**JUNIOR SOFTWARE DEVELOPER**

**TECHNICAL PAPER II**

1. Which of the following attribute specifies if the user can edit the element's content or not?
   1. editable
   2. contenteditable
   3. contextmenu
   4. content

Ans: b

1. Which of the following element is removed by HTML5?
   1. vlink
   2. dir
   3. marginwidth
   4. compact

Ans: b

1. Which of the following is not newly added element in HTML5?
   1. article
   2. audio
   3. nav
   4. frameset

Ans: d

1. Which of the following is not a HTML5 tag?
   1. <source>
   2. <video>
   3. <slider>
   4. All of the above

Ans: c

1. Which of the following element does not support autofocus attribute?
   1. <input>
   2. <base>
   3. <select>
   4. None of these

Ans: b

1. How to display preformatted text in HTML?
   1. <p>
   2. <pre>
   3. <hr>
   4. All of the above

Ans: b

1. Which of the following element is responsible for making the text bold in HTML?
   1. <pre>
   2. <a>
   3. <b>
   4. <br>

Ans: c

1. Which attribute is used to provide a unique name to an HTML element?
   1. id
   2. class
   3. type
   4. None of these

Ans: a

1. Colors are defined in HTML using?
   1. RGB values
   2. HEX values
   3. RGBA values
   4. All of the above

Ans: d

1. The HTML canvas is a
   1. Three dimensional grid
   2. One dimensional grid
   3. Two dimensional grid
   4. None of these

Ans: c

1. Which of the following tag is used to embed css in html page?
   1. <css>
   2. <!DOCTYPE html>
   3. <script>
   4. <style>

Ans: d

1. Which of the following CSS selector is used to specify a rule to bind a particular unique element?
   1. tag
   2. id
   3. class
   4. None of these

Ans: b

1. Which of the following is the correct syntax for referring the external style sheet?
   1. <style src = example.css>
   2. <style src = "example.css" >
   3. <stylesheet> example.css </stylesheet>
   4. <link rel="stylesheet" type="text/css" href="example.css">

Ans: d

1. The property in CSS used to change the background color of an element is –
   1. bgcolor
   2. color
   3. background-color
   4. All of the above

Ans: c

1. The “color:red” in CSS can be known as
   1. Value
   2. Declaration
   3. Selector
   4. Rule

Ans: b

1. Which one of these is not an appropriate value for the font-variant property?
   1. small-caps
   2. large-caps
   3. default
   4. inherit

Ans: b

1. The CSS property that is equivalent to the align attribute is:
   1. text-align
   2. float
   3. text-align & float
   4. centre

Ans: b

1. Which one is not the audio element’s attribute?
   1. check
   2. controls
   3. loop
   4. src

Ans: a

1. Which of these measurements would define a measurement that is relative to the x-height of a font?
   1. px
   2. pt
   3. em
   4. ex

Ans: d

1. Which CSS3 Color Feature could be used as a macro for any current color?
   1. HSLa Color
   2. RGB Color
   3. CurrentColor keyword
   4. HSL Color

Ans: c

1. Which of the following is the correct output for the following JavaScript code:

var x=5,y=1

var obj ={ x:10}

with(obj)

{

alert(y)

}

* 1. 1
  2. 5
  3. 10
  4. Error

Ans: a

1. The "function" and " var" are known as:
   1. Keywords
   2. Data types
   3. Declaration statements
   4. Prototypes

Ans c

1. What will happen, if the following JavaScript code is executed?

var count =0;

while (count <10)

{

console.log(count);

count++;

}

* 1. An error
  2. An exception is thrown
  3. The values of count variable are logged or stored in a particular location or storage
  4. The value of count from 0 to 9 is displayed in the console

Ans: c

1. Which of the following function of the String object returns the character in the string starting at the specified position via the specified number of characters in JavaScript?
   1. slice()
   2. split()
   3. substr()
   4. search()

Ans: c

1. Find the correct output of the given JavaScript code.

functioncomparing()

{

int x=9;

char y=9;

if(x==y)

return true;

else

return false;

}

* 1. compilation error
  2. false
  3. runtime error
  4. true

Ans: d

1. Find out the correct output of the following given piece of code in JavaScript:

functionfun()

{

int y=10;

char z=10;

if(y.tostring()===z)

return true;

else

return false;

}

* 1. logical error
  2. false
  3. runtime error
  4. true

Ans: d

1. What will be the output of the following JavaScript code?

<p id="demo"></p>

<script>

var js = 10;

js \*= 5;

document.getElementById("demo").innerHTML = js;

</script>

* 1. 10
  2. 50
  3. 5
  4. None of these

Ans: b

1. What will be the output of the following JavaScript code?

<p>1</p>

<p>2</p>

<p>3</p>

function myFunction()

{

var l = document.getElementsByTagName("P").length;

alert(l);

}

* 1. 1
  2. 2
  3. 3
  4. None of these

Ans: c

1. Which of the following keywords is used to define a variable in Javascript?
   1. var
   2. let
   3. Both a and b
   4. None of these

Ans: c

1. Which of the following methods is used to access HTML elements using Javascript?
   1. getElementById()
   2. getElementByClassName()
   3. Both a and b
   4. None of these

Ans: c

1. What is the function of ‘git push’ in GIT?
   1. ‘git pish’ remote refs along with associated objects
   2. ‘git push’ updates remote refs
   3. ‘git push’ updates remote refs along with associated objects
   4. None of the above

Ans: c

1. The files that can be committed are always present in git \_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Working directory
   2. Staging area
   3. Untagged area
   4. None of these

Ans: b

1. Which Git command changes where the HEAD pointer points and modifies the contents of the working directory?
   1. checkout
   2. merge
   3. mv
   4. pull

Ans: a

1. The ‘git clone’ command does which of the following?
   1. Creates a working directory
   2. Makes a local copy of the repository
   3. Commits a new branch
   4. Both a and b

Ans: d

1. Now, imagine that you have a local repository, but other team members have pushed changes into the remote repository. What Git operation would you use to download those changes into your working copy?
   1. checkout
   2. commit
   3. export
   4. pull

Ans: d

1. Which of these terms best describes GitHub?
   1. Integrated Development Environment
   2. Distributed Version Control System
   3. Issue Tracking System
   4. Web-Based Repository Hosting Service

Ans: d

1. In Git, which error would you get if you try to push master-branch changes to a remote repository, and someone else pushed changes to that same branch while you were making your changes?
   1. Rejected
   2. 404
   3. 500
   4. Access denied

Ans: a

1. Blind Search is used for which of the mentioned situations?
   1. Advanced Game Theory
   2. Real-life Simulation
   3. Small Search Space
   4. None of the above

Ans: c

1. Which one of the following is the common language of AI?
   1. Lisp
   2. Python
   3. PHP
   4. Java

Ans: b

1. Which of the following are the proposition symbols in AI?
   1. true, false and null
   2. true
   3. false
   4. true and false

Ans: d

1. Which of the following is considered a type of AI agent?
   1. Simple Reflex AI agent
   2. Goal based AI agent
   3. Learning AI agent
   4. All of the above

Ans: d

1. \_\_\_\_\_\_\_\_ is a component of AI.
   1. Training
   2. Designing
   3. Learning
   4. Puzzling

Ans: c

1. On which approach the face recognition system is bases?
   1. Weak AI approach
   2. Applied AI approach
   3. Strong AI approach
   4. Cognitive AI approach

Ans: b

1. \_\_\_\_\_\_\_\_ environment is considered strategic.
   1. Partial
   2. Stochastic
   3. Deterministic
   4. Rational

Ans: c

1. Which of the following is/are example of AI agent?
   1. Human
   2. Autonomous Spacecraft
   3. Robot
   4. All of the above

Ans: d

1. AI agent can interact with its environment by using \_\_\_\_\_\_\_\_
   1. Only perceivers
   2. Only sensors
   3. Sensors and perceivers
   4. None of these

Ans: c

1. Among the given options, which search algorithm requires less memory?
   1. Optimal search
   2. Depth first search
   3. Breadth first search
   4. Linear search

Ans: b

1. A technique that was developed to determine whether a machine could or could not demonstrate the AI known as the \_\_\_\_\_
   1. Boolean algebra
   2. Turing test
   3. Logarithm
   4. Algorithm

Ans: b

1. Among the given options, which is not the required property of knowledge representation?
   1. Inferential efficiency
   2. Inferential adequacy
   3. Representational verification
   4. Representational adequacy

Ans: c

1. Among the given options, which is also known as inference rule?
   1. Reference
   2. Reform
   3. Resolution
   4. None of the above

Ans: c

1. What is Python code-compiled or interpreted?
   1. The code is both compiled and interpreted
   2. Neither compiled nor interpreted
   3. Only compiled
   4. Only interpreted

Ans: b

1. Which of the following is the use of the function id() in python?
   1. Every object does not have a unique id in Python
   2. The id function in python returns the identity of the object
   3. Both a and b
   4. None of these

Ans: b

1. What is the output of the following Python code?

L = list('123456')

L[0] = L[5] = 0

L[3] = L[-2]

print(L)

* 1. [0, ‘2’, ‘3’, ‘4’, ‘5’, 0]
  2. [‘6’, ‘2’, ‘3’, ‘5’, ‘5’, ‘6’]
  3. [‘0’, ‘2’, ‘3’, ‘5’, ‘5’, ‘0’]
  4. [0, ‘2’, ‘3’, ‘5’, ‘5’, 0]

Ans: d

1. Which of the following functions does not necessarily accept only iterables as arguments?
   1. enumerate()
   2. all()
   3. max()
   4. chr()

Ans: d

1. What will be the output of the following Python code?

def foo():

try:

return 1

finally:

return 2

k = foo()

print(k)

* 1. Error
  2. 3
  3. 2
  4. 1

Ans: c

1. What is the output of the following program?

line = "What will have so will"

L = line.split('a')

for i in L:

print(i, end=' '

* 1. [‘What’, ‘will’, ‘have’, ‘so’, ‘will’]
  2. Wh t will h ve so will
  3. What will have so will
  4. [‘Wh’, ‘t will h’, ‘ve so will’]

Ans: b

1. What is the output of the following Python code?

mylist = ['geeks', 'forgeeks']

for i in mylist:

i.upper()

print(mylist)

* 1. [‘GEEKS’, ‘FORGEEKS’].
  2. [‘geeks’, ‘forgeeks’].
  3. [None, None].
  4. Unexpected

Ans: b

1. What is the output of the following Python code?

data = 50

try:

data = data/10

except ZeroDivisionError:

print('Cannot divide by 0 ', end = '')

finally:

print('Final block executed', end = '')

else:

print('Division successful ', end = '')

* 1. Runtime error
  2. Cannot divide by 0
  3. Final block executed
  4. Division successful

Ans: a

1. Which of the options below could possibly be the output of the following Python code?

D = {1 : [1, 2, 3], 2: (4, 6, 8)}

D[1].append(4)

print(D[1], end = " ")

L = [D[2]]

L.append(10)

D[2] = tuple(L)

print(D[2])

* 1. [1, 2, 3, 4] [4, 6, 8, 10]
  2. [1, 2, 3, 4] ((4, 6, 8), 10)
  3. [1, 2, 3, 4]
  4. Error

Ans: b

1. What is the output of the following Python code?

class Acc:

def \_\_init\_\_(self, id):

self.id = id

id = 555

acc = Acc(111)

print (acc.id)

* 1. 555
  2. 111
  3. 666
  4. None of these

Ans: b

1. What will be the output of the following Python code?

print("Hello {0[0]} and {0[1]}".format(('foo', 'bin')))

* 1. Hello (‘foo’, ‘bin’) and (‘foo’, ‘bin’)
  2. Error
  3. Hello foo and bin
  4. None of these

Ans: c

1. What will be the output of the following Python code?

def addItem(listParam):

listParam += [1]

mylist = [1, 2, 3, 4]

addItem(mylist)

print(len(mylist))

* 1. 5
  2. 8
  3. 1
  4. 2

Ans: a

1. What is the output of the following Python code?

set1 = {1, 2, 3}

set2 = set1.copy()

set2.add(4)

print(set1)

* 1. {1, 2, 3, 4}
  2. Invalid Syntax
  3. Error
  4. {1, 2, 3}

Ans: d

1. Which function is called when the following Python code is executed?

f = foo()

format(f)

* 1. str()
  2. format()
  3. \_\_str\_\_()
  4. \_\_format\_\_()

Ans: c

1. Which of the following functions can help us to find the version of python that we are currently working on?
   1. sys.version(1)
   2. sys.version(0)
   3. sys.version()
   4. sys.version

Ans: d

1. Which feature of OOP indicates code reusability?
   1. Abstraction
   2. Polymorphism
   3. Encapsulation
   4. Inheritance

Ans: d

1. Which feature of OOP is indicated by the following code?

class student{ int marks; };

class topper:public student{ int age; topper(int age){ this.age=age; } };

* 1. Encapsulation and Inheritance
  2. Inheritance and polymorphism
  3. Polymorphism
  4. Inheritance

Ans: a

1. Which among the following can show polymorphism?
   1. Overloading &&
   2. Overloading <<
   3. Overloading ||
   4. Overloading +=

Ans: b

1. Which type of members can’t be accessed in derived classes of a base class?
   1. All can be accessed
   2. Protected
   3. Private
   4. Both b and c

Ans: c

1. What happens if non static members are used in static member function?
   1. Executes fine
   2. Compile time error
   3. Executes if that member function is not used
   4. Runtime error

Ans: b

1. What will be the output of the following C++ code?

#include <iostream>

#include <string>

using namespace std;

int main(int argc, char const \*argv[])

{

char s1[6] = "Hello";

char s2[6] = "World";

char s3[12] = s1 + " " + s2;

cout<<s3;

return 0;

}

* 1. Hello
  2. World
  3. Error
  4. Hello World

1. What happens if the following program is executed in C and C++?

#include <stdio.h>

int main(void)

{

int new = 5;

printf("%d", new);

}

* 1. Error in C and successful execution in C++
  2. Error in both C and C++
  3. Error in C++ and successful execution in C
  4. A successful run in both C and C++

Ans: c

1. What is the value of p in the following C++ code snippet?

#include <iostream>

using namespace std;

int main()

{

int p;

bool a = true;

bool b = false;

int x = 10;

int y = 5;

p = ((x | y) + (a + b));

cout << p;

return 0;

}

* 1. 16
  2. 12
  3. 0
  4. 2

Ans: a

1. What will be the output of the following C++ program?

#include <iostream>

using namespace std;

int main()

{

int n = 5;

void \*p = &n;

int \*pi = static\_cast<int\*>(p);

cout << \*pi ;

return 0;

}

* 1. 6
  2. 5
  3. Compile time error
  4. Run time error

Ans: b

1. Which operator is used to insert the data into file?
   1. >>
   2. <<
   3. <
   4. >

Ans: b

1. What will be the output of the following C++ code?

#include <iostream>

using namespace std;

int add(int first, int second)

{

return first + second + 15;

}

int operation(int first, int second, int (\*functocall)(int, int))

{

return (\*functocall)(first, second);

}

int main()

{

int a;

int (\*plus)(int, int) = add;

a = operation(15, 10, plus);

cout << a;

return 0;

}

* 1. 40
  2. 25
  3. 45
  4. 35

Ans: a

1. What is the meaning of the following declaration?

int(\*ptr[5])();

* 1. ptr is pointer to function
  2. ptr is array of pointer to function
  3. ptr is pointer to such function which return type is array
  4. ptr is pointer to array of function

Ans: b

1. Virtual functions in C++ tells the compiler to perform \_\_\_\_\_\_\_\_\_\_\_ on such functions.
   1. Static binding
   2. Late binding
   3. Compile time binding
   4. No binding

Ans: b

1. Which symbol is used to declare the preprocessor directives?
   1. $
   2. #
   3. %
   4. &

Ans: b

1. Which of the following is not one of the sizes of the floating point types in C++?
   1. short float
   2. float
   3. long double
   4. double

Ans: a

1. Which of the following interface is used to declare core methods in java?
   1. Set
   2. EventListner
   3. Collection
   4. Comparator

Ans: c

1. How do you force garbage collection to occur at a certain point in Java?
   1. Call System.forceGc()
   2. Call System.gc()
   3. Call System.requireGc()
   4. None of these

Ans: d

1. The environment variable used to set the java path is?
   1. JAVA\_HOME
   2. JAVA\_Path
   3. JDK\_HOME
   4. Both a and c

Ans: a

1. \_\_\_ is the ability of a Java application to perform multiple tasks at the same time.
   1. Multithreading
   2. Multiprocessing
   3. Multitasking
   4. Both a and b

Ans: a

1. The \_\_\_ statement is used inside the switch to terminate a Statement sequence.
   1. jump
   2. goto
   3. exit(0)
   4. break

Ans: d

1. What is not the use of “this” keyword in Java?
   1. Referring to the instance variable when a local variable has the same name
   2. Passing itself to the method of the same class
   3. Passing itself to another method
   4. Calling another constructor in constructor chaining

Ans: b

1. Find the output of the following program in Java.

public class Solution{

public static void main(String[] args){

short x = 10;

x = x \* 5;

System.out.print(x);

}

}

* 1. Compile error
  2. 50
  3. 10
  4. Exception

Ans: a

1. When is the object created with new keyword in Java?
   1. At compile time
   2. At run time
   3. Both a and b
   4. None of these

Ans: b

1. Which of the following will ensure the thread will be in running state in Java?
   1. yield
   2. wait
   3. notify
   4. kill Thread()

Ans: b

1. Which of the following loops will execute the body of loop even when condition controlling the loop is initially false?
   1. do-while
   2. while
   3. for
   4. None of these

Ans: a

1. Which of these class is superclass of String and StringBuffer class?
   1. java.util
   2. java.lang
   3. Array List
   4. None of these

Ans: b

1. Which of these is an incorrect statement for the language Java?
   1. String objects are immutable, they cannot be changed
   2. String object can point to some other reference of String variable
   3. StringBuffer class is used to store string in a buffer for later use
   4. None of these

Ans: c

1. Which of the below does not implement Map interface in Java?
   1. HashMap
   2. Hashtable
   3. EnumMap
   4. Vector

Ans: d

1. If two threads access the same hashmap at the same time in Java, what would happen?
   1. ConcurrentModificationException
   2. NullPointerException
   3. ClassNotFoundException
   4. RuntimeException

Ans: a

1. Which of this method can be used to make the main thread to be executed last among all the threads?
   1. stop()
   2. sleep()
   3. join()
   4. call()

Ans: b

1. Which of this method is used to find out that a thread is still running or not?
   1. run()
   2. alive()
   3. isAlive()
   4. checkRun()

Ans: c

1. Which class provides system independent server side implementation in Java?
   1. Socket
   2. ServerSocket
   3. Server
   4. ServerReader

Ans: b

1. Which of the following is the correct way of implementing an interface A by class B?
   1. class B extends A{}
   2. class B implements A{}
   3. class B imports A{}
   4. None of these

Ans: b

1. What type of variable can be defined in an interface in Java?
   1. public static
   2. private final
   3. public final
   4. static final

Ans: d

1. What does an interface contain?
   1. Method definition
   2. Method declaration
   3. Method declaration and definition
   4. Method name

Ans: b