GreenLawns High School

Warden Road

FINAL EXAMINATION 2024– 25

Std: 9   Subject : Computer Applications   Max. Marks: 100
Date: 24/02/25   Dur. : 2 Hours
Number of printed pages : 4

SECTION A (40 Marks)

Question 1   **[20]**

Select proper option and write correct answer

1) Which of the following will produce 8.0 if x=8.9
 a) Math.ceil(x)   b) Math.round(x)   c) Math.floor(x)   d) Math.abs(x)
2) The result of Math.max(Math.sqrt(49), Math.min(36,63))
 a) 36   b) 63   c) 49 d) 7
3) Which one of the following is multiple branch selection statement ?
 a) if   b) if else   c) switch   d) if else if
4)   switch allows following data type :
    1) int   2) char   3) double   4) boolean
 a) only 1   b) 1 and 2   c) only 3   d) 3 and 4
5) Which among the following is valid condition in if else ?
 a) if (a>0 && a<0)   b) if (ch=’a’)   c) if(val>25.00 &&val<50.0) d) If(a!==b)
6) Identify valid conversion

  a) int x=3.5   b) double b=”356”   c) boolean b=’x’   d) int a=(int) 45.89;

7) Ascii code for   space is

  a) 32   b) 30   c) 33   d) 35

8) Identify the type of conversion in the statement : int   x=’B’;

   a) forceful   b) coercion   c) explicit   d) narrowing

9) Which of the following is correct statement to accept int value from user ?

   a) Int n= sc.nextint();   b) int n=sc.next();   c) int n=sc.nextInt()   d) int n= nextInt();

10) int x1=a++ ; int x2=++a;   what value will be stored in x1 and x2 if a=4

  a) x1=4 x2=4   b) x1=4 x2=5   c)   x1=5   x2=4   d) x1=5 x2=5

11) Select   right   sentence from the   following :

  a) Binary operator works with one variable

  b) && is a relational operator

  c) % is a binary operator

  d) ++a it uses value of a first and then increase value of a by 1

12) Which is a valid separator ?

  a) [b) (c) >   d) { }

13) Select method from Math class which does not required any argument

  a) max ()   b) pow()   c)   random()   d) cbrt()

14) Assertion : for loop becomes infinite loop when updation is missing

Reason : updation is required to make loop work infinetly

a) Assertion is true , reason is false
b) Assertion is false , reason is true
c) Both Assertion and reason are true
d) Both Assertion and reason are false

15) Assertion : break is not necessary statement in switch case statement

Reason : In the absence of break it results into fall through

a) Assertion is true , reason is false
b) Assertion is false , reason is true
c) Both Assertion and reason are true
d) Both Assertion and reason are false

16) for (int i=5 ; i!=0 ; i --) it results into

System.out.print(i);

a) finite loop   b) null loop   c) infinite loop   d) empty loop

17) 1/2xbxh this mathematical expression is written in java as follows :

a) 1/2bh   b) 0.5*B*H   c) ½*b*h   d)   0.5*b*h

18) Among the following which operator has highest order of precedence

a) +=   b) ++   c) || d) >=

19) Scanner class is present in _____ package.

a) lang   b) language c) utility   d) util

20) Select valid declaration of two double variables

a) double a , b ;   b) double a , double b ,   c) Double a , b ;   d)   Double a ; Double b;

Question 2

a) Name the following   [5]

I.   To make unauthorised copy of software
II.   The technique in which data is encoded
III. Act in which bulk mail is sent
IV.   Code of conduct on net.
V.   The software that can be copied and shared freely.

b) State true or false   [5]

I.   Person who access information from others computer is known as hacker
II.   The act of creating trouble is troubleshooting
III. Controlling access to system is a type of protective measure .
IV.   The software which sweeps the data from computer is known as phishing.
V.   Accuracy of information is a major ethical issue.

Question 3

a) Write a java statement for the following   [2]

i) check value of amt lies between 1000 to 3000
ii) initialise variable b1 with default boolean value

b) Max is getting an error in the following code . Identify the error and write   [2]
correct code.
class Perform
{

```java
public static  void  print( int  x)
{
   Switch (x) :
   {
      case  1= System.out.print("one"); break;
      case  2= System.out.print("two"); break;
     Default :  System.out.print("Invalid"); break;
   } } }
```

c) Convert following if else if into   switch case   **[2]**

```java
if(ch =='M' || ch=='m'  )
System.out.println("Mahabharat");
else  if  (ch=='R' ||ch=='r')
System.out.println(" Ramayan");
else
System.out.println(" Fairy  Tale");6
```

d) Write output for the following   **[2]**

```java
i)    int i;
   for( i=2 ; i< =10 ; )
   {
     System.out.println(++i* 4 );
      i+=3 ;
   }
```

ii) Write the output   if a= 3 , b=4 , c=5   **[2]**

```java
if   (a+b%c >a+b/c)
System.out.print(a*b*c);
else
System.out.print(a+b+c);
```

SECTION B (60 Marks)

Question 5   **[15]**

 Write a program   to accept Customer name , mobile no and amount he / she purchased goods using Scanner class.   Calculate discount and gift he will get as per following criteria.

amt	discount	gift
Less than or equal to7000	5%	iron
More than 7000 and less than or equal to 15,000	10%	grinder
More than 15,000	12%	Leather bag

Display customer name , mobile no , discount and gift .

Question 6 [15]

Write a program to accept employee name , mobile number and salary using Scanner class .Calculate tax as per the following criteria :

salary	tax
1 lakh	nil
>1 lakh - <=5 lakh	3000+ 7% of salary exceeding 1 lakh
> 5 lakhs - <=12 lakhs	5000+10 % of salary exceeding 5 lakhs
>12 lakhs	7000+12 % of salary exceeding 12 lakhs

Display name , mobile number and tax .

Question 7 [15]

Write a program to display following pattern using function

a) void series (int x) $x^1+x^3+x^5+x^7........+x^{19}$

b) void series( ) 1-2+3-4+5………-20

Question 8 [15]

WAP to accept a number and check if it is a three digit number , if it is three digit number then check if it is Dudency number or not. Dudency number is :
example : $512 = 5+1+2 = 8$ where $8^3 = 512$

If it is not three digit number display message "Invalid Number".