

iiO'13

International Informatics Olympiad 2013

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**SILVER
ZONE**
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TEST PAPER TYPE

BB

LEVEL 1

QUESTION PAPER

Duration : 60 Minutes

Questions : 40

Maximum Marks : 100

Enrollment No.

Student Name

School Name

Read the following instructions carefully before you begin to answer the questions in the OMR Answer Sheets provided along with this question paper. Ask the Examination In-charge/Invigilator how to mark the OMR Answer Sheets, in case you have any doubts.

NOTE: Marking improper STREAM POINT NO. 11 in the OMR SHEET may lead inappropriate/non-availability of result.

INSTRUCTION TO CANDIDATES TO BE EXPLAINED BY THE INVIGILATORS

- This Booklet contains 100 questions in all comprising the following 6 Sections:

Section-A	Fundamental of Computer Science	(15 Questions)	2.5 Marks each
Section-B	Computer Science (C++)	(20 Questions)	2.5 Marks each
Section-C	Informatics Practices (Java)	(20 Questions)	2.5 Marks each
Section-D	Python	(20 Questions)	2.5 Marks each
Section-E	Multimedia & Web Technology	(20 Questions)	2.5 Marks each
Section-F	Mental Ability	(05 Questions)	2.5 Marks each

Section A and F are compulsory for all students. Opt any one from Section B, C, D & Section E.
- This Booklet contains 10 pages. Please check, if any page is misprinted, missing or repeated.
- Collect your OMR Answer Sheets from the Invigilator/Examination In-Charge to answer the questions given in this Booklet.
- You must fill all the necessary information's which are required in the space provided in this booklet and OMR Answer Sheet.
- Correct Answers must be marked by "**Darkening**" the corresponding circles on the OMR Answer Sheet, against the relevant question number with **Pencil or Blue/Black, Ball point Pen** only. Answers which are not darkened in circle will not be awarded with any mark.
- No rough work is to be done in the OMR Answer Sheet.
- Mobile Phones and other Wireless equipments are banned in the examination halls/rooms.
- OMR Answer Sheets must be handed over to the Examination In-charge/Invigilator before you leave the examination room/hall and recheck that you have filled all the required informations.
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TEACHERS ARE REQUESTED TO CHECK IF THE REQUIRED INFORMATIONS ARE PROPERLY FILLED BY THE CANDIDATES IN THE QUESTION PAPER & OMR ANSWER SHEETS, AND ALSO ENSURE THAT OMR ANSWER SHEETS ARE PROPERLY MARKED. PLEASE SEND US BACK THE OMR ANSWER SHEETS ONLY.

SECTION - A
(Fundamental of Computer Science)

1. **Refreshing Dynamic memory means?**
(A) Capacitor must recharged periodically
(B) Capacitor must discharged periodically
(C) Removing capacitor
(D) All of the above
(E) None of these
2. **An integrated circuit is:**
(A) A complicated circuit
(B) An integrating device
(C) Much costlier than a single transistor
(D) Fabricated on a tiny silicon chip
(E) None of these
3. **In which one of the following generations of Computer high level language or HLL is used, which has human sounding words and syntax (like words in a sentence)?**
(A) 1st Generation
(B) 2st Generation
(C) 4st Generation
(D) All of these
(E) None of these
4. **Which one of the following organizations is responsible for managing the Internet Protocol address spaces (IPv4 and IPv6) and assignment of address blocks to regional Internet registries?**
(A) IANA
(B) LACNIC
(C) ICANN
(D) ARIN
(E) None of these
5. **Which one of the following is a protocol which ensures that sensitive information can be transmitted safely online?**
(A) Secure Socket Layer (B) Serial data
(C) Parallel data (D) All of these
(E) None of these
6. **What is the decimal number for the hexadecimal value of C?**
(A) 10
(B) 11
(C) 12
(D) 13
(E) None of these

7. **Translator is system software that converts high level language into machine language. Which one of the following generation language does not require any translator ?**
(A) 5GL (B) 4GL
(C) 1GL (D) 2GL
(E) None of these
8. **In TCP/UDP communications, what service can be found on port 23?**
(A) FTP (B) HTTP
(C) SMTP (D) Telnet
(E) None of these
9. **Which of the following is a feature of 4GLs?**
(A) Procedural (B) Structural
(C) Sequential (D) Object oriented
(E) None of these
10. **Which of the following is/are an example(s) of guided media of communication?**
(A) twisted pair cable (B) optical cable
(C) coaxial cable (D) All of these
(E) None of these
11. **Why do computers use zeros and ones?**
(A) because combinations of zeros and ones can represent any numbers and characters.
(B) because digital devices have two stable states and it is natural to use one state for 0 and the other for 1.
(C) because binary numbers are simplest.
(D) because binary numbers are the bases upon which all other number systems are built.
(E) None of these
12. **Which of the following statements are true about kerning?**
(A) Kerning can be adjusted either automatically or manually
(B) It is a process of moving letters closer together
(C) Kerning for fonts check box is available on Font dialog box
(D) All of these
(E) None of these
13. **Which of the following are layers in the TCP/IP model?**
1. Application 2. Session
3. Transport 4. Internet
5. Data Link 6. Physical
(A) 1 and 2 (B) 1, 3 and 4
(C) 2, 3 and 5 (D) 3, 4 and 5
(E) None of these

14. Find the expression which returns 1 if both bits have a value of 1; otherwise will return a value of 0.

- (A) AND (B) OR
(C) XOR (D) 1's complement
(E) None of these

15. Which protocol is used to find the hardware address of a local device?

- (A) RARP
(B) ARP
(C) IP
(D) ICMP
(E) None of these

SECTION - B

Computer Science (C++)

16. Which of the following is not a type of constructor?

- (A) Copy constructor
(B) Friend constructor
(C) Default constructor
(D) Parameterized constructor
(E) None of these

17. What is the result of this function

```
int test(int j) {  
    int x = 5;  
    if(j == 0)  
    { int x;  
      x = 3; }  
    return x;  
};
```

- (A) 3
(B) 5
(C) 8
(D) 3 if j==0 and 0 otherwise
(E) None of these

18. Which of the following statements is incorrect?

- (A) friend keyword can be used in the class to allow access to another class.
(B) friend keyword can be used for a function in the public section of a class.
(C) friend keyword can be used for a function in the private section of a class.
(D) friend keyword can be used on main().
(E) None of these

19. What is correct about the static data member of a class?

- (A) A static member function can access only static data members of a class.
(B) A static data member is shared among all the object of the class.
(C) A static data member can be accessed directly from main().
(D) Both A and B.
(E) None of these

20. Linked lists are best suited

- (A) for relatively permanent collections of data
(B) for the size of the structure and the data in the structure are constantly changing
(C) for both of above situation
(D) for none of above situation
(E) None of these

21. Find the output :

```
void main()  
{  
    int i=0,x=0;  
    while(i<18)  
    {  
        if (i%2==0)  
        {  
            x=x+i;  
        } i++;  
    }  
    cout<<x;  
}
```

- (A) 84 (B) 64
(C) 72 (D) 108
(E) None of these

22. Which of the following statement is correct?

- (A) Class is an instance of object.
(B) Object is an instance of a class.
(C) Class is an instance of data type.
(D) Object is an instance of data type.
(E) None of these

23. Which of the following is used to make an abstract class?

- (A) Declaring it abstract using static keyword.
(B) Declaring it abstract using virtual keyword.
(C) Making at least one member function as virtual function.
(D) Making at least one member function as pure virtual function.
(E) None of these

24. Which inheritance type is used in the class given below?

```
class A : public X, public Y
{
```

- (A) Multilevel inheritance
- (B) Multiple inheritance
- (C) Hybrid inheritance
- (D) Hierarchical Inheritance
- (E) None of these

25. How "Late binding" is implemented in C++?

- (A) Using C++ tables
- (B) Using Virtual tables
- (C) Using Indexed virtual tables
- (D) Using polymorphic tables
- (E) None of these

26. Which one of the following statement is/are correct about object in OOP?

- (A) Object is a basic run time entity.
- (B) It may represent a place.
- (C) It may represent user defined data type.
- (D) Both a and c
- (E) All of these

27. Read the following code snippet and examine the type of constructor.

```
class sample
{
int i;
public:
sample()
{ int i=0; }
};
```

- (A) Default
- (B) Copy
- (C) Parameterized
- (D) All of these
- (E) None of the above

28. Which of the following header file includes definition of cin and cout?

- (A) istream.h
- (B) ostream.h
- (C) iomanip.h
- (D) iostream.h
- (E) None of these

29. A function with the same name as the class, but preceded with a tilde character (~) is called _____ of that class.

- (A) constructor
- (B) destructor
- (C) function
- (D) object
- (E) None of these

30. Find the output of the following program:

```
#include <iostream.h>
#include <conio.h>
void main(void)
{
int arr[5]={5,9,14,22,35};
int ar[5]={2,3,7,10,15};
int i,j,tot=0;
clrscr();
for (i=0,j=0;i<=4;i++)
{
tot+=arr[i]/ar[j];
j++;
}
cout<<tot;
getch();
}
```

- (A) 12
- (B) 10
- (C) 11
- (D) 12
- (E) None of these

31. What is debugger used for?

- (A) Running and tracing programs in a controlled way
- (B) Removing comments from the source code
- (C) Removing syntax errors from C++ programs
- (D) Running diagnostics of hardware components
- (E) None of these

32. Which one of the following is correct statement?

- (A) A doubly link list can be traversed forward direction only.
- (B) A doubly link list can be traversed forward and backward direction.
- (C) A doubly link list can be traversed backward direction only.
- (D) A doubly link list can not be traversed.
- (E) None of these

33. Which of the following adds one string to the end of another?

- (A) append();
- (B) strcat();
- (C) stringadd();
- (D) stradd();
- (E) None of these

34. Queue is based on FIFO principle. FIFO is stands for.

- (A) First in First Out
- (B) Fast in Fast Out
- (C) First input First Outcome
- (D) Fast inside
- (E) None of these

35. _____ is an example of polymorphism.

- (A) Function overloading
- (B) Call by value
- (C) Call by reference
- (D) Data hiding
- (E) None of these

SECTION - C

Informatics Practices (Java)

16. Which of the following keyword is used to prevent a class to being inherited?

- (A) Super
- (B) Static
- (C) Final
- (D) New
- (E) None of these

17. Which one of the following syntax is correct to call the `currentThread()` method?

- (A) `Public static currentTread()`
- (B) `Static Thread currentThread()`
- (C) `Thread static currentThread()`
- (D) `Thread public static currentThread()`
- (E) None of these

18. The AWT contains the support for a Window-based graphical interface. What is the full form of AWT?

- (A) Advance Window Tool
- (B) Abstract Window Toolkit
- (C) Accessible Window Toolkit
- (D) Active Window Toolkit
- (E) None of these

19. Consider the following code snippet:

```
class MyCons {
    int x;
    //Following is the constructor
    MyCons (int i) {
        x = i;
    }
}
class ConsDemo {
    public static void main(String args[]) {
        MyCons t1 = new MyCons (50);
        MyCons t2 = new MyCons(60);
        System.out.println(t1.x + " " + t2.x);
    }
}
```

What will be the output?

- (A) 50 60
- (B) 5060
- (C) 50
- (D) It generates a garbage value
- (E) None of these

20. Consider the following code snippet:

```
public class Student{
    public static void main(String num[]){
        double i = -100.675;
        System.out.println(Math.ceil(i));
        System.out.println(Math.floor(i));
    }
}
```

What will be the output?

- (A) -100.0
- (B) 100.0
- (C) -101.0
- (D) It generates garbage value
- (E) None of these

21. INSTR is a built in function of SQL, and is used to:

- (A) Returns specified number of characters from total width of n character expression.
- (B) Returns the character value right justified to a given character expressions.
- (C) Returns the numeric position
- (D) Both (A) and (B)
- (E) None of these

22. The control input is accomplished in java by reading from _____ in a `BufferedReader` object to create a character stream.

- (A) `System.in`
- (B) `System.out`
- (C) `System.err`
- (D) `System.str`
- (E) None of these

23. A subclass can call a constructor method defined by the base class/superclass by using _____ keyword.

- (A) `Call`
- (B) `Super`
- (C) `Final`
- (D) All of these
- (E) None of these

24. Which of the following at the top of exception class hierarchy?

- (A) `Exception`
- (B) `RuntimeException`
- (C) `Throwable`
- (D) `Error`
- (E) None of these

25. The Start Thread method is used to start a thread by calling its _____ method.

- (A) Run
- (B) Join
- (C) GetName
- (D) IsAlive
- (E) None of these

26. Consider the following code, What will happen, when you execute the following code?

```
class F
{
public static void main(String args[])
{
int d = 0;
int a = 42 / d;
}
}
```

- (A) The program will compile without error and produce 42 as outputs.
- (B) The program will compile without error and produce an error "Exception in thread "main" java.lang.ArithmeticException" when it runs.
- (C) The program will compile without error and produce an error "Exception in thread "main" java.lang.RuntimeException" when it runs.
- (D) The program will compile without error and produce 0 as outputs.
- (E) None of these

27. Which of the following statements is/are correct about exception?

- (A) An exception is an abnormal condition that arises in a code sequence at run time.
- (B) An exception is a runtime
- (C) An exception is an object that describes an exceptional condition that has occurred in a piece of code.
- (D) All of these
- (E) None of these

28. _____ is the first web browser developed in Java?

- (A) Internet Explorer
- (B) Netscape Navigator
- (C) Opera
- (D) HotJava
- (E) None of these

29. _____ is a logical error in a program.

- (A) Poor Security
- (B) Wrong Syntax
- (C) Bug
- (D) Installation failure
- (E) None of these

30. Java provides the Date class available in package

- (A) java.util
- (B) jvm.util
- (C) java.date
- (D) all of these
- (E) None of these

31. You have created a java program that has various exceptions, the java provides few keys to handle the exception. The java exception handling can be managed by_____.

- (A) Three keywords, try, catch, and throw.
- (B) Two keywords, try and catch.
- (C) Five keywords, try, catch, throw, throws, and finally.
- (D) Four keywords, try, catch, throw, and finally
- (E) None of these

32. Java is an object oriented language. It was originally developed by Sun Microsystems. Which of the following is not the feature of Java?

- (A) portable
- (B) robust
- (C) distributed
- (D) interpreted
- (E) All of these are the features of Java

33. _____ object is the engine that interprets the pattern and performs match operations against an input string.

- (A) Matcher
- (B) Pattern class
- (C) PatternSyntaxException
- (D) all of these
- (E) None of these

34. Which one of the following can be used with ALTER command?

- (A) DROP
- (B) CHANGE
- (C) MODIFY
- (D) All of these
- (E) None of these

35. Which of the following represent legal flow control statements?

- (i) break;
- (ii) break();
- (iii) continue outer;
- (iv) continue(inner);
- (v) return;
- (vi) exit();
- (A) (i), (ii) & (iii)
- (B) (i), (iii) & (iv)
- (C) (i) & (v)
- (D) (i), (iii) & (v)
- (E) None of these

SECTION - D

Python

16. Suppose `i` is an int type variable. Which of the following statements display the character whose Unicode is stored in variable `i`?

- (A) `print(i)`
- (B) `print(str(i))`
- (C) `print(int(i))`
- (D) `print(chr(i))`
- (E) None of these

17. What will be displayed by `print(ord('z') - ord('a'))`?

- (A) 25
- (B) 26
- (C) a
- (D) z
- (E) None of these

18. Suppose `s = "Welcome"`, what is its type?

- (A) int
- (B) float
- (C) str
- (D) String
- (E) None of these

19. Which of the following is a Python dictionary?

- (A) `[1, 2, 3]`
- (B) `(1, 2, 3)`
- (C) `{1, 2, 3}`
- (D) `{}`
- (E) None of these

20. Find the output of the following code:

```
class Account:
def __init__(self, id):
self.id = id
id = 666
acc = Account(123)
print acc.id
```

- (A) None
- (B) 123
- (C) 666
- (D) `SyntaxError`, this program will not run
- (E) None of these

21. Find me...

```
name = "snow storm"
print "%s" % name[6:8]
```

- (A) st
- (B) sto
- (C) to
- (D) tor
- (E) `Syntax Error`

22. What will get printed?

```
name = "snow storm"
name[5] = 'X'
print name
```

- (A) snow storm
- (B) snowXstorm
- (C) snow Xtorm
- (D) `ERROR`, this code will not run
- (E) None of these

23. Which numbers are printed?

```
for i in range(2):
print i
for i in range(4,6):
print i
```

- (A) 2, 4, 6
- (B) 0, 1, 2, 4, 5, 6
- (C) 0, 1, 4, 5
- (D) 0, 1, 4, 5, 6, 7, 8, 9
- (E) 1, 2, 4, 5, 6

24. What sequence of numbers is printed?

```
values = [1, 2, 1, 3]
nums = set(values)
def checkit(num):
if num in nums:
return True
else:
return False
for i in filter(checkit, values):
print i
```

- (A) 1 2 3
- (B) 1 2 1 3
- (C) 1 2 1 3 1 2 1 3
- (D) 1 1 1 1 2 2 3 3
- (E) `Syntax Error`

25. What sequence of numbers is printed?

```
values = [2, 3, 2, 4]
def my_transformation(num):
return num ** 2
for i in map(my_transformation, values):
print i
```

- (A) 2 3 2 4
- (B) 4 6 4 8
- (C) 1 1.5 1 2
- (D) 1 1 1 2
- (E) 4 9 4 16

26. **What does the code below do?**
sys.path.append('/root/mods')
- (A) Changes the location that the python executable is run from
 - (B) Changes the current working directory
 - (C) Adds a new directory to search for python modules that are imported
 - (D) Removes all directories for mods
 - (E) Changes the location where sub-processes are searched for after they are launched

27. _____ creates a list.

- (A) list1 = list()
- (B) list1 = []
- (C) list1 = list([12, 4, 4])
- (D) list1 = [1, "3", "red"]
- (E) All of these

28. **Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is max(list1)?**

- (A) 5
- (B) 4
- (C) 8
- (D) 25
- (E) 1

29. **For m = [[x, x + 1, x + 2] for x in range(0, 3)], m is _____.**

- (A) [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
- (B) [[0, 1, 2], [1, 2, 3], [2, 3, 4]]
- (C) [1, 2, 3, 4, 5, 6, 7, 8, 9]
- (D) [0, 1, 2, 1, 2, 3, 2, 3, 4]
- (E) None of these

30. **How many elements are in m = [[x, y] for x in range(0, 4) for y in range(0, 4)]?**

- (A) 8
- (B) 12
- (C) 16
- (D) 32
- (E) None of these

31. **To read two characters from a file object infile, use _____.**

- (A) infile.read(2)
- (B) infile.read()
- (C) infile.readline()
- (D) infile.readlines()
- (E) None of these

32. _____ displays a file dialog for saving a file.

- (A) filename = askopenfilename()
- (B) filename = asksaveasfilename()
- (C) filename = openfilename()
- (D) filename = saveasfilename()
- (E) None of these

33. **Invoking the _____ method converts raw byte data to a string.**

- (A) encode()
- (B) decode()
- (C) convert()
- (D) toString()
- (E) None of these

34. **What is round(3.52)?**

- (A) 3.5
- (B) 3
- (C) 5
- (D) 4
- (E) 3.0

35. **Which function do you use to read data using binary input?**

- (A) read
- (B) input
- (C) load
- (D) receive
- (E) None of these

SECTION - E

Multimedia & Web Technology

16. **The four parts of a database listed in ascending order are:**

- (A) File , record, field, entry.
- (B) Entry, field, record, file.
- (C) Entry, field, file, record.
- (D) File, field, entry, record.
- (E) None of these

17. **Page 1 has this link:**

` Go`

How can page2.asp get the "color" parameter?

- (A) Get("color")
- (B) Response.QueryString("color")
- (C) Request.QueryString("color")
- (D) Request.Form("color")
- (E) None of these

18. **ASP code is....**

- (A) a client-side executable code.
- (B) a server-side executable code.
- (C) a world-wide-web executable code.
- (D) All of the above.
- (E) None of these

19. **What method do you use to explicitly kill a user's session?**

- (A) abandon()
- (B) kill()
- (C) stop()
- (D) terminate()
- (E) None of these

20. What will be output of the following code?

- ```
<% =left(right("pineapples", 6), 5) %>
```
- (A) apples (B) Apple  
(C) Ineap (D) Apple  
(E) None of these

21. Which of the following technologies doesn't help in creating dynamic web pages?

- (A) ASP (B) JAVA  
(C) PERL (D) HTML  
(E) None of these

22. The AIFF stands for Audio Interchange File Format. It was developed by\_\_\_\_\_

- (A) IBM  
(B) Apple  
(C) Microsoft  
(D) Micromax  
(E) None of these

23. Which of the following statements is/are best suited about MP3 format?

- (A) It's encoding system combines good compression (small files) only  
(B) It is high quality only  
(C) It's encoding system combines good compression (small files) with high quality  
(D) B and C  
(E) None of these

24. What would be the output of the following?

- ```
<%  
response.Write(WeekDayName(2))  
response.Write(", ")  
response.Write(WeekDayName(2,true))  
%>
```
- (A) Monday, 1 (B) Sunday, Sun
(C) Sun, Sunday (D) Sunday, Monday
(E) None of these

25. From the following which one is not the type of text box in Flash:

- (A) Input text (B) Static text
(C) Dynamic text (D) Message text
(E) None of these

26. If the default pages in HTML are index.htm, default.html, etc, what are the default pages in ASP?

- (A) index.asp
(B) default.asp
(C) home.asp
(D) Both (A) and (B)
(E) Both (B) and (C)

27. From the following which type of transmission medium consists a bundle of glass threads, each of which is capable of transmitting messages modulated onto light waves

- (A) Optical Fiber Cable
(B) Twisted pair cable
(C) Coaxial Cable
(D) Microwave
(E) None of these

28. A public key encryption system

- (A) allows anyone to decode the transmissions
(B) allows only the correct sender to decode the data
(C) allows only the correct receiver to decode the data
(D) does not encode the data before transmitting it
(E) None of these

29. In multimedia combination of audio and video makes it interesting and useful. Which one of the following statement is correct about binary video file?

- (A) The extension of binary video file is .avi.
(B) The extension of binary video file is .bin.
(C) The extension of binary video file is .cvc.
(D) The extension of binary video file is .bix.
(E) None of these

30. Match the following:

- | | |
|---------|-------------------------------|
| A | B |
| 1. .mov | A. Windows Media Video Format |
| 2. .wmv | B. Corel Paint Shop Pro |
| 3. .flv | C. Macromedia format |
| 4. .swf | D. Quicktime Format |
| | E. Flash Video Format |
- (A) 1-->D, 2-->A, 3-->E, 4-->C
(B) 1-->E, 2-->B, 3-->C, 4-->D
(C) 1-->C, 2-->A, 3-->D, 4-->E
(D) 1-->E, 2-->A, 3-->B, 4-->D
(E) None of these

31. Flash is used to develop animation. Which of the following organization developed Flash?

- (A) Microsoft
(B) IBM
(C) Adobe
(D) HCL
(E) None of these

32. DOM enables a set of properties that can be used to access, navigate, and update the document tree. Which one of the following returns the value of a text node?

- (A) Id
- (B) Data
- (C) Classname
- (D) Attributes
- (E) None of these

33. Which statement is correct?

1. All users of the same application share ONE Session object.
 2. All users of the same application share ONE Application object.
- (A) Only 1 is correct
 - (B) Only 2 is correct
 - (C) Both (A) and (B) are incorrect
 - (D) Both (A) and (B) are correct
 - (E) None of these

34. Which one of these events is a standard Global.asa event?

- (A) Global.asa doesn't have any standard events
- (B) Application_OnStart
- (C) Session_Start
- (D) Session_id
- (E) None of these

35. Style Sheets can save a lot of work while designing multiple WebPages. Which one of the following is not correct about CSS?

- (A) CSS stands for Cascading Style Sheets
- (B) Styles define how to display HTML elements
- (C) Styles were added to HTML 4.0 to solve a problem
- (D) External Style Sheets are stored in HTML files
- (E) None of these

SECTION - F Mental Ability

36. If 'KHDFJ' is coded as 'PSWUQ', then how will 'JPMKH' be coded?

- (A) QKNPS
- (B) QKNSP
- (C) QNKPS
- (D) QSNPK
- (E) None of these

37. If code for 'HZ' = '18', then the code for 'DX' = '?'

- (A) 55
- (B) 28
- (C) 14
- (D) 20
- (E) None of these

38. 'Rampant' is related to 'Widespread' then 'Sagacious' is related to which of the following?

- (A) Foolish
- (B) Unskilled
- (C) Wise
- (D) Satiated
- (E) None of these

39. A lady said to a man "The daughter of your only sister is the sister of my husband." What is the man's sister is to the lady?

- (A) Father
- (B) Brother-in-law
- (C) Mother-in-law
- (D) Sister-in-law
- (E) None of these

40. If the code for 'APQR' is '52', then how will 'RZXB' be coded?

- (A) 45
- (B) 70
- (C) 95
- (D) 120
- (E) None of these

