ☐ Virus
- ☐ Cybercoin

Question No.50

4.00

Bookmark ☐

In the context of Web, CSS stands for

- ☐ Cascaded Style Sheets
- ☐ Closed Style Sheets
- ☐ Color Style Sheets
- ☐ None of these

Question No.51

4.00

Bookmark ☐

The cube root of .000216 is:

- ☐ 87
- ☐ 0.06
- ☐ 0.6
- ☐ 77

Question No.52

4.00

Bookmark ☐

Array of elements in rectangular arrangement is classified as

- ☐ Linked List
- ☐ elements array
- ☐ elements
- ☐ matrix

Question No.53

4.00

Bookmark ☐

Bristle : Brush

- ☐ Stage: Chairs
- ☐ Arm : Leg
- ☐ Key: Piano
- ☐ Art: Sculpture

Question No.54

4.00

Bookmark ☐

Choose the best synonym of the italicized word.

Reena has an *insatiable* love for music.

- ☐ unquenchable
- ☐ unchanging
- ☐ undesirable

☐ irreconcilable

Question No.55

4.00

Bookmark ☐

What is the output of the following C code?

```
#include <stdio.h>
void main()
{
    int i = 2;
    do
    {
        printf("Hi");
    } while (i < 2)
}
```

- ☐ Hi
- ☐ No output
- ☐ Compile time error
- ☐ Hi Hi

Question No.56

4.00

Bookmark ☐

Which of the following represents the type (extension) of file for a mobile application that one would download from Google Play Store?

- ☐ .ipa extension
- ☐ .jar extension
- ☐ .exe extension
- ☐ .apk extension

Question No.57

4.00

Bookmark ☐

The action 'STACK(A, B)' of a robot arm specify to

- ☐ Place block B on Block A
- ☐ Place blocks B, A on the table in that order
- ☐ Place blocks A, B on the table in that order
- ☐ Place block A on block B

Question No.58

4.00

Bookmark ☐

Assertion: Crude oil is abundantly found in nature

Reason: It is the main raw material for all automobiles

- ☐ Both A and R are true and R is not the correct explanation of A
- ☐ A is false but R is true
- ☐ Both A and R are true and R is the correct explanation of A
- ☐ A is true but R is false

Question No.59

4.00

Bookmark ☐

These poultry belong to Mr. Kishen, our new neighbor
The underlined word is a _____ noun.

- ☐ abstract
- ☐ common

- ☐ common
- ☐ collective
- ☐ proper

Question No.60

4.00

Bookmark ☐

Study the following information carefully and answer the question below it

The Director of an MBA college has decided that six guest lectures on the topics of Motivation, Decision Making, Quality Circle, Assessment Centre, Leadership and Group Discussion are to be organised on each day from Monday to Sunday.

- (i) One day there will be no lecture (Saturday is not that day), just before that day Group Discussion will be organised.
- (ii) Motivation should be organised immediately after Assessment Centre.
- (iii) Quality Circle should be organised on Wednesday and should not be followed by Group Discussion
- (iv) Decision Making should be organised on Friday and there should be a gap of two days between Leadership and Group Discussion

Which of the pairs of lectures were organised on first and last day?

- ☐ Quality Circle and Motivation
- ☐ Group Discussion and Quality Circle
- ☐ Group Discussion and Decision Making
- ☐ None of these

Question No.61

4.00

Bookmark ☐

What does the following C statement mean? `scanf("%4s", str);`

- ☐ Read maximum 4 characters from console.
- ☐ Read exactly 4 characters from console.
- ☐ Read a string str in multiples of 4
- ☐ Nothing

Question No.62

4.00

Bookmark ☐

Study the following information carefully and answer the question below it

- (i) There is a group of five persons- A, B, C, D and E
- (ii) One of them is manual scavenger, one is sweeper, one is watchman, one is human scarecrow and one is grave-digger
- (iii) Three of them – A, C and grave-digger prefer tea to coffee and two of them – B and the watchman prefer coffee to tea
- (iv) The human scarecrow and D and A are friends to one another but two of these prefer coffee to tea.
- (v) The manual scavenger is C's brother

Which of the above statements is unnecessary?

- ☐ (iii)
- ☐ (ii)
- ☐ Null
- ☐ (iv)

Question No.63

4.00

Bookmark ☐

Which of the following is not a logical operator?

- ☐ ||
- ☐ !
- ☐ &&
- ☐ ==>

Question No.64

4.00

Bookmark ☐

What is the output of the following C code?

```
include <stdio.h>
void main()
{
```

```
#define max 37;
printf("%d", max);
}
```

- ☐ Compile time error
- ☐ max
- ☐ Depends on compiler
- ☐ 37

Question No.65

4.00

Bookmark ☐

Automatic variables in C are allocated memory in

- ☐ Code segment
- ☐ Stack
- ☐ Data segment
- ☐ Heap

Question No.66

4.00

Bookmark ☐

What is the output of the following C code?

```
#include <stdio.h>
struct point
{
    int x;
    int y;
};
void foo(struct point*);
int main()
{
    struct point p1 = {1, 2};
    foo(&p1);
}
void foo(struct point *p)
{
    printf("%d\n", *p->x++);
}
```

- ☐ 1
- ☐ 2
- ☐ Compile time error
- ☐ Segmentation fault

Question No.67

4.00

Bookmark ☐

The least perfect square, which is divisible by each of 21, 36 and 66 is:

- ☐ 214344
- ☐ 231444
- ☐ 213444
- ☐ 214434

Question No.68

4.00

Bookmark ☐

Study the following information carefully and answer the question below it:

Aasha, Bhuvnesh, Charan, Danesh, Ekta, Farhan, Ganesh and Himesh are sitting around a circle, facing the centre. Aasha sits fourth to the right of Himesh while second to the left of Farhan. Charan is not the neighbour of Farhan and Bhuvnesh. Danesh sits third to the right of Charan. Himesh never sits next to Ganesh.

Who is to the immediate left of Aasha?

- ☐ Ganesh
- ☐ Charan
- ☐ Aasha
- ☐ Bhuvnesh

Question No.69

4.00

Bookmark ☐

What is the output of the C code below?

```
#include <stdio.h>
void main()
{
    int a[3] = {1, 2, 3};
    int *p = a;
    printf("%p\t%p", p, a);
}
```

- ☐ Same address printed
- ☐ Compile time error
- ☐ No output
- ☐ Different address printed

Question No.70

4.00

Bookmark ☐

In arithmetic progression, if $d = -4$, $n = 7$, $a_n = 4$, then a is

- ☐ 28
- ☐ 20
- ☐ 6
- ☐ 7

Question No.71

4.00

Bookmark ☐

Let p be the proposition "You drive over 80 kilometres per hour." and let q be the proposition "You get a speeding ticket.". Which of the following formulas represents the statement "Whenever you get a speeding ticket, you are driving over 80 kilometres per hour"? In the options below, \rightarrow represents the logical IMPLIES connective and \wedge represents the logical AND connective.

- ☐ $q \rightarrow \neg p.$
- ☐ $p \wedge \neg q.$
- ☐ $q \rightarrow p.$
- ☐ $p \rightarrow q.$

Question No.72

4.00

Bookmark ☐

Which pre-defined function returns a pointer to the last occurrence of a character in a string?

- ☐ `strchr(s, c);`
- ☐ `strlchr(s, c);`
- ☐ `strrchr(s, c);`
- ☐ `strfchr(s, c);`

Question No.73

4.00

Bookmark ☐

X is twice as good a workman as Y and together they finish a piece of work in 18 days. In how many days will X alone finish the work?

- ☐ 27
- ☐ 28
- ☐ 25
- ☐ 26

Question No.74

4.00

Bookmark ☐

A quadratic polynomial with real number coefficients has,

- ☐ More than two real roots
- ☐ Exactly two real roots
- ☐ Exactly two roots that are natural numbers
- ☐ At most two real roots

Question No.75

4.00

Bookmark ☐

The term Ajax is best described by which of the following?

- ☐ A single technology that can be used to implement a web application in the client side.
- ☐ A single technology that can be used to implement a web application in the server side.
- ☐ A group of technologies that can be used to implement a web application in the client side.
- ☐ A group of technologies that can be used to implement a web application in the server side.

Question No.76

4.00

Bookmark ☐

The mother gripped her child's arm _____ he be trampled.

- ☐ lest
- ☐ unless
- ☐ if
- ☐ if not

Question No.77

4.00

Bookmark ☐

Which combination of the integer variables x, y and z makes the variable a get the value 4 in the following expression? $a = (x > y) ? ((x > z) ? x : z) : ((y > z) ? y : z)$

- ☐ x = 3, y = 4, z = 2
- ☐ x = 6, y = 3, z = 5
- ☐ x = 5, y = 4, z = 5
- ☐ x = 6, y = 5, z = 3

Question No.78

4.00

Bookmark ☐

If you want to align text to the right side of a block element in a cascading style sheet (CSS) then which of the following property would you use?

- ☐ Justify
- ☐ Text Align
- ☐ Right Align
- ☐ Left Align

Question No.79

4.00

Bookmark ☐

Which of the following is true

- ☐ gets() can read a string with newline characters but a normal scanf() with %s can not.
- ☐ gets() can read a string with spaces but a normal scanf() with %s can not.
- ☐ gets() can always replace scanf() without any additional code.
- ☐ None of the Mentioned

Question No.80

4.00

Bookmark ☐

As a country, the United States is _____ that there are five time zones.

- ☐ so big
- ☐ much big
- ☐ too big
- ☐ very big

Question No.81

4.00

Bookmark ☐

The function/macro putchar(c) always outputs character c to the

- ☐ Depends on the compiler
- ☐ Standard output
- ☐ Screen
- ☐ Depends on the standard

Question No.82

4.00

Bookmark ☐

The communication protocol used by Internet is

- ☐ HTTP
- ☐ FTP
- ☐ WWW
- ☐ TCP/IP

Question No.83

4.00

Bookmark ☐

The malicious software used to attack the systems are called as

- ☐ Malware

- ☐ Embedware
- ☐ Freeware
- ☐ Closeware

Question No.84

4.00

Bookmark ☐

Which of the following causes an error?

- ☐ Trying to read a file that doesn't exist.
- ☐ Inability to write data in a file.
- ☐ Failure to allocate memory with the help of malloc.
- ☐ All of the items above.

Question No.85

4.00

Bookmark ☐

In a Javascript Application what function can be used to send messages to users requesting for an text input?

- ☐ Prompt()
- ☐ Alert()
- ☐ Display()
- ☐ GetOutput()

Question No.86

4.00

Bookmark ☐

Which of the following statement is correct for switch controlling expression?

- ☐ Both int and char can be used in "switch" control expression
- ☐ All types i.e. int, char and float can be used in "switch" control expression
- ☐ "switch" control expression can be empty as well.
- ☐ Only int can be used in "switch" control expression.

Question No.87

4.00

Bookmark ☐

What is the use of "#pragma once"?

- ☐ Used to avoid multiple declarations of same variable.
- ☐ Used to avoid assertions
- ☐ to cause the current source file to be included only once in a single compilation
- ☐ Used in a c file to include a header file at least once

Question No.88

4.00

Bookmark ☐

_____ computing refers to applications and services that run on a distributed network using virtualized resources.

- ☐ Cloud
- ☐ Parallel
- ☐ Soft
- ☐ Distributed

Question No.89

4.00

Bookmark ☐

Which of the following is NOT a protocol?

- ☐ IMAP
- ☐ SMTP
- ☐ HTTP
- ☐ CSS

Question No.90

4.00

Bookmark ☐

Process in which elements of matrix combined together to compute real-valued number is classified as

- ☐ matrix combination
- ☐ determinant

- ☐ real combination
- ☐ optimization

Question No.91

4.00

Bookmark ☐

The function `tolower(c)` defined in library works for which of the following.

- ☐ Unicode character set
- ☐ Any character set
- ☐ Ascii and utf-8 but not EBSIDIC character set
- ☐ Ascii character set

Question No.92

4.00

Bookmark ☐

Correct the error in the italicized part of the sentence by choosing the most appropriate option.

Whenever the two sisters *go out for shopping*, they take their pet dog with them.

- ☐ go out of shopping
- ☐ go out shopping
- ☐ go out on shopping
- ☐ go out to shopping

Question No.93

4.00

Bookmark ☐

What is the output of this C code (if run with no options or arguments)?

```
#include <stdio.h>
int main(int argc, char *argv[])
{
    printf("%d\n", argc);
    return 0;
}
```

- ☐ 0
- ☐ 1
- ☐ Depends on the compiler
- ☐ Compile time error

Question No.94

4.00

Bookmark ☐

Choose the best antonym of the italicized word.

The task assigned to him was *arduous*.

- ☐ good
- ☐ easy
- ☐ absorbing
- ☐ plain

Question No.95

4.00

Bookmark ☐

8723 in BCD equals

- ☐ 1000 0001 0010 0011
- ☐ 1000 0111 0110 0011
- ☐ 1000 0111 0010 0011
- ☐ 1000 0101 0010 0011

Question No.96

4.00

Bookmark ☐

Due to _____, the subways were closed all morning.

- ☐ floods
- ☐ its flooding
- ☐ flood
- ☐ are flooded

Question No.97

4.00

Bookmark ☐

Mode of 12, 17, 16, 14, 13, 16, 11, 14 is

- ☐ 14
- ☐ 11
- ☐ 13
- ☐ 14 and 16

Question No.98

4.00

Bookmark ☐

Which of the following lists the service models of cloud computing?

- ☐ REST services, SOAP
- ☐ Infrastructure as a Service, Platform as a Service, Software as a Service
- ☐ Cloud clients
- ☐ Service oriented architecture

Question No.99

4.00

Bookmark ☐

Based on the information given, answer the below question.

1. A,B,C,D,E and F are travelling in a bus.
2. There are two reporters, two mechanics, one photographer and one writer in the group.
3. Photographer A is married to D who is a reporter.
4. The writer is married to B who is of the same profession as that of F.
5. A,B,C,D are two married couples and no one in this belong to the same profession.
6. F is the brother of C.

Which of the following is the pair of reporters?

- ☐ AE
- ☐ DE
- ☐ Cannot be determined
- ☐ DF

Question No.100

4.00

Bookmark ☐

Which of the following is not a valid variable name declaration in C?

- ☐ int _a3
- ☐ int a_3
- ☐ int 3_a
- ☐ int a3

Sr No.	MCA
1	Which term will replace the question mark in the series: ABD,DGK,HMS,MTB,SBL, ?
Alt1	ZKU
Alt2	ZKW
Alt3	ZAB
Alt4	XKW

2	Choose word from the given options which bears the same relationship to the third word, as the first two bears: Illiteracy: Education:: Flood:?
Alt1	Rain
Alt2	Bridge
Alt3	Dam
Alt4	River

3	Select the lettered pair that has the same relationship as the original pair of words: Sip : Gulp
Alt1	Touch: Push
Alt2	Cup: Class
Alt3	Tent: Hut
Alt4	Soup: Water

4	Select the lettered pair that has the same relationship as the original pair of words: Low : Cattle
Alt1	Sheep: Beef
Alt2	Gaggle: Chicken
Alt3	Grunt: Hogs
Alt4	Flock: Goat

5	Find out the number that has the same relationship as the numbers of the given pair: 8 : 81 :: 64 : ?
Alt1	125
Alt2	137
Alt3	525
Alt4	625

6	Spot the defective segment from the following:
Alt1	It's time
Alt2	the students dispersed
Alt3	to go to home
Alt4	after study hours

7	There is no ----- in our car and it is already crowded.
Alt1	room
Alt2	place
Alt3	seat

Alt4	space
------	-------

8	Newton ----- loved his pet dog very much.
Alt1	a scientist
Alt2	the scientist
Alt3	scientist
Alt4	one scientist

9	Choose the option closest in meaning to the given word: JINGOISM
Alt1	deism
Alt2	chauvinism
Alt3	extremism
Alt4	pacifism

10	Choose the antonymous option you consider the best: QUACK
Alt1	bizarre
Alt2	procurer
Alt3	charlatan
Alt4	authority

11	In a village there are 1000 persons. Out of which 800 are literates. Out of 1000, 700 are criminals. There are 550 literate criminals in that village. How many illiterate non criminals are there?
Alt1	150
Alt2	250
Alt3	50
Alt4	200

12	Average weight of A,B,C is 45; Average weight of A&B is 40; Average weight of B&C is 43, Weight of B is
Alt1	17
Alt2	20
Alt3	26
Alt4	31

13	Which of the following cannot be the Median of the three positive Integers X,Y & Z ?
Alt1	X
Alt2	Z
Alt3	X+Z
Alt4	$(X+Z)/3$

14	How many Zero's are there in the product $1*2*3*.....*10$
Alt1	2
Alt2	10
Alt3	5

Alt4	6
------	---

15	A,B,C,D work on a project. Together A,B & C can complete in 100 days; Together B,C & D can complete in 101 days; Together C,D & A can complete in 102 days; together D,A & B can complete in 103 days . Rank them from the best to the worst performer.
Alt1	C>B>A>D
Alt2	C>A>B>D
Alt3	D>B>A>C
Alt4	D>A>B>C

16	22 Students are evenly spaced on the circumference of a big circle. They are numbered 1 to 22. which number is opposite to 17?
Alt1	8
Alt2	5
Alt3	7
Alt4	6

17	The fare of a luxury cab is Rs. X for the first five Kilometres and Rs,13/- per Kilometre thereafter. If a passenger pays Rs.2402/- for a journey of 187 kilometres, what is the value of X ?
Alt1	Rs.29
Alt2	Rs.39
Alt3	Rs.36
Alt4	Rs.31

18	An HR Company employs 4800 people out of which 45 per cent are males and 60 per cent of males are either 25 years or older. How many males are employed in that company who are younger than 25 years ?
Alt1	2640
Alt2	2160
Alt3	1296
Alt4	864

19	A person buys a shirt with marked price Rs.400/- at 20% discount. In order to make a profit of 20% the person should sell the shirt for
Alt1	Rs.400/-
Alt2	Rs.384/-
Alt3	Rs.320/-
Alt4	Rs.480/-

20	The following information is given:(i) Five friends P, Q, R, S and T travelled to five different cities of Chennai, Calcutta, Delhi, Bangalore and Hyderabad by five different modes of transport of Bus, Train, Aeroplane, Car and Boat from Mumbai. (ii) The person who travelled to Delhi did not travel by boat. (iii) R went to Bangalore by car and Q went to Calcutta by aeroplane.(iv) S travelled by boat whereas T travelled by train. (v) Mumbai is not connected by bus to Delhi and Chennai. Which of the following combinations of place and mode is not correct ?
----	--

Alt1	Delhi — Bus
Alt2	Calcutta — Aeroplane
Alt3	Bangalore — Car
Alt4	Chennai — Boat

21	A pineapple costs Rs. 7 each. A watermelon costs Rs. 5 each. X spends Rs. 38 on these fruits . The number of pineapples purchased is:-
Alt1	4
Alt2	2
Alt3	3
Alt4	Data inadequate

22	<p>To resolve the problem of transmission of clear text passwords, we can first encrypt the password on the user's computer and then send it to the server for authentication. This means that we must provide for some sort of cryptographic functionality on the user's computer. In fact, this functionality is needed even in the approach of encrypting the random number with the message digest of the user's password. This is not a problem in the case of client-server applications, where the client is capable of performing computations anyway. However, in the case of Internet applications, where the client is a Web browser, which does not have any special programming capabilities, this can be a problem. Consequently, we must resort to technologies such as Secure Socket Layer (SSL). That is, a secure SSL connection must be established between the client and the server, which would involve the step wherein the client verifies the server's authenticity based on the server's digital certificate. After this, all the communication between the client and the server will be encrypted using SSL, so the password need not have any application-level protection mechanisms now. SSL would perform the required encryption operations.</p> <p>Based on the passage, we understand that SSL is needed only:-</p>
Alt1	In client server communication
Alt2	When password for transmission needs to be encrypted
Alt3	When the client has to communicate securely with the server through a web browser
Alt4	When the client does not have any special programming capabilities

23	<p>Enigma machine is a mechanical tool used by the Germans in World War II to scramble messages and prevent the enemy from understanding them. Enigma was based on revolving wheels, or rotors, that were wired together and connected to a typewriter keyboard. There were so many ways to encrypt a message that even if 1,000 analysts tried four different ways each minute, all day, every day, it would have taken the team 1.8 billion years to test them all.</p> <p>So, how did the Allies break the encryption? First, they made use of the likely chatter over the wires about each day's events. By guessing that the Germans would be discussing certain places or issues, the Allies found sections of scrambled text that they could relate to the original messages, or cleartext. Next, they concentrated on Luftwaffe messages. Counting on the likelihood that the Luftwaffe signalmen were not as well trained as those in the Army or Navy, the Allies watched for slip-ups that increased the odds of understanding the encrypted messages. For instance, Luftwaffe signalment often used 'a girlfriend's name for a key setting or beginning a second message with the same setting as that left at the ending of the first'. Such knowledge enabled the Allies to determine some of the Luftwaffe's plans during the Battle of Britain. Thus, sophisticated technology can be trumped when control protocols are not followed carefully and completely.</p> <p>Which of the following is true about Enigma with reference to the passage above?</p>
Alt1	Enigma is an electro-mechanical tool because it has revolving wheels which are wired to a typewriter keyboard

Alt2	Enigma is a mechatronic tool because it has revolving wheels which are wired to a typewriter keyboard
Alt3	Enigma is only a mechanical tool
Alt4	Enigma is a computer-supported mechanical tool because it has revolving wheels which are wired to a typewriter keyboard

24	The ".com" stands for:-
Alt1	Component
Alt2	Commercial
Alt3	Computer
Alt4	Committed

25	Two numbers are in the ratio 2 : 3. If their L.C.M. is 48. What is sum of the numbers?
Alt1	28
Alt2	40
Alt3	42
Alt4	68

26	The transmission medium which uses light is called:-
Alt1	Log wire
Alt2	Mirror wire
Alt3	Fibre Optics
Alt4	UTP

27	<p>There is a group of seven persons in a family, A, B, C, D, E, F and G. They all appeared in an I.Q. test to test their intelligence. There are two married couples in the family and three females in total. G, a female, is the most intelligent. B, the father of E, is more intelligent than his son. C has one son and one daughter. She is more intelligent than her husband. The father of B is more intelligent than B himself. E, the grandson of F, is the least intelligent. F, the grandfather, is the second most intelligent in the family. The mother of B is less intelligent than B. None among the married topped the I.Q. test. The grandmother of G has two sons, one of whom is D, who is more intelligent than her brother but less intelligent than his wife. Nobody is a widow or a widower in the family</p> <p>Who among them is a married couple?</p>
Alt1	AF
Alt2	AC
Alt3	AE
Alt4	AD

28	What is the least number which when divided by 5, 6, 7 and 8 leaves a remainder 3, but when divided by 9 leaves no remainder?
Alt1	1683
Alt2	3363
Alt3	1453
Alt4	1324

29	Four girls are sitting on a bench to be photographed. Shikha is to the left of Reena. Manju is to the right of Reena. Rita is between Reena and Manju. Who would be second from the left in the photograph?
Alt1	Rita
Alt2	Reena
Alt3	Manju
Alt4	Shikha

30	Which is the necessary part of the BOOK?
Alt1	Pages
Alt2	Pictures
Alt3	Learning
Alt4	Fiction

31	<p>The sum of the incomes of A and B is more than that of C and D taken together. The sum of the incomes of A and C is the same as that of B and D taken together. Moreover, A earns half as much as the sum of the incomes of B and D.</p> <p>If A's income be Rs. 80,000 per annum and the difference between the incomes of B and D be the same as A's income, B's income is:-</p>
Alt1	Rs. 80,000
Alt2	Rs. 40,000
Alt3	Rs. 60,000
Alt4	Rs. 1,20,000

32	<p>To resolve the problem of transmission of clear text passwords, we can first encrypt the password on the user's computer and then send it to the server for authentication. This means that we must provide for some sort of cryptographic functionality on the user's computer. In fact, this functionality is needed even in the approach of encrypting the random number with the message digest of the user's password. This is not a problem in the case of client-server applications, where the client is capable of performing computations anyway. However, in the case of Internet applications, where the client is a Web browser, which does not have any special programming capabilities, this can be a problem. Consequently, we must resort to technologies such as Secure Socket Layer (SSL). That is, a secure SSL connection must be established between the client and the server, which would involve the step wherein the client verifies the server's authenticity based on the server's digital certificate. After this, all the communication between the client and the server will be encrypted using SSL, so the password need not have any application-level protection mechanisms now. SSL would perform the required encryption operations.</p> <p>Based on the above passage, we understand that SSL:-</p>
Alt1	Eliminates the need for password encryption
Alt2	Is a secure connection between the client and server
Alt3	Is a secure layer between the client and server
Alt4	Adds an additional overhead between the client and server

33	If you are facing North-East and move 10 m forward, turn left and move 7.5 m, then you are:-
Alt1	South of your initial position

Alt2	East of your initial position
Alt3	North of your initial position
Alt4	12m from your initial position

34	Which of the following are not statements? i. Three plus four is eight ii. The sun is a planet iii. Switch on the light iv. This statement is true.
Alt1	i, ii
Alt2	i, iv
Alt3	iii, iv
Alt4	ii, iii

35	At a game of billiards, A can give B 15 points in 60 and A can give C 20 points in 60. How many points can B give C in a game of 90?
Alt1	12 points
Alt2	22 points
Alt3	10 points
Alt4	20 points

36	The product of two numbers is 9375 and the quotient, when the larger one is divided by the smaller, is 15. The sum of the numbers is:-
Alt1	385
Alt2	380
Alt3	425
Alt4	400

37	What is the antonym of Comical?
Alt1	Crazy
Alt2	Wacky
Alt3	Serious
Alt4	Humorous

38	Arrange the words given below in a meaningful sequence. 1. Poverty 2. Unemployment 3. Death 4. Population 5. Disease
Alt1	4 1 2 3 5
Alt2	1 2 3 4 5
Alt3	4 2 1 5 3
Alt4	2 3 4 1 5

39	Choose the correct meaning of the idiom.
Alt1	To amend some problems
Alt2	To destroy something

Alt3	To find a reason for quarrel
Alt4	To criticize someone

40	SQL stands for:-
Alt1	Structured Query Language
Alt2	Simple Query Language
Alt3	Standard Query Language
Alt4	Single Query Language

41	The product of two numbers is 120 and the sum of their squares is 289. The sum of the number is:-
Alt1	189
Alt2	169
Alt3	23
Alt4	20

42	Java programs are compiled into:-
Alt1	Bit Code
Alt2	Byte Code
Alt3	JCode
Alt4	C-Code

43	In the following sentence suggest the suitable alternative for the italicised phrase. In case no improvement is needed mark "no improvement" Whenever the two sisters go out for shopping, they take their pet dog with them.
Alt1	go out shopping
Alt2	go out to shopping
Alt3	go out on shopping
Alt4	no improvement

44	In order to help the company attain its goal of enhancing profit, all the employees_____.
Alt1	voluntarily offered to render additional services in lieu of nothing
Alt2	voluntarily offered to work overtime with lucrative compensation
Alt3	appealed the management to implement new welfare schemes
Alt4	urged the management to grant paid leave

45	What is the least perfect square which is divisible by each of 21, 36 and 66?
Alt1	214434
Alt2	231444
Alt3	213444
Alt4	214344

46	FTP stands for:-
Alt1	File Transfer Protocol
Alt2	File Transfer Point
Alt3	File Type Print
Alt4	Format Type Print

47	Find the Odd one.
Alt1	sheep:bleat
Alt2	horse:neigh
Alt3	owl:hoot
Alt4	ass:grunt

48	The difference between a two-digit number and the number obtained by interchanging the positions of its digits is 36. What is the difference between the two digits of that number?
Alt1	4
Alt2	6
Alt3	5
Alt4	3

49	Which of the following is NOT a search engine?
Alt1	Yahoo
Alt2	Motorola
Alt3	Google
Alt4	Bing

50	_____ of old paintings is a job for experts.
Alt1	Retrieval
Alt2	Restoration
Alt3	Renovation
Alt4	Resurrection

51	<p>There is a group of seven persons in a family, A, B, C, D, E, F and G. They all appeared in an I.Q. test to test their intelligence. There are two married couples in the family and three females in total. G, a female, is the most intelligent. B, the father of E, is more intelligent than his son. C has one son and one daughter. She is more intelligent than her husband. The father of B is more intelligent than B himself. E, the grandson of F, is the least intelligent. F, the grandfather, is the second most intelligent in the family. The mother of B is less intelligent than B. None among the married topped the I.Q. test. The grandmother of G has two sons, one of whom is D, who is more intelligent than her brother but less intelligent than his wife. Nobody is a widow or a widower in the family</p> <p>Who among the following is not the same generation as others?</p>
Alt1	A
Alt2	B
Alt3	C
Alt4	D

52	Convoy:Ships ::Deputation:?
Alt1	Politicians
Alt2	Writers
Alt3	Representatives
Alt4	Voters

53	Cube is related to square in the same way as square is related to:-
Alt1	Point
Alt2	Triangle
Alt3	Plane
Alt4	Line

54	The SSL stands for:-
Alt1	System Socket Level
Alt2	System Single Level
Alt3	Secure Sockets Layer
Alt4	Secure System Level

55	Identify the odd item.
Alt1	Python
Alt2	Oracle
Alt3	C
Alt4	Java

56	Which number should come next in this series? 12, 38, 116, 350, 1052, ?
Alt1	3112
Alt2	3216
Alt3	3158
Alt4	3253

57	An alternative to MS office is:-
Alt1	Libre office
Alt2	S office
Alt3	M office
Alt4	SM office

58	Which of the following is NOT a web browser?
Alt1	Edge
Alt2	Firefox
Alt3	KDE
Alt4	Opera

59	Pick out the most effective word from the options for the following: We shall not be able to use your ability in court unless we can find someone to _____ to statements.
Alt1	avouch
Alt2	corroborate
Alt3	approve
Alt4	verify

60	Find the correctly spelt word.
Alt1	Hinderence
Alt2	Hindreence
Alt3	Hindrance
Alt4	Hinderance

61	Identify the odd item.
Alt1	Jellybean
Alt2	Kitkat
Alt3	Marshmallow
Alt4	Coolkit

62	If you behave strangely, nobody will get _____ with you.
Alt1	through
Alt2	along
Alt3	about
Alt4	on

63	Spot the erroneous part of the sentence "An Indian ship laden with merchandise got drowned in the Pacific":-
Alt1	got drowned
Alt2	in the Pacific
Alt3	An Indian Ship
Alt4	Laden with merchandise

64	The sum of the squares of three numbers is 138, while the sum of their products taken two at a time is 131. Their sum is:-
Alt1	30
Alt2	40
Alt3	50
Alt4	20

65	Find a positive number which when increased by 17 is equal to 60 times the reciprocal of the number.
Alt1	17
Alt2	20
Alt3	3
Alt4	10

66	Light : Sun : : Heat : ?
Alt1	Electricity
Alt2	Star
Alt3	Moon
Alt4	Fire

67	<p>To resolve the problem of transmission of clear text passwords, we can first encrypt the password on the user's computer and then send it to the server for authentication. This means that we must provide for some sort of cryptographic functionality on the user's computer. In fact, this functionality is needed even in the approach of encrypting the random number with the message digest of the user's password. This is not a problem in the case of client-server applications, where the client is capable of performing computations anyway. However, in the case of Internet applications, where the client is a Web browser, which does not have any special programming capabilities, this can be a problem. Consequently, we must resort to technologies such as Secure Socket Layer (SSL). That is, a secure SSL connection must be established between the client and the server, which would involve the step wherein the client verifies the server's authenticity based on the server's digital certificate. After this, all the communication between the client and the server will be encrypted using SSL, so the password need not have any application-level protection mechanisms now. SSL would perform the required encryption operations.</p> <p>The passages emphasizes which of the following:-</p>
Alt1	Passwords are only sent from user's computer to the server
Alt2	Passwords must be used only for server authentication
Alt3	Password must be encrypted before transmission to server for authentication
Alt4	Only encrypted Password must be used for authentication with the server

68	Yard is to inch as quart is to:-
Alt1	gallon
Alt2	Ounce
Alt3	liquid
Alt4	milk

69	<p>To resolve the problem of transmission of clear text passwords, we can first encrypt the password on the user's computer and then send it to the server for authentication. This means that we must provide for some sort of cryptographic functionality on the user's computer. In fact, this functionality is needed even in the approach of encrypting the random number with the message digest of the user's password. This is not a problem in the case of client-server applications, where the client is capable of performing computations anyway. However, in the case of Internet applications, where the client is a Web browser, which does not have any special programming capabilities, this can be a problem. Consequently, we must resort to technologies such as Secure Socket Layer (SSL). That is, a secure SSL connection must be established between the client and the server, which would involve the step wherein the client verifies the server's authenticity based on the server's digital certificate. After this, all the communication between the client and the server will be encrypted using SSL, so the password need not have any application-level protection mechanisms now. SSL would perform the required encryption operations.</p> <p>Based on the above passage, we understand that:-</p>
Alt1	Cryptographic functionalities are required in the user's computer only when we use a Web browser
Alt2	Cryptographic functionalities are not required if we use client-server applications
Alt3	Cryptographic functionalities are required for encrypting user passwords
Alt4	Cryptographic functionalities are required in the user's computer

70	Two cards are drawn together from a pack of 52 cards. The probability that one is a spade and one is a heart, is
Alt1	13/102
Alt2	29/34
Alt3	3/20
Alt4	47/102

71	A man is 24 years older than his son. In two years, his age will be twice the age of his son. What is the present age of his son?
Alt1	23 years
Alt2	25 years
Alt3	24 years
Alt4	22 years

72	Two dice are thrown together .What is the probability that the sum of the number on the two faces is divisible by 4 or 6?
Alt1	8/18
Alt2	4/18
Alt3	7/18
Alt4	5/18

73	Thick is related to Thin in the same way as Idle is related to:-
Alt1	Industrious
Alt2	Activity
Alt3	Buisness
Alt4	Virtuous

74	The compiler used to compile the C programs in Unix environments is called:-
Alt1	dcc
Alt2	acc
Alt3	gcc
Alt4	kcc

75	<p>Timing attacks relate to public-key algorithm. However, the issue may also be relevant for symmetric ciphers. In essence, a timing attack is one which information about the key or the plaintext is obtained by observing how long it takes a given implementation to perform decryptions on various cipher texts. A timing attack exploits the fact that an encryption or decryption algorithm often takes slightly different amounts of time on different inputs. This is a long way from knowing the actual key, but it is an intriguing first step. Data Encryption Standard (DES) algorithm appears fairly resistant to a successful timing attack but some avenues could be explored. Although this is an interesting line of attack, it so far appears unlikely that this technique will ever be successful against DES or more powerful symmetric ciphers such as triple DES and the Advanced Encryption Standard algorithm</p> <p>Which is most relevant understanding about Timing Attack from the last line of the text?</p>
Alt1	Can never be successful on DES algorithm
Alt2	Can be successful on DES algorithm but it needs further work

Alt3	Not possible to perform a timing attack easily on DES
Alt4	Can be successful on DES later but not on more powerful symmetric ciphers

76	Commonly available RPM for hard disk is:-
Alt1	5400
Alt2	6000
Alt3	2300
Alt4	1500

77	<p>There is a group of seven persons in a family, A, B, C, D, E, F and G. They all appeared in an I.Q. test to test their intelligence. There are two married couples in the family and three females in total. G, a female, is the most intelligent. B, the father of E, is more intelligent than his son. C has one son and one daughter. She is more intelligent than her husband. The father of B is more intelligent than B himself. E, the grandson of F, is the least intelligent. F, the grandfather, is the second most intelligent in the family. The mother of B is less intelligent than B. None among the married topped the I.Q. test. The grandmother of G has two sons, one of whom is D, who is more intelligent than her brother but less intelligent than his wife. Nobody is a widow or a widower in the family</p> <p>How is G related to D?</p>
Alt1	Daughter
Alt2	Daughter - in- law
Alt3	Niece
Alt4	Cousin

78	<p>Enigma machine is a mechanical tool used by the Germans in World War II to scramble messages and prevent the enemy from understanding them. Enigma was based on revolving wheels, or rotors, that were wired together and connected to a typewriter keyboard. There were so many ways to encrypt a message that even if 1,000 analysts tried four different ways each minute, all day, every day, it would have taken the team 1.8 billion years to test them all.</p> <p>So, how did the Allies break the encryption? First, they made use of the likely chatter over the wires about each day's events. By guessing that the Germans would be discussing certain places or issues, the Allies found sections of scrambled text that they could relate to the original messages, or plaintext. Next, they concentrated on Luftwaffe messages. Counting on the likelihood that the Luftwaffe signalmen were not as well trained as those in the Army or Navy, the Allies watched for slip-ups that increased the odds of understanding the encrypted messages. For instance, Luftwaffe signalment often used 'a girlfriend's name for a key setting or beginning a second message with the same setting as that left at the ending of the first'. Such knowledge enabled the Allies to determine some of the Luftwaffe's plans during the Battle of Britain. Thus, sophisticated technology can be trumped when control protocols are not followed carefully and completely.</p>
Alt1	The encryption was not strong
Alt2	The Allies used intelligent techniques to break the message
Alt3	The encryption process was not followed correctly
Alt4	The signalmen were not trained in using the tool

79	Complete the following proverbs: A little knowledge is a _____ thing.
----	---

Alt1	good
Alt2	sweet
Alt3	dangerous
Alt4	profitable

80	<p>Timing attacks relate to public-key algorithm. However, the issue may also be relevant for symmetric ciphers. In essence, a timing attack is one which information about the key or the plaintext is obtained by observing how long it takes a given implementation to perform decryptions on various cipher texts. A timing attack exploits the fact that an encryption or decryption algorithm often takes slightly different amounts of time on different inputs. This is a long way from knowing the actual key, but it is an intriguing first step. Data Encryption Standard (DES) algorithm appears fairly resistant to a successful timing attack but some avenues could be explored. Although this is an interesting line of attack, it so far appears unlikely that this technique will ever be successful against DES or more powerful symmetric ciphers such as triple DES and the Advanced Encryption Standard algorithm</p> <p>Which of the following is true based on the above passage?</p>
Alt1	Timing attack relates to both symmetric ciphers and public-key algorithms
Alt2	Timing attack is directly relevant to public-key algorithms but indirectly relevant to symmetric ciphers
Alt3	Timing attack relates to public-key algorithms only
Alt4	Public Key ciphers and Symmetric ciphers can be subject to timing attacks

81	<p>Enigma machine is a mechanical tool used by the Germans in World War II to scramble messages and prevent the enemy from understanding them. Enigma was based on revolving wheels, or rotors, that were wired together and connected to a typewriter keyboard. There were so many ways to encrypt a message that even if 1,000 analysts tried four different ways each minute, all day, every day, it would have taken the team 1.8 billion years to test them all.</p> <p>So, how did the Allies break the encryption? First, they made use of the likely chatter over the wires about each day's events. By guessing that the Germans would be discussing certain places or issues, the Allies found sections of scrambled text that they could relate to the original messages, or plaintext. Next, they concentrated on Luftwaffe messages. Counting on the likelihood that the Luftwaffe signalmen were not as well trained as those in the Army or Navy, the Allies watched for slip-ups that increased the odds of understanding the encrypted messages. For instance, Luftwaffe signalment often used 'a girlfriend's name for a key setting or beginning a second message with the same setting as that left at the ending of the first'. Such knowledge enabled the Allies to determine some of the Luftwaffe's plans during the Battle of Britain. Thus, sophisticated technology can be trumped when control protocols are not followed carefully and completely.</p>
Alt1	Even 1000 analysts cannot test all the possible encryptions
Alt2	It would have taken 1000 analysts to find all the possible encryptions for a message
Alt3	It would have taken 1000 analysts 1.8 billion years to break the encryption
Alt4	Even if 1000 analysts tried four different ways each minute, all day, every day, they cannot break the encryption

82	Which of the following is a cloud based storage provider?
Alt1	Filebox
Alt2	Dropbox

Alt3	Firefox
Alt4	Dbox

83	The calendar for the year 2007 will be the same for the year:-
Alt1	2016
Alt2	2018
Alt3	2014
Alt4	2017

84	The popularly used file system in windows operating system is:-
Alt1	NTFS
Alt2	Ext4
Alt3	Loader
Alt4	Ext3

85	If LIGHT is coded as GILTH, find the code for RAINY.
Alt1	NAIRY
Alt2	IARYN
Alt3	ARINY
Alt4	RINAY

86	<p>Timing attacks relate to public-key algorithm. However, the issue may also be relevant for symmetric ciphers. In essence, a timing attack is one which information about the key or the plaintext is obtained by observing how long it takes a given implementation to perform decryptions on various cipher texts. A timing attack exploits the fact that an encryption or decryption algorithm often takes slightly different amounts of time on different inputs. This is a long way from knowing the actual key, but it is an intriguing first step. Data Encryption Standard (DES) algorithm appears fairly resistant to a successful timing attack but some avenues could be explored. Although this is an interesting line of attack, it so far appears unlikely that this technique will ever be successful against DES or more powerful symmetric ciphers such as triple DES and the Advanced Encryption Standard algorithm</p> <p>Which of the following is true based on the above passage?</p>
Alt1	Timing attack is not help to obtain the actual key
Alt2	Timing attack can help to obtain the actual key eventually
Alt3	Timing attack and followed by many other subsequent attacks can help to obtain the actual key
Alt4	Timing attack is the first step towards finding the actual key

87	I saw a _____ of cows in the field.
Alt1	Herd
Alt2	Group
Alt3	Swarm
Alt4	Flock

88	If a number is multiplied by 22 and the same number is added to it then we get a number that is half the square of that number. Find the number.
Alt1	40

Alt2	35
Alt3	30
Alt4	46

89	<p>Timing attacks relate to public-key algorithm. However, the issue may also be relevant for symmetric ciphers. In essence, a timing attack is one which information about the key or the plaintext is obtained by observing how long it takes a given implementation to perform decryptions on various cipher texts. A timing attack exploits the fact that an encryption or decryption algorithm often takes slightly different amounts of time on different inputs. This is a long way from knowing the actual key, but it is an intriguing first step. Data Encryption Standard (DES) algorithm appears fairly resistant to a successful timing attack but some avenues could be explored. Although this is an interesting line of attack, it so far appears unlikely that this technique will ever be successful against DES or more powerful symmetric ciphers such as triple DES and the Advanced Encryption Standard algorithm</p> <p>Which of the following is true based on the above passage?</p>
Alt1	There are multiple types of timing attacks having multiple variants
Alt2	There are multiple types of timing attacks
Alt3	A single type of attack having multiple variants
Alt4	A single type of attack

90	Find the minimum number of straight lines required to make the given figure.
Alt1	14
Alt2	19
Alt3	17
Alt4	15

91	WiFi stands for:-
Alt1	Wireless Fidelity
Alt2	Wireless Fire
Alt3	Wireless Fix
Alt4	Wireless Fiction

92	<p>Enigma machine is a mechanical tool used by the Germans in World War II to scramble messages and prevent the enemy from understanding them. Enigma was based on revolving wheels, or rotors, that were wired together and connected to a typewriter keyboard. There were so many ways to encrypt a message that even if 1,000 analysts tried four different ways each minute, all day, every day, it would have taken the team 1.8 billion years to test them all.</p> <p>So, how did the Allies break the encryption? First, they made use of the likely chatter over the wires about each day's events. By guessing that the Germans would be discussing certain places or issues, the Allies found sections of scrambled text that they could relate to the original messages, or cleartext. Next, they concentrated on Luftwaffe messages. Counting on the likelihood that the Luftwaffe signalmen were not as well trained as those in the Army or Navy, the Allies watched for slip-ups that increased the odds of understanding the encrypted messages. For instance, Luftwaffe signalment often used 'a girlfriend's name for a key setting or beginning a second message with the same setting as that left at the ending of the first'. Such knowledge enabled the Allies to determine some of the Luftwaffe's plans during the Battle of Britain. Thus, sophisticated technology can be trumped when control protocols are not followed carefully and completely.</p>
Alt1	Some of Luftwaffe's messages were broken
Alt2	Luftwaffe's messages were easy to break
Alt3	Luftwaffe's messages were completely broken by Allies
Alt4	Luftwaffe's messages were the only ones broken by Allies

93	<p>Enigma machine is a mechanical tool used by the Germans in World War II to scramble messages and prevent the enemy from understanding them. Enigma was based on revolving wheels, or rotors, that were wired together and connected to a typewriter keyboard. There were so many ways to encrypt a message that even if 1,000 analysts tried four different ways each minute, all day, every day, it would have taken the team 1.8 billion years to test them all.</p> <p>So, how did the Allies break the encryption? First, they made use of the likely chatter over the wires about each day's events. By guessing that the Germans would be discussing certain places or issues, the Allies found sections of scrambled text that they could relate to the original messages, or cleartext. Next, they concentrated on Luftwaffe messages. Counting on the likelihood that the Luftwaffe signalmen were not as well trained as those in the Army or Navy, the Allies watched for slip-ups that increased the odds of understanding the encrypted messages. For instance, Luftwaffe signalment often used 'a girlfriend's name for a key setting or beginning a second message with the same setting as that left at the ending of the first'. Such knowledge enabled the Allies to determine some of the Luftwaffe's plans during the Battle of Britain. Thus, sophisticated technology can be trumped when control protocols are not followed carefully and completely.</p>
Alt1	It is a type of encryption of a message
Alt2	It is a way of rendering a message incomprehensible
Alt3	It is the same as encrypting the message
Alt4	Encryption renders a message incomprehensible and scrambling is a type of encryption

94	<p>To resolve the problem of transmission of clear text passwords, we can first encrypt the password on the user's computer and then send it to the server for authentication. This means that we must provide for some sort of cryptographic functionality on the user's computer. In fact, this functionality is needed even in the approach of encrypting the random number with the message digest of the user's password. This is not a problem in the case of client-server applications, where the client is capable of performing computations anyway. However, in the case of Internet applications, where the client is a Web browser, which does not have any special programming capabilities, this can be a problem. Consequently, we must resort to technologies such as Secure Socket Layer (SSL). That is, a secure SSL connection must be established between the client and the server, which would involve the step wherein the client verifies the server's authenticity based on the server's digital certificate. After this, all the communication between the client and the server will be encrypted using SSL, so the password need not have any application-level protection mechanisms now. SSL would perform the required encryption operations.</p> <p>Based on the above passage, we understand that SSL is:-</p>
Alt1	An Encryption technology
Alt2	An authentication technology and encryption is a part of it
Alt3	An encryption technology and authentication is a part of it
Alt4	An Authentication technology

95	In how many ways the letters of word 'LEADER' can be arranged?
Alt1	360
Alt2	420
Alt3	350
Alt4	480

96	Every computer connected to the internet has a:-
Alt1	CSS
Alt2	DNS
Alt3	Web site
Alt4	IP address

97	Android is a:-
Alt1	Mobile Operating System
Alt2	Framework
Alt3	Package
Alt4	Programming Language

98	Which of the following is an open source operating system?
Alt1	Windows 8.1
Alt2	iOS
Alt3	Linux
Alt4	Windows 10

99	CMM, EOO, GQQ, _____, KUU.
Alt1	GSS
Alt2	GRR

Alt3	ITT
Alt4	ISS

100	What is the number of triangles that can be formed whose vertices are the vertices of an octagon but have only one side common with that of octagon?
Alt1	32
Alt2	16
Alt3	24
Alt4	64

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352 PU M C A Computer Applications

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102 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear

Wimbledon Trophy: Tennis :: Walkers Cup : ?

- ☐ Polo
- ☐ Hockey
- ☐ Wrestling
- ☐ Golf

2 of 100

144 PU_2016_352_RQ

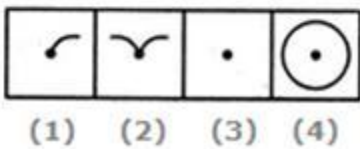
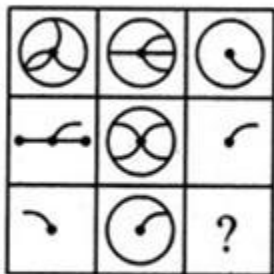
4, 23, 60, 121,

- ☐ 154
- ☐ 352
- ☐ 212
- ☐ 221

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147 PU_2016_352_RQ

Select a suitable figure from the four alternatives that would complete the figure matrix.



- ☐ 4

- ☐ 1
- ☐ 2
- ☐ 3

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100 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear.

Poodle: Dog :: Moose : ?

- ☐ Fowl
- ☐ Deer
- ☐ Duck
- ☐ Donkey

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101 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear.

Tea: Cup :: Tobacco : ?

- ☐ Leaves
- ☐ Toxin
- ☐ Hookah
- ☐ Cheroot

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128 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer.

If PAINT is coded as 74128 and EXCEL is coded as 93596, then how would you encode ACCEPT?

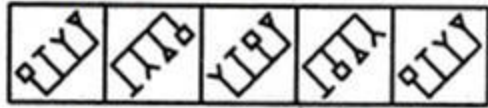
- ☐ 735961
- ☐ 455978
- ☐ 547978
- ☐ 554978

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146 PU_2016_352_RQ

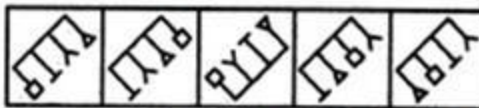
Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures:



(A) (B) (C) (D) (E)

Answer Figures:



(1) (2) (3) (4) (5)

- ☐ 3
- ☐ 1
- ☐ 4
- ☐ 2

8 of 100

127 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer.

If in a certain language, MACHINE is coded as LBBIHOD, Which word would be coded as SLTMFNB?

- ☐ TMITNGOC
- ☐ RMSNEOA
- ☐ TKULGMC
- ☐ RKSLEMA

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143 PU_2016_352_RQ

Five boys took part in a race. Raj finished before Mohit but behind Gaurav. Ashish finished before Sanchit but behind Mohit. Who won the race?

- ☐ Mohit
- ☐ Raj
- ☐ Ashish
- ☐ Gaurav

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142 PU_2016_352_RQ

There are six cities A, B, C, D, E and F. A is not a hill station. B and E are not historical places. D is not an industrial city. A and D are not historical cities. A and B are not alike.

Which two cities are neither historical places nor industrial centres?

- ☐ A and B
- ☐ F and C

- ☐ B and D
- ☐ D and E

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104 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear

Scissors : Cloth :: Scythe : ?

- ☐ Paper
- ☐ Steel
- ☐ Grass
- ☐ Wood

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110 PU_2016_352_RQ

From among the four alternative, choose the best answer whose meaning is closest to the word in question.

GAINSAY

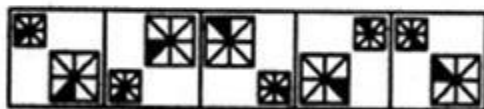
- ☐ Suggestion
- ☐ Proposal
- ☐ Advantage
- ☐ Contradict

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145 PU_2016_352_RQ

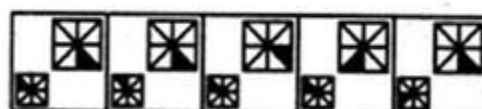
Select a figure from amongst the Answer Figures which will continue the same series as established by the five Problem Figures.

Problem Figures:



(A) (B) (C) (D) (E)

Answer Figures:



(1) (2) (3) (4) (5)

- ☐ 3
- ☐ 2

- ☐ 1
- ☐ 4

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108 PU_2016_352_RQ

From among the four alternative, choose the best answer whose meaning is closest to the word in question.

ACQUAINT

- ☐ Withhold
- ☐ Conceal
- ☐ Risky
- ☐ Familiarise

15 of 100

129 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer.

If *white* is called *blue*, *blue* is called *red*, *red* is called *yellow*, *yellow* is called *green*, *green* is called *black*, *black* is called *violet* and *violet* is called *orange*, what would be the colour of the human blood?

- ☐ Green
- ☐ Red
- ☐ violet
- ☐ Yellow

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124 PU_2016_352_RQ

Fill in the blanks. From amongst the four alternatives, choose the best answer.

He quickly glanced _____ the book to find what it said about the Indian economy.

- ☐ at
- ☐ in
- ☐ through
- ☐ to

17 of 100

130 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer.

If '*ski rps tri*' stands for '*nice Sunday morning*'; '*teh sti rps*' stands for '*every Tuesday morning*' and '*ski ptr qlm*' stands for '*nice market place*'. What would '*Sunday*' stand for?

- ☐ qlm
- ☐ Ski

- ☐ rps
- ☐ tri

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123 PU_2016_352_RQ

Fill in the blanks. From amongst the four alternatives, choose the best answer.

No exact statistics exist on the _____ killing of innocent animals, but it is _____ an important factor in the deaths of bears, foxes and other animals.

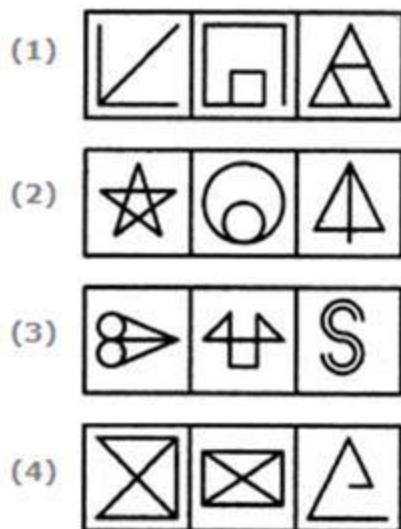
- ☐ comradely.contentiously
- ☐ unctuous.tenuously
- ☐ inadvertent.undoubtedly
- ☐ blithesome.iridescently

19 of 100

149 PU_2016_352_RQ

Choose the set of figures which follows the given rule.

Rule: Any figure can be traced by a single unbroken line without retracting.



- ☐ 3
- ☐ 1
- ☐ 4
- ☐ 2

20 of 100

107 PU_2016_352_RQ

From among the four alternative, choose the best answer whose meaning is closest to the word in question.

CORPULENT

- ☐ Gaunt
- ☐ Lean
- ☐ Obese
- ☐ Emaciated

21 of 100

106 PU_2016_352_RQ

From among the four alternative, choose the best answer whose meaning is closest to the word in question.

CANNY

- ☐ Stout
- ☐ Clever
- ☐ Obstinate
- ☐ Handsome

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103 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear

Painting: Artist :: Symphony : ?

- ☐ Poet
- ☐ Essayist
- ☐ Novelist
- ☐ Composer

23 of 100

126 PU_2016_352_RQ

Fill in the blanks. From amongst the four alternatives, choose the best answer.

The counsel urged the court to _____ down the obnoxious law.

- ☐ strike
- ☐ enforce
- ☐ cancel
- ☐ enact

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109 PU_2016_352_RQ

From among the four alternative, choose the best answer whose meaning is closest to the word in question.

JAUNT

- ☐ Short drive
- ☐ Solitary
- ☐ Refuse
- ☐ Irresistible force

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141 PU_2016_352_RQ

There are six cities A, B, C, D, E and F. A is not a hill station. B and E are not historical places. D is not an industrial city. A and D are not historical cities. A and B are not alike.

Which city is a hill station and an industrial centre but not a historical place ?

- ☐ F
- ☐ E
- ☐ B
- ☐ A

26 of 100

121 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer whose meaning is appropriately opposite to the meaning of the words in questions.

HIRSUTE

- ☐ Bald
- ☐ Scaly
- ☐ quite
- ☐ Erudite

27 of 100

122 PU_2016_352_RQ

From amongst the four alternatives, choose the best answer whose meaning is appropriately opposite to the meaning of the words in questions.

SACROSANCT

- ☐ Unholy
- ☐ Irreverent
- ☐ Irreligious
- ☐ Unethical

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105 PU_2016_352_RQ

In the question there is a certain relation between the given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear

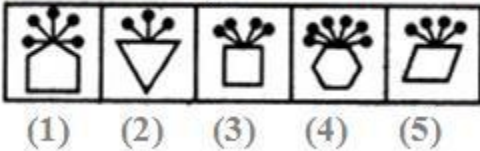
Snowfall : Precipitation :: Grotto : ?

- ☐ Cave
- ☐ Fort
- ☐ Throat
- ☐ Castle

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148 PU_2016_352_RQ

Choose the figure which is different from the rest.



- ☐ 4
- ☐ 2
- ☐ 3
- ☐ 1

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125 PU_2016_352_RQ

Fill in the blanks. From amongst the four alternatives, choose the best answer.

The local official _____ the Minister of the situation.

- ☐ told
- ☐ explained
- ☐ apprised
- ☐ warned

31 of 100

160 PU_2016_352_RQ

Two boats, travelling at 5 and 10 kms per hour, head directly towards each other. They begin at a distance of 20 kms from each other. How far apart are they (in kms) one minute before they collide?

- ☐ 1/3.
- ☐ 1/4

- ☐ 1/6.
- ☐ 1/2.

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172 PU_2016_352_RQ

In an office there are 60% female employees. 50% of all the male employees are computer literate. If there are total 62% employees computer literate out of the total 1600 employees, then the no. of female employees who are computer literate:-

- ☐ 690
- ☐ 672
- ☐ 960
- ☐ can't be determined

33 of 100

166 PU_2016_352_RQ

Ten years ago, the ages of the members of a joint family of eight people added up to 231 yr. Three years later, one member died at the age of 60 yr and a child was born during the same year, After another three years, one more member died, again at 60, and a child was born during the same year. The current average age of this eight member joint family is nearest to:-

- ☐ 24yr
- ☐ 22yr
- ☐ 21yr
- ☐ 23yr

34 of 100

170 PU_2016_352_RQ

There are twice the number of two wheelers as there are three wheelers and the number of 4 wheelers are equal to the number of two wheelers. The average number of wheel per vehicle is:-

- ☐ 3
- ☐ 5
- ☐ 4
- ☐ none of these

35 of 100

176 PU_2016_352_RQ

David sets his watch at 6:10 am on Sunday, which gains 12 minutes in a day. On Wednesday if this watch is showing 2:50 pm. What is the correct time?

- ☐ 1:50 pm
- ☐ 2:30 pm
- ☐ 3:30 pm
- ☐ 2:10 pm

36 of 100

164 PU_2016_352_RQ

A group of 630 children is arranged in rows for a group photograph session. Each row contains three fewer children than the row in front of it. What number of rows is not possible?

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6

37 of 100

162 PU_2016_352_RQ

The rightmost non-zero of the number 30^{2720} is:-

- ☐ 7
- ☐ 3
- ☐ 9
- ☐ 1

38 of 100

178 PU_2016_352_RQ

Mallah can row 40 km upstream and 55 km downstream in 13 hr and 30 km upstream and 44 km downstream in 10 hours. What is the speed of Mallah in still water?

- ☐ 3 km/hr
- ☐ 6 km/hr
- ☐ 12 km/hr
- ☐ 8 km/hr

39 of 100

169 PU_2016_352_RQ

Rahim plans to drive from city A to station C, at the speed of 70 km/hr, to catch a train arriving there from B. He must reach C at least 15 min before the arrival of the train. The train leaves B, located 500 km south of A, at 8:00 AM and travels at a speed of 50 km/hr. It is known that C is located between West and North-west of B, with BC at 60 to AB. Also, C is located between south and south-west of A with AC at 30 to AB. The latest time by which Rahim must leave A and still catch train is closest to:-

- ☐ 6:30 am
- ☐ 6:15 am
- ☐ 7:00 am
- ☐ 6:45 am

40 of 100

174 PU_2016_352_RQ

A, B and C can complete a piece of work in 15, 30 and 40 days respectively. They started the work together and A left 2 days before the completion of the work and B left 4 days before the completion of the work. In how many days was the work completed?

- ☐ $7\frac{3}{10}$
- ☐ $10\frac{7}{30}$
- ☐ $10\frac{2}{15}$
- ☐ none of these

41 of 100

198 PU_2016_352_RQ

Java byte code is called as:-

- ☐ Source code
- ☐ Object Code
- ☐ Machine code
- ☐ Java Virtual Machine code

42 of 100

180 PU_2016_352_RQ

If $\cos B = \sin A / 2\sin C$, find the nature of triangle:-

- ☐ scalene
- ☐ Isosceles
- ☐ can't be determined
- ☐ none of these

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188 PU_2016_352_RQ

The following is not a file access method:-

- ☐ Semi Random
- ☐ Sequential
- ☐ Dynamic
- ☐ Random

44 of 100

182 PU_2016_352_RQ

If $x + y = 25$ and $x^2 y^3 + y^2 x^3 = 25$, what is the value of xy ?

- ☐ ± 1
- ☐ 4
- ☐ 5
- ☐ 0

45 of 100

196 PU_2016_352_RQ

In SQL which command is used to enable/disable all triggers on a table?

- ☐ MODIFY TRIGGERS
- ☐ ALTER TRIGGERS
- ☐ DO TRIGGERS
- ☐ ALTER TABLE

46 of 100

186 PU_2016_352_RQ

In SQL which command is used to change tables storage characteristics:-

- ☐ CHANGE TABLE
- ☐ MODIFY KEY
- ☐ ALTER TABLE
- ☐ MODIFY TABLE

47 of 100

184 PU_2016_352_RQ

A,B and C shoot to hit a target. If A hits the target 4 times in 5 trials, B hits it 3 times in 4 trials and C hits it 2 times in 3 trials. What is the probability that the target is hit by atleast 2 persons?

- ☐ 5/6
- ☐ 4/5
- ☐ 3/4
- ☐ 1/9

48 of 100

192 PU_2016_352_RQ

A good query system:-

- ☐ Can accept English Language commands`
- ☐ Can be accessed only by data processing professionals
- ☐ Should not have user interface
- ☐ Allows non-programmer to access information stored in a database

49 of 100

190 PU_2016_352_RQ

In a relational schema, each triple is divided into fields called:-

- ☐ Domains
- ☐ Queries
- ☐ Sub domain

- ☐ Relations

50 of 100

194 PU_2016_352_RQ

The relational model uses some unfamiliar terminology. A tuple is equivalent to a:-

- ☐ Record
- ☐ File
- ☐ Database
- ☐ Field

51 of 100

188 PU_2016_352_E

January 1, 2007 was Monday. What day of the week lies on Jan. 1, 2008?

- ☐ Monday
- ☐ Thursday
- ☐ Wednesday
- ☐ Tuesday

52 of 100

173 PU_2016_352_E

The Open Source Equivalent of Microsoft Powerpoint is:-

- ☐ Impress
- ☐ Open Power
- ☐ Switch
- ☐ Calc

53 of 100

197 PU_2016_352_E

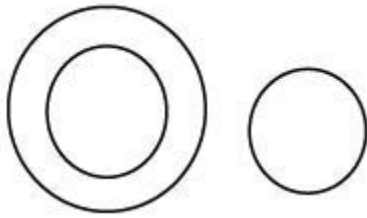
Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?

- ☐ 0.24
- ☐ 0.35
- ☐ 0.45
- ☐ 0.75

54 of 100

157 PU_2016_352_E

Which of the following sets is best represented in the given diagram?



- ☐ State, Districts, Union territories
- ☐ Country, States, Districts
- ☐ Animals, Males, Females
- ☐ Animals, Insects, Cockroach

55 of 100

164 PU_2016_352_E

Vinay walks a distance of 3 km towards North, then he turns to his left and walks for 2 km. He again turns left and walks for 3 km. At this point he turns to his left and walks for 3 km. How many km(s) is he from the starting point?

- ☐ 3 km
- ☐ 2 km
- ☐ 1 km
- ☐ 4 km

56 of 100

120 PU_2016_352_E

I did not mind what he was saying; he was only through his hat.

- ☐ Talking in an insulting manner
- ☐ Talking ignorantly
- ☐ Talking nonsense
- ☐ Talking innocently

57 of 100

169 PU_2016_352_E

Find out the next number in the following series.

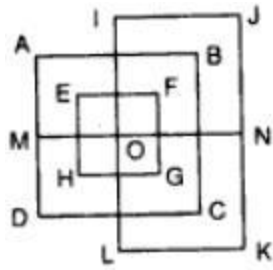
4, 2, 1, $(1/2)$, $(1/4)$, ____.

- ☐ $1/3$
- ☐ $2/8$
- ☐ $1/16$
- ☐ $1/8$

58 of 100

144 PU_2016_352_E

Count the number of lines in the given figure



- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 13

59 of 100

136 PU_2016_352_E

The sum of the incomes of A and B is more than that of C and D taken together. The sum of the incomes of A and C is the same as that of B and D taken together. Moreover, A earns half as much as the sum of the incomes of B and D.

Whose income is the highest?

- ☐ C
- ☐ B
- ☐ D
- ☐ A

60 of 100

180 PU_2016_352_E

A starts a business with a capital of Rs. 85,000. B joins in the business with Rs.42500 after some time. For how much period does B join, if the profits at the end of the year are divided in the ratio of 3: 1?

- ☐ 6 months
- ☐ 7 months
- ☐ 8 months
- ☐ 5 months

61 of 100

172 PU_2016_352_E

I. The government has decided to make all the information related to primary education available to the general public.

II. In the past, the general public did not have access to all these information related to primary education.

- ☐ Statement II is the cause and statement I is its effect
- ☐ Both the statements I and II are independent causes

- ☐ Both the statements I and II are effects of independent causes
- ☐ Statement I is the cause and statement II is its effect

62 of 100

189 PU_2016_352_E

There are 5 yellow, 4 green and 3 black balls in a bag. All the 12 balls are drawn one by one and arranged in a row. Find out the number of different arrangements possible.

- ☐ 27720
- ☐ 25630
- ☐ 21220
- ☐ 24630

63 of 100

132 PU_2016_352_E

Choose the correct meaning of the idiom .

To Drive Home

- ☐ Back to original position
- ☐ To find one's roots.
- ☐ To emphasize
- ☐ To return to the place of rest

64 of 100

192 PU_2016_352_E

Find the odd man out. 187, 264, 386, 473, 682, 781:-

- ☐ 682
- ☐ 187
- ☐ 473
- ☐ 386

65 of 100

168 PU_2016_352_E

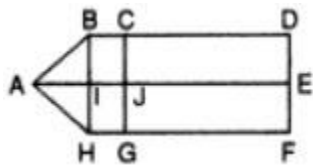
Sentence: "The clothes were neatly hanged on the cloth line". Find if there is any grammatical error in the given sentence. If there is any error, it will be only one part of the sentence. The number or alphabet of that part is your answer. (Disregard punctuation errors if any)

- ☐ The clothes
- ☐ were neatly
- ☐ hanged
- ☐ on the cloth line.

66 of 100

156 PU_2016_352_E

Count the number of rectangles in the following figure:-



- ☐ 7
- ☐ 8
- ☐ 6
- ☐ 9

67 of 100

196 PU_2016_352_E

A train 360 m long runs with a speed of 45 km/hr. What time will it take to pass a platform of 140 m long?

- ☐ 38 sec
- ☐ 42 sec
- ☐ 39 sec
- ☐ 40 sec

68 of 100

117 PU_2016_352_E

Find the word with different meaning from the following group of words:-

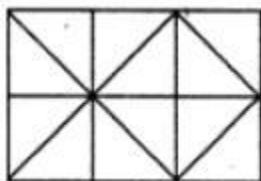
Sustain, Maintain, Keep, Block, Uphold, Bear

- ☐ Block
- ☐ Sustain
- ☐ Uphold
- ☐ Maintain

69 of 100

152 PU_2016_352_E

How many squares are there in the following figure?



- ☐ 9
- ☐ 8
- ☐ 6

☐ 7

70 of 100

133 PU_2016_352_E

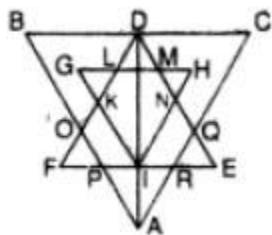
Poles:Magnet :: ?:Battery

- ☐ Terminals
- ☐ Power
- ☐ Cells
- ☐ Energy

71 of 100

148 PU_2016_352_E

Find the minimum number of straight lines required to make the given figure.



- ☐ 27
- ☐ 15
- ☐ 17
- ☐ 19

72 of 100

193 PU_2016_352_E

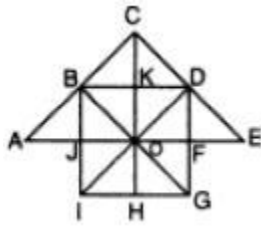
If $\log 27 = 1.431$, then the value of $\log 9$ is:-

- ☐ 0.934
- ☐ 0.944
- ☐ 0.954
- ☐ 0.924

73 of 100

149 PU_2016_352_E

How many triangles and squares are in the following figure?



- ☐ 18, 16
- ☐ 15, 21
- ☐ 26, 6
- ☐ 14, 20

74 of 100

137 PU_2016_352_E

The sum of the incomes of A and B is more than that of C and D taken together. The sum of the incomes of A and C is the same as that of B and D taken together. Moreover, A earns half as much as the sum of the incomes of B and D.

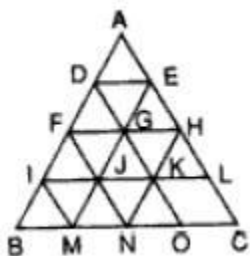
Which of the following statements is not correct?

- ☐ C earns more than D
- ☐ B earns more than C
- ☐ A earns more than B
- ☐ B earns more than D

75 of 100

153 PU_2016_352_E

Count the number of lines in the following figure:-



- ☐ 15
- ☐ 17
- ☐ 14
- ☐ 11

76 of 100

165 PU_2016_352_E

Horse : Jockey :: Car : ?

- ☐ Chauffeur
- ☐ Mechanic
- ☐ Steering
- ☐ Brake

77 of 100

124 PU_2016_352_E

Find the word with different meaning from the following group of words.

Prohibit, Prevent, Block, Forbid, Allow, Deny

- ☐ Block
- ☐ Prevent
- ☐ Deny
- ☐ Allow

78 of 100

184 PU_2016_352_E

A group of students decided to collect as many paise from each member of group as is the number of members. If the total collection amounts to Rs.98.01, the number of members in the group is

- ☐ 88
- ☐ 99
- ☐ 89
- ☐ 98

79 of 100

121 PU_2016_352_E

What is the antonym of Acquit?

- ☐ Reject
- ☐ Forgive
- ☐ Condemn
- ☐ Freedom

80 of 100

181 PU_2016_352_E

Which number should come next in this series?

8, 24, 12, 36, 18, 54, ?

- ☐ 108
- ☐ 72
- ☐ 27

☐ 68

81 of 100

253 PU_2016_352_M

USB stands for:-

- ☐ Universal Serial Block
- ☐ Universal System Bus
- ☐ Universal Serial Bus
- ☐ Unicode System Bus

82 of 100

248 PU_2016_352_M

Here are some words translated from an artificial language.

hapllesh means cloudburst

srenchoch means pinball

resbosrench means ninepin

Which word could mean "cloud nine"?

- ☐ haplresbo
- ☐ haploch
- ☐ ochhapl
- ☐ leshsrench

83 of 100

232 PU_2016_352_M

Choose the sentence which is the direct speech equivalent of the given indirect speech.

Sita ordered her servant to bring her cup of tea.

- ☐ Sita said to her servant, "Bring me a cup of tea."
- ☐ Sita told her servant, "Bring her that cup of tea."
- ☐ Sita told her servant, "Bring a cup of tea."
- ☐ Sita said, "Bring me a cup of tea."

84 of 100

225 PU_2016_352_M

Which of the following is more close in meaning to "WARY"?

- ☐ Tired
- ☐ Distorted
- ☐ vigilant
- ☐ Sad

85 of 100

256 PU_2016_352_M

Which of the following is NOT a protocol?

- ☐ HTTP
- ☐ CPP
- ☐ SMTP
- ☐ IMAP

86 of 100

252 PU_2016_352_M

A and B started business with Rs. 3000 and Rs. 4000 respectively. After 8 months A withdraws Rs.1000 and B advances Rs. 1000 more. At the end of the year, their profits amounted to Rs. 630. Then the share of A is:-

- ☐ 230
- ☐ 240
- ☐ 210
- ☐ 200

87 of 100

228 PU_2016_352_M

Correct the following sentence :-

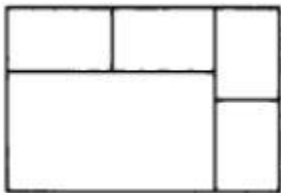
They examined both the samples very carefully but failed to detect any difference in them.

- ☐ some difference between
- ☐ any difference among
- ☐ any difference between
- ☐ some difference in

88 of 100

236 PU_2016_352_M

How many rectangles are in the following figure?

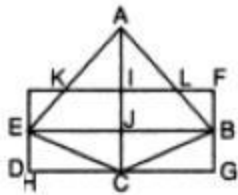


- ☐ 15
- ☐ 10
- ☐ 9
- ☐ 5

89 of 100

233 PU_2016_352_M

Count the number of triangles in the following figure



- ☐ 20
- ☐ 15
- ☐ 19
- ☐ 16

90 of 100

249 PU_2016_352_M

If Anand is the son of Qedo, Qedo and Yogi are sisters, Zeni is the mother of Yogi, Peter is the son of Zeni, and then which of the following statements is correct?

- ☐ Zeni and Yogi are parents of Anand
- ☐ Peter and Yogi are sisters
- ☐ Peter is the maternal uncle of Anand
- ☐ Anand and Peter are cousins

91 of 100

260 PU_2016_352_D

The scientists took into account a number of very different concrete water management options, from low-tech solutions for smallholders to the industrial scale. Water harvesting by collecting excess rain run-off for instance in cisterns -- for supplementary irrigation during dry spells -- is a common traditional approach in some regions such as the Sahel region in Africa, but is under-used in many other semi-arid regions such as Asia and North America. Mulching is another option -- the soil gets covered either simply with crop residues left on the field, reducing evaporation, or with huge plastic sheets. Finally, a major contribution to the global potential is upgrading irrigation to drip systems.

It is especially under on-going climate change that water management becomes increasingly important to reduce food risks. The reason is that global warming is likely to increase droughts and change rainfall patterns, so water availability becomes even more critical than before. Assuming a moderate CO₂ fertilization effect -- plants take up CO₂ and could hence benefit from higher concentrations in the air, but the magnitude of this effect is still under debate -, the study shows that in most climate policy scenarios water management can counterbalance a large part of the regional warming impacts on farming. Yet if greenhouse-gas emissions from burning fossil fuels are not reduced at all, in a business-as-usual scenario, water management will clearly not suffice to outweigh the negative climate effects.

Which of the following gives the theme of the above passage?

- ☐ Different approaches on Water Management
- ☐ Need for Water Management
- ☐ Study on Water Management

- ☐ Water management for agriculture

92 of 100

286 PU_2016_352_D

Zachary has invited his three buddies over to watch the basketball game on his wide-screen television. They are all hungry, but no one wants to leave to get food. Just as they are arguing about who should make the food run, a commercial comes on for a local pizze-ria that delivers. The phone number flashes on the screen briefly and they all try to remember it. By the time Zachary grabs a pen and paper, each of them recollects a different number.

#1: All of the men agree that the first three numbers are 995.

#2: Three of them agree that the fourth number is 9.

#3: Three agree that the fifth number is 2.

#4: Three agree that the sixth number is 6; three others agree that the seventh number is also 6.

Which of the numbers is most likely the telephone number of the pizzeria?

- ☐ 995-9336
- ☐ 995-9268
- ☐ 995-9266
- ☐ 995-8266

93 of 100

282 PU_2016_352_D

Read the following information given below and answer the questions that follow:

A * B means A and B are of the same age.

A B means B is younger than A.

A + B means A is younger than B.

Deven-Shashi*Hemant is same as:-

(1)Hemant+Shashi+Deven

(2)Hemant-Shashi+Deven

(3)Shashi*Hemant+Deven

- ☐ (2) and (3) only
- ☐ (1) only
- ☐ (3) only
- ☐ (1) and (2) only

94 of 100

278 PU_2016_352_D

In the following sentence, find the word which may be either inappropriate in the context of the sentence or wrongly spelt.

He who is indeed of the brotherhood does not voyage in quest of the picturesque but of certain jolly humors.

- ☐ Humors

- ☐ Voyage
- ☐ Picturesque
- ☐ Brotherhood

95 of 100

275 PU_2016_352_D

An egg vendor sells half his eggs and half an egg to his first customer. To the second customer, he sells half of what he was left with and half an egg and to the third customer, he sells half of what he was then left with half an egg. However he did not break any egg. If in the end, the vendor was left with three eggs, how many eggs did he have initially?

- ☐ 31
- ☐ 45
- ☐ 26
- ☐ 39

96 of 100

264 PU_2016_352_D

The scientists took into account a number of very different concrete water management options, from low-tech solutions for smallholders to the industrial scale. Water harvesting by collecting excess rain run-off for instance in cisterns -- for supplementary irrigation during dry spells -- is a common traditional approach in some regions such as the Sahel region in Africa, but is under-used in many other semi-arid regions such as Asia and North America. Mulching is another option -- the soil gets covered either simply with crop residues left on the field, reducing evaporation, or with huge plastic sheets. Finally, a major contribution to the global potential is upgrading irrigation to drip systems.

It is especially under on-going climate change that water management becomes increasingly important to reduce food risks. The reason is that global warming is likely to increase droughts and change rainfall patterns, so water availability becomes even more critical than before. Assuming a moderate CO₂ fertilization effect -- plants take up CO₂ and could hence benefit from higher concentrations in the air, but the magnitude of this effect is still under debate --, the study shows that in most climate policy scenarios water management can counterbalance a large part of the regional warming impacts on farming. Yet if greenhouse-gas emissions from burning fossil fuels are not reduced at all, in a business-as-usual scenario, water management will clearly not suffice to outweigh the negative climate effects.

Which of the following is not in the scope of the passage?

- ☐ Water management
- ☐ Water Management in different parts of the world
- ☐ Climate changes
- ☐ Global Warming

97 of 100

283 PU_2016_352_D

Six persons A, B, C, D, E and F are sitting in two rows, three in each. E is not at the end of any row. D is second to the left of F. C the neighbour of E, is sitting diagonally opposite to D. B is the neighbour of F. Which of the following are in one of the two rows?

- ☐ FBC
- ☐ CEB

- ☐ DBF
- ☐ AEF

98 of 100

273 PU_2016_352_D

How many triangles are in the following figure?

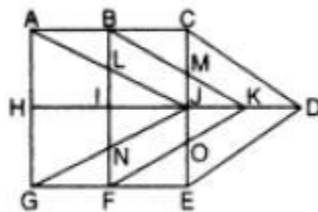


- ☐ 10
- ☐ 27
- ☐ 18
- ☐ 14

99 of 100

272 PU_2016_352_D

How many triangles and parallelograms are in the following figure?



- ☐ 15, 21
- ☐ 18, 16
- ☐ 14, 20
- ☐ 19, 17

100 of 100

279 PU_2016_352_D

dionot means oak tree

blyonot means oak leaf

blycrin means maple leaf

Which word could mean "maple syrup"?

- ☐ crinweel

- ☐ hupponot
- ☐ Patricrin
- ☐ Blymuth

ENTRANCE EXAMINATION FOR ADMISSION, MAY 2013.

M.C.A. (MASTER OF COMPUTER APPLICATIONS)

COURSE CODE : 352

Register Number :

Signature of the Invigilator
(with date)

COURSE CODE : 352

Time : 2 Hours

Max : 400 Marks

Instructions to Candidates :

1. Write your Register Number within the box provided on the top of this page and fill in the page 1 of the answer sheet using pen.
2. Do not write your name anywhere in this booklet or answer sheet. Violation of this entails disqualification.
3. Read each question carefully and shade the relevant answer (A) or (B) or (C) or (D) or (E) in the relevant box of the ANSWER SHEET using HB pencil.
4. Avoid blind guessing. A wrong answer will fetch you -1 mark and the correct answer will fetch 4 marks.
5. Do not write anything in the question paper. Use the white sheets attached at the end for rough works.
6. Do not open the question paper until the start signal is given.
7. Do not attempt to answer after stop signal is given. Any such attempt will disqualify your candidature.
8. On stop signal, keep the question paper and the answer sheet on your table and wait for the invigilator to collect them.
9. Use of Calculators, Tables, etc. are prohibited.

Directions (For questions 1 to 6) : In each of the following questions there is a certain relationship between two given words on one side of :: and one word is given on another side of :: while another word is to be found from the given alternatives, having the same kind of relation with this word as the words of given pair bear. Choose the correct alternative.

1. ANGLE : DEGREE ::
(A) Area : square unit
(B) Milk : quart
(C) Society : classes
(D) Letter : alphabet
(E) None of the Above
2. CONFIRMED : INVETERATE ::
(A) Knowledge : supposed
(B) Financial : bankrupt
(C) Immature : callow
(D) Credible : incredible
(E) None of the Above
3. PARENTHESIS : EXPLANATION ::
(A) Ellipsis : omission
(B) Asterisk : exaggeration
(C) Synopsis : affectation
(D) Apostrophe : annotation
(E) None of the Above
4. CENSUS : POPULATION ::
(A) Manifest : debts
(B) Roster : audience
(C) Itinerary : journeys
(D) Inventory : merchandise
(E) None of the Above
5. STANZA : POEM ::
(A) Mimicry : pantomime
(B) Duet : chorus
(C) Act : opera
(D) Rhyme : verse
(E) None of the Above
6. DEMURE: CHURL :
(A) Hare-brained:savant
(B) Soothing: emollient
(C) Venal: greenery
(D) Diabolic: hoodoo
(E) None of the above

Directions (For questions 7 to 12) : From amongst the four alternatives, choose the best answer whose meaning is closest to the meaning of the word in question. If nothing is appropriate, choose the last option.

7. RHINOPHYTONECROPHILIA

- (A) Romancing the dead
- (B) One who is love with the undertaker
- (C) One who likes smelling dead plants and flowers
- (D) One who summons ghosts
- (E) None of the above

8. PLEONASM

- (A) Tautological
- (B) Chimerical
- (C) Episodic
- (D) Prismatic
- (E) None of the above

9. APOTHECARY

- (A) Planet close to the Sun
- (B) Star closest to Earth
- (C) Coat hanger
- (D) Pharmacy
- (E) None of the above

10. NOSEGAY

- (A) Olfactory sensation
- (B) A bouquet of flowers
- (C) Obnoxious person
- (D) Pungent smelling
- (E) None of the above

11. UNGUENT

- (A) An ointment or medicinal application
- (B) Uncle like
- (C) Soporific
- (D) Sophomoric
- (E) None of the above

12. LUDICROUS

- (A) Absurd
- (B) Clear
- (C) Simple
- (D) Dismal
- (E) None of the above

Overlapping Start (13 => 15 = 3)

Directions (For questions 13 to 15): For each of the words below, a contextual usage is provide(D) Pick the word from the alternatives given that is most inappropriate in the given context.

13. TEMPORAL: Do not get tempted by these temporal pleasures. They do not last long.
(A) Ephemeral (B) Immortal
(C) Everlasting (D) Eternal
(E) None of the above
14. FATUOUS: He is far too sensible to have done a fatuous thing like this.
(A) Stupid (B) Intelligent
(C) Inane (D) Foolish
(E) None of the above
15. MACABRE: The office wore a macabre look on Friday after the company downsized its staff strength.
(A) Grisly (B) Gruesome
(C) Tropical (D) Lugubrious
(E) None of the above

Overlapping End (13 => 15 = 3)

Directions (For questions 16 to 23) : From amongst the four alternatives, choose the best answer whose meaning is appropriately opposite to the meaning of the word in question. If nothing is appropriate, choose the last option.

16. OBSEQUIIOUS
(A) servile (B) first
(C) fawning (D) supercilious
(E) None of the above
17. FULMINATION
(A) praise (B) repetition
(C) escape (D) ratification
(E) None of the above
18. TOUT
(A) cast aspersions on (B) deny the relevance of
(C) misrepresent (D) withhold consent
(E) None of the above
19. OUTLANDISH
(A) conventional (B) prolific
(C) unchanging (D) transparent
(E) None of the above

20. RAVEL
 (A) knit (B) omit
 (C) remain silent (D) measure
 (E) None of the above
21. PERSISTENCE
 (A) irrelevance (B) inconstancy
 (C) inequality (D) intemperance
 (E) None of the above
22. IGNOMINIOUS
 (A) scholarly (B) incognito
 (C) laudatory (D) disgraceful
 (E) None of the above
23. CONTENTIOUS
 (A) satisfied (B) pacific
 (C) hungry (D) bellicose
 (E) None of the above

Directions (For questions 24 to 27) : From amongst the four alternatives, choose the best answer which is appropriate for the blank(s) in the question. If nothing is appropriate, choose the last option.

24. In his usual _____ manner, he had insured himself against this type of loss.
 (A) pensive (B) providential
 (C) indifferent (D) circumspect
 (E) None of the above
25. We never believed that he would resort to _____ in order to achieve his goal; we always regarded him as a _____ man.
 (A) charm - insincere (B) necromancy - pietistic
 (C) subterfuge - honest (D) prestidigitation - articulate
 (E) None of the above
26. The most technologically advanced societies have been responsible for the greatest _____ indeed savagery seems to be indirect proposition to _____.
 (A) inventions - know-how (B) wars - viciousness
 (C) triumphs - civilizations (D) atrocities - development
 (E) None of the above
27. When I am elected, I will work towards effecting those changes for which I have been fighting all these years. We will work together to do away with the bureaucratic bogs which have existed ever since my opponent took office. Everyone of you knows what I stand for; I invite my opponent to _____.
 (A) hand in his resignation graciously (B) stop lying to the public
 (C) make his stance clear (D) get our city more federal aid
 (E) None of the above

Directions (Questions X to X): Read the passages give below and answer the questions appropriate to the concerned passages.

Nine individuals - Z, Y, X, W, V, U, T, S and R - are the only candidates, who can serve on three committees - A, B and C. The following are the rules regarding to constituting the committees:

- Each candidate should serve on exactly one of the committees.
- Committee A should consist of exactly one member more than committee (B)
- It is possible that there are no members of committee (C)
- Among Z, Y and X none can serve on committee (A)
- Among W, V and U none can serve on committee (B)
- Among T, S and R none can serve on committee (C)

With the above base information answer the following questions:

28. In case T and Z are the individuals serving on committee B, how many of the nine individuals should serve on committee C?
- (A) 3 (B) 4
(C) 5 (D) 6
(E) None of the above
29. Of the nine individuals, the largest number that can serve together on committee C is
- (A) 9 (B) 8
(C) 7 (D) 6
(E) None of the above
30. In case R is the only individual serving on committee B, which among the following should serve on committee A?
- (A) W and S (B) V and U
(C) T and S (D) U and S
(E) None of the above
31. In case any of the nine individuals serves on committee C, which among the following should be the candidate to serve on committee A?
- (A) Z (B) Y
(C) W (D) T
(E) None of the above
32. In case T, S and X are the only individuals serving on committee B, the total membership of committee C should be:
- (A) Z and Y (B) Z and W
(C) Y and V (D) Y and U
(E) None of the above
33. Among the following combinations which could constitute the membership of committee C?
- (A) Y and T (B) X and U
(C) Y, X and W (D) W, V and U
(E) None of the above

In an experiment conducted at a laboratory, 160 white mice were injected with Serum D 160 other white mice were injected with a harmless sugar solution. In two weeks time 39% of the white mice, who were injected with Serum D contracted the highly contagious and often fatal disease, jungle fever. Hence, it can be concluded that jungle fever is caused by some elements similar to the elements in Serum D

With the above base information answer the following questions:

34. The above discussion would be weakened most severely in case it is shown that
- (A) People contracting jungle fever are usually the victims of the bite of the South American Lesser Hooded Viper.
 - (B) One among the 160 white mice had already contracted jungle fever prior to the laboratory experiment.
 - (C) The natural habitats of white mice does not contain any of the elements found in Serum D
 - (D) The scientists administered the injections being ignorant of the contents of the solutions used
 - (E) None of the above.
35. The above argument would be highly empowered in case it were shown that:
- (A) Some of the elements in Serum D are extracted from the root of a certain poisonous jungle wildflower.
 - (B) Invariably the blood of the victims of jungle fever victims contains a high level of a certain toxic substance also found in serum D
 - (C) Almost all the white mice died within a period of two days after the first symptoms appeared
 - (D) Normally the rate of jungle fever among white mice is less than 0.01%.
 - (E) None of the above.
36. Distribution of leaflets and delivering speeches on government property should be outlawed. Radicals and fanatics have no right to use public property when peddling their unsavory views.
- The argument above is based on the postulate
- (A) The general public has a special concern in the free exchange of different political views.
 - (B) Every person who hands out leaflets and delivers speeches is a radical or fanati C
 - (C) Radicals and fanatics prefer the use of public property while propagating their viewpoint.
 - (D) Legal constraints which are applicable to one group need not be equally applicable to all.
 - (E) None of the above

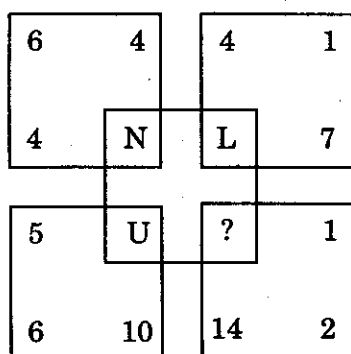
37. No national productivity measures are available for underground industries that may exist but remain unreported. On the other hand, at least some industries that are run entirely by self-employed industrialists are included in national productivity measures.
- From the information given above, it can be validly concluded that,
- (A) There are at least some industries run entirely by self-employed industrialists that are underground industries
 - (B) No industries that are run entirely by self-employed industrialists operate underground
 - (C) There are at least some industries other than those run entirely by self-employed industrialists that are underground industries
 - (D) There are at least some industries run entirely by self-employed industrialists that are not underground industries
 - (E) None of the above
38. Sally has never received a violation from the Federal Aviation Administration during her 16-year flying career. Sally must be a great pilot.
- Which of the following can be said about the reasoning above?
- (A) The definitions of the terms create ambiguity.
 - (B) The argument uses circular reasoning.
 - (C) The argument works by analogy.
 - (D) The argument is built upon hidden assumptions.
 - (E) None of the above.
39. Cars are safer than planes. Fifty percent of plane accidents result in death, while only one percent of car accidents result in death.
- Which of the following, if true, would most seriously weaken the argument above?
- (A) Planes are inspected more often than cars.
 - (B) The number of car accidents is several hundred thousand times higher than the number of plane accidents.
 - (C) Pilots never fly under the influence of alcohol, while car drivers often do.
 - (D) Plane accidents are usually the fault of air traffic controllers, not pilots.
 - (E) None of the above.
40. Dear Editor: I feel obliged to comment on the unfair review you published last week written by Robert Duxbury. Your readers should know that Mr. Duxbury recently published his own book that covered the same topic as my book, which you asked him to review. It is regrettable that Mr. Duxbury should feel the need to belittle a competing work in the hope of elevating his own book.
- The author of the letter above makes her point by employing which method of argument?
- (A) Attacking the motives of the author of the unfavorable review.
 - (B) Attacking the book on the same topic written by the author of the review.
 - (C) Contrasting her own book with that written by the author of the review.
 - (D) Questioning the judgment of the author of the unfavorable review.
 - (E) None of the above.

41. Many people argue that the death penalty deters murder. However, the notorious killer Ned Grandy deliberately moved to a state that imposes the death penalty just before embarking on a series of ferocious murders. Thus, it seems clear that the existence of the death penalty does not serve as a deterrent to murder.
- The argument above may best be characterized as:
- (A) an appeal to emotion.
 - (B) a flawed analogy.
 - (C) a general conclusion based on a specific example.
 - (D) circular reasoning.
 - (E) None of the above.
42. Consider the following:
- James weighs more than Kelly.
 - Luis weighs more than Mark.
 - Mark weighs less than Ned
 - Kelly and Ned are exactly the same weight.
- If the information above is true, which of the following must also be true?
- (A) Luis weighs more than Ned
 - (B) Luis weighs more than James.
 - (C) Kelly weighs less than Luis
 - (D) James weighs more than Mark
 - (E) None of the above.
43. Man: I've heard that the new Chemistry class is really difficult.
Woman: Oh, I wouldn't say that. I took Chemistry 402 last quarter, and I think the course went very smoothly.
- Question: What does the woman mean?
- (A) The chemistry class is very tough.
 - (B) The chemistry class is not teaching this quarter.
 - (C) The chemistry class is easier than the man thinks.
 - (D) The chemistry class should be avoided if possible.
 - (E) None of the above.
44. Woman: I've heard great things about that movie that just came out. You want to go see it tonight?
- Man: I'd love to, but I've got a history final in two days, and I haven't studied all quarter. I think I'd better take a rain check this time.
- What does the man mean?
- (A) He needs to take a break from his studying.
 - (B) He loves the woman very much.
 - (C) He doesn't like going out in the rain.
 - (D) He will not be able to accompany the woman.
 - (E) None of the above.

45. Woman: The milk in the refrigerator is sour. I don't think it's drinkable.
 Man: No joke. The expiration date was three weeks ago.
 Question: What does the man imply?
- (A) The woman has an extremely sour disposition.
 - (B) They need to replace the refrigerator.
 - (C) The woman is just kidding.
 - (D) It's not surprising the milk has ruined
 - (E) None of the above.

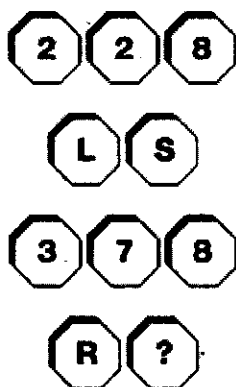
Directions (Questions X to X): Observe the series of patterns given in each question and find the appropriate one which can replace the concern Question Mark.

46. Which letter replaces the question mark?



- (A) P
- (B) Q
- (C) R
- (D) S
- (E) None of the above.

47. Which letter replaces the question mark?



- (A) S
- (B) M
- (C) U
- (D) P
- (E) None of the above.

48.

Which number replaces the question mark?

6		1
L	P	D
2		4

5		1
J	M	C
2		3

4		4
L	T	H
3		2

3		2
O	U	F
5		?

- (A) 1 (B) 2
(C) 3 (D) 4
(E) None of the above.

49.

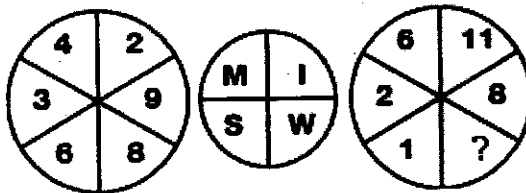
Which letter replaces the question mark?

3	P	8
9	G	11
2	U	4
3	W	1
7	?	18

- (A) Q (B) B
(C) S (D) K
(E) None of the above.

50.

Which number replaces the question mark?



- (A) 1 (B) 2
(C) 3 (D) 4
(E) None of the above.

Directions (Questions 51 to 54): Choose the odd one out from the following series of patterns.

51. 3, 5, 11, 14, 17, 21
(A) 21 (B) 17
(C) 14 (D) 3
(E) None of the above.
52. 8, 27, 64, 100, 125, 216, 343
(A) 27 (B) 100
(C) 125 (D) 343
(E) None of the above.
53. 10, 25, 45, 54, 60, 75, 80
(A) 10 (B) 45
(C) 54 (D) 75
(E) None of the above.
54. 396, 462, 572, 396, 427, 671, 264
(A) 396 (B) 427
(C) 671 (D) 264
(E) None of the above.

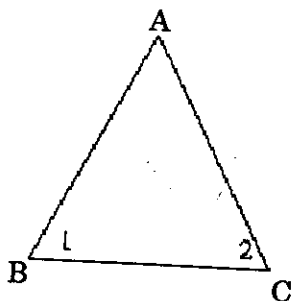
Directions (Questions 55 to 60): For each question, compare between the given Two quantities and choose the appropriate answer from the given options.

55. Quantity A: $(-6)^4$
Quantity B: $(-6)^5$
(A) Quantity A is greater
(B) Quantity B is greater
(C) Two quantities are equal
(D) The relationship cannot be determined from the information given
(E) None of the above
56. Quantity A: Time to travel 95 miles at 50 miles per hour
Quantity B: Time to travel 125 miles at 60 miles per hour
(A) Quantity A is greater
(B) Quantity A equals Quantity B
(C) Quantity B is greater
(D) The relationship cannot be determined from the information given
(E) None of the above
57. Quantity A: $(9/13)^2$
Quantity B: $(9/13)^{1/2}$
(A) Quantity A equals Quantity B
(B) The relationship cannot be determined from the information given
(C) Quantity B is greater
(D) Quantity A is greater
(E) None of the above

58. Quantity A: $4/100$
Quantity B: $0.012/3$
- (A) Quantity B is greater
 - (B) Quantity A equals Quantity B
 - (C) Quantity A is greater
 - (D) The relationship cannot be determined from the information given
 - (E) None of the above

59. $x = 2y + 3$
 $y = -2$
Quantity A: x
Quantity B: -1
- (A) Quantity in Column A is greater
 - (B) Quantity in Column B is greater
 - (C) The two quantities are equal
 - (D) The relationship cannot be determined from the information given
 - (E) None of the above

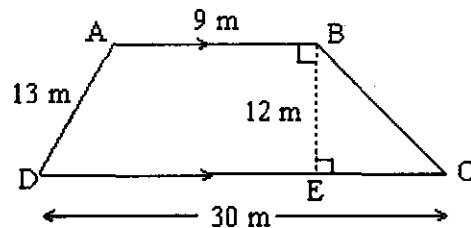
60.



- Diagram is illustrative and is not drawn to scale.
Given $AB = AC$ and angle $BAC = 60^\circ$
- Quantity A: Length of side AB
Quantity B: Length of side BC
- (A) Quantity A equals Quantity B
 - (B) Quantity B is greater
 - (C) The relationship cannot be determined from the information given
 - (D) Quantity A is greater
 - (E) None of the above

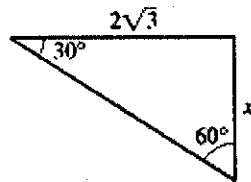
61. If the radius of a circle is increased by 20% then the area is increased by
 (A) 44% (B) 120%
 (C) 144% (D) 40%
 (E) None of the above

62. A plot of land is in the shape of a trapezium whose dimensions are given in the figure below :



Hence the perimeter of the field is

- (A) 50 m (B) 64 m
 (C) 72 m (D) 84 m
 (E) None of the above
63. Lengths for the triangle below are given in feet. What is the value of x ?



- (A) 2 (B) $\sqrt{3}$
 (C) 4 (D) 5
 (E) None of the above

Overlapping Start ($64 \Rightarrow 73 = 11$)

64. A person starts multiplying consecutive positive integers from 20. How many numbers should he multiply before the will have result that will end with 3 zeroes?
 (A) 11 (B) 10
 (C) 6 (D) 5
 (E) None of the above

65. What is the remainder when $91 + 92 + 93 + \dots + 99$ is divided by 6?
 (A) 0 (B) 3
 (C) 4 (D) 2
 (E) None of the above

66. How many numbers are there between 100 and 1000 such that atleast one of their digits is 6?
 (A) 648 (B) 258
 (C) 654 (D) 252
 (E) None of the above

67. Find the sum of all the integers which are multiples of 7 and lie between 200 and 400.
 (A) 8729 (B) 8700
 (C) 8428 (D) 8438
 (E) None of the above
68. Let A and B be two solid spheres such that the surface area of B is 300% higher than the surface area of A. The volume of A is found to be $k\%$ lower than the volume of B. The value of k must be
 (A) 85.5 (B) 92.5
 (C) 90.5 (D) 87.5
 (E) None of the above
69. A test has 50 questions. A student scores 1 mark for a correct answer, $-1/3$ for a wrong answer, and $-1/6$ for not attempting a question. If the net score of a student is 32, the number of questions answered wrongly by that student cannot be less than
 (A) 6 (B) 12
 (C) 3 (D) 9
 (E) None of the above
70. How many even integers n , where $100 \leq n \leq 200$, are divisible neither by seven nor by nine?
 (A) 40 (B) 37
 (C) 39 (D) 38
 (E) None of the above
71. Let $g(x) = \max(5 - x, x + 2)$. The smallest possible value of $g(x)$ is
 (A) 4.0 (B) 4.5
 (C) 1.5 (D) 3.5
 (E) None of the above
72. Given that $-1 \leq v \leq 1$, $-2 \leq u \leq -0.5$ and $-2 \leq z \leq -0.5$ and $w = vz/u$, then which of the following is necessarily true?
 (A) $-0.5 \leq w \leq 2$ (B) $-4 \leq w \leq 4$
 (C) $-4 \leq w \leq 2$ (D) $-2 \leq w \leq -0.5$
 (E) None of the above
73. How many three digit positive integers, with digits x , y and z in the hundred's, ten's and unit's place respectively, exist such that $x < y$, $z < y$ and $x \neq 0$?
 (A) 245 (B) 285
 (C) 240 (D) 320
 (E) None of the above
74. Let T be the set of integers $\{3, 11, 19, 27, \dots, 451, 459, 467\}$ and S be a subset of T such that the sum of no two elements of S is 470. The maximum possible number of elements in S is
 (A) 32 (B) 28
 (C) 29 (D) 30
 (E) None of the above

Overlapping End ($64 \Rightarrow 74 = 11$)

Already Overlapping End ($13 \Rightarrow 15 = 3$)

So, Total overlapping is equal to $11 + 3 = 14$.

75. The average of 5 quantities is 6. The average of 3 of them is 8. What is the average of the remaining two numbers?
(A) 6.5 (B) 4
(C) 3 (D) 3.5
(E) None of the above
76. The average age of a family of 5 members is 20 years. If the age of the youngest member be 10 years then what was the average age of the family at the time of the birth of the youngest member?
(A) 13.5 (B) 14
(C) 15 (D) 12.5
(E) None of the above
77. If ABC is a right angle triangle with angle $A = 90^\circ$ and $2s = a + b + c$, where $a > b > c$ where notations have their usual meanings, then which one of the following is Correct?
(A) $(s - b)(s - c) > s(s - a)$ (B) $(s - a)(s - c) > s(s - b)$
(C) $(s - a)(s - b) < s(s - c)$ (D) $4s(s - a)(s - b)(s - c) = bc$
(E) None of the above
78. Daal is now being sold at Rs. 20 per kg. During last month, its rate was Rs. 16 per kg. By how much percent should a family reduce its consumption so as to keep the expenditure fixed?
(A) 15 (B) 18
(C) 20 (D) 33
(E) None of the above
79. Find the least value of $3x + 4y$ if $x^2y^3 = 6$.
(A) 15 (B) 8
(C) 10 (D) 12
(E) None of the above
80. One fast typist type some matter in 2hrs and another slow typist type the same matter in 3hrs. If both do combine in how much time they will finish?
(A) 1hr 14 mints (B) 1hr 18 mints
(C) 1hr 12 mints (D) 1hr 02 mints
(E) None of the above

81. In 8*8 Chess board, what is the total number of squares?
 (A) 64 (B) 128
 (C) 192 (D) 204
 (E) None of the above
82. In a fraction, if 1 is added to both the numerator at the denominator, the fraction becomes $\frac{1}{2}$. If numerator is subtracted from the denominator, the fraction becomes $\frac{3}{4}$. Find the fraction.
 (A) $\frac{6}{5}$ (B) $\frac{1}{5}$
 (C) $\frac{3}{7}$ (D) $\frac{7}{8}$
 (E) None of the above
83. Five years ago, Beth's age was three times that of Amy. Ten years ago, Beth's age was one half that of Chelsea. If C represents Chelsea's current age, which of the following represents Amy's current age?
 (A) $\frac{c}{6} + 5$ (B) $2c$
 (C) $\frac{(c-10)}{3}$ (D) $3c-5$
 (E) None of the above
84. A person who decided to go weekend trip should not exceed 8 hours driving in a day. Average speed of forward journey is 40 mph. due to traffic in sundays, the return journey average speed is 30 mph. how far he can select a picnic spot
 (A) 90 miles (B) 120 miles
 (C) 115 miles (D) 112 miles
 (E) None of the above
85. The monthly incomes of A and B are in the ratio 4 : 5, their expenses are in the ratio 5:6. If 'A' saves Rs.25 per month and 'B' saves Rs.50 per month, what are their respective incomes?
 (A) Rs.400 and Rs.500 (B) Rs.240 and Rs.300
 (C) Rs.320 and Rs.400 (D) Rs.440 and Rs.550
 (E) None of the above

Overlapping Start (86 => 93 = 8)

86. Which of the following features are implemented directly by virtual memory?

- (i) A larger virtual address space than physical memory
- (ii) Allow multiple processes to share a physical memory
- (iii) Higher bandwidth access to disk
- (iv) A larger number of auto vectored interrupts
- (v) Protection between processes

- (A) i, ii & iii
- (B) i, ii, v
- (C) i, ii, iv
- (D) i, iv, v
- (E) None of the above

87. How many bits are required to address a 4M x 32-bit main memory if,

- (i). Main memory is word-addressable (ii). Main memory is byte-addressable

- (A) 22, 24
- (B) 24, 22
- (C) 22, 22
- (D) 24, 24
- (E) None of the above

88. What will be the output of the following program?

```
#include<stdio.h>
main()
{ float a=12,b=12;
  if (a = b)
    printf("\n a and b are equal ");
}
```

- (A) Nothing will be printed
- (B) a and b are equal
- (C) compilation error
- (D) Syntax error
- (E) None of the above

89. What will be the output of the following program?

```
#include<stdio.h>
main()
{static char a[]="Bombay";
 char *b="Bombay";
 printf("%d %d",sizeof(a),sizeof(b));
}
```

- (A) 1 6
- (B) 1 1
- (C) 2 2
- (D) 7 2
- (E) None of the above

90. The open source language used with Mozilla is
 (A) M++ (B) XUL
 (C) Mo Basic (D) All of the above
 (E) None of the above
91. Thunder bird is a
 (A) Spreadsheet application (B) Debugging tool
 (C) Testing Tool (D) E-mail client
 (E) None of the above
92. If $R=(A,B,C,D,E)$ with AB as the primary key and $F=(B \rightarrow F, A \rightarrow C, AB \rightarrow DE, AB \rightarrow F)$, Then the relation is in _____ normal form.
 (A) First (B) Second
 (C) Third (D) All of the above
 (E) None of the above
93. In a FCFS Disk Scheduling, Consider, a disk queue with requests for I/O to blocks on cylinders in the order 98,183, 37,122, 14,124, 65, 67. Make an assumption that disk head is initially at cylinder 53, Then the total head movement involved is
 (A) 640 (B) 740
 (C) 840 (D) 940
 (E) None of the above
- Overlapping End ($86 \Rightarrow 93 = 8$)
 Already Overlapping End ($13 \Rightarrow 15 = 3$)
 Already Overlapping End ($64 \Rightarrow 74 = 11$)
 So, Total overlapping is equal to $8+3+11 = 22$.
94. What will be the output of the following program?

```
#include<stdio.h>
#define PRODUCT(x) (x*x)
main()
{
  int i=3,j=0,k=0;
  clrscr();
  j=PRODUCT(i++);
  k=PRODUCT(++i);
  printf("%d %d ",j,k);
}
```

 (A) 9 49 (B) 49 9
 (C) 9 9 (D) 0 0
 (E) None of above

95. Business Intelligence is the industrial terminology for
(A) Data Structures (B) Database normalization
(C) Data encryption (D) Neural Networks
(E) None of the above
96. On a movable-head system, the time it takes to position the head at the track is known as
(A) Latency time (B) Transfer Time
(C) Rotational Delay (D) seek time
(E) None of the above
97. Which is not true in the following?
(A) Functional independence is a direct outgrowth of modularity.
(B) Cohesion is a natural extension of information hiding.
(C) Modularity is the only criteria to increase the rate of reusability.
(D) Design specification contains a requirements cross reference.
(E) None of the above.
98. Half-adder is also known as
(A) AND gate (B) NAND gate
(C) NOR gate (D) XOR gate
(E) None of the above
99. Trap door
(A) Could be included in a compiler
(B) Pose a difficult problem because, to detect them
(C) Could be included in interpreter
(D) Both A and B
(E) None of the above
100. Every BCNF decomposition is
(A) Dependency preserving (B) Not dependency preserving
(C) Need to be dependency preserving (D) All of the above
(E) None of the above
-