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DPS SHARJAH

HY/CSQP/1121/B **22-NOV-2021**

HALF YEARLY EXAMINATION (2021-22)

SET - B

Subject: COMPUTER SCIENCE **Max. Marks:35**

Grade: XI **Time:1 Hr. 30 Mins**

Name: **Section:** **Roll No:**

General Instructions:

The question paper is divided into 3 Sections - A, B and C.

- Section A, consist of 25 Questions (1-25). Attempt any 20 questions.
- Section B, consist of 24 Questions (26-49). Attempt any 20 questions.
- Section C, consist of 6 case study-based Questions (50-55). Attempt any 5 questions.
- All questions carry equal marks.
- The question paper has 8 printed pages

SECTION A

Attempt 20 questions from this section. Choose the most suitable option.

1. Which smaller unit of the CPU directs and coordinates all activities within it and determines the sequence in which instructions are executed, sending instructions sequence to other smaller units.

a. ALU **b.** CU

c. Processor **d.** Memory

2. Suppose the variable x has the value 5 and y has the value 10.
After executing these statements:
x = y
y = x
what will the values of x and y be, respectively?

a. 5 and 10 **b.** 10 and 5

c. 10 and 10 **d.** 5 and 5

3. The following program fragment is meant to be used to find the sum of the ASCII values for all the characters in a string that the user enters. What is the missing line in this code?

```
phrase = input("Enter a phrase: ")
ascii_sum = 0        # accumulator for the sum
for ch in phrase:
    ##### missing line here
print(ascii_sum)
```

a. ascii_sum = ascii_sum + ch **b.** ascii_sum = chr(ch)

c. ascii_sum = ascii_sum + chr(ch) **d.** ascii_sum = ascii_sum + ord(ch)

4. What is the value of count after the following code has been executed?

```
s = "He said he saw Henry."
count = s.count("he")
```

a. 0 **b.** 1
c. 2 **d.** 3

5. The coding scheme for Indian scripts.
a. ISCII **b.** ASCII
c. UNICODE **d.** extended ASCII

6. Which one of the following has the same precedence level?
a. Addition and Subtraction
b. Multiplication, Division and Addition
c. Multiplication, Division, Addition and Subtraction
d. Addition and Multiplication

7. Python was created by
a. Steve Jobs **b.** James Gosling
c. Google **d.** Guido Van Rossum

8. What gets printed?
print(type(2/3))
a. <class 'int'> **b.** <class 'float'>
c. <class 'tuple'> **d.** <class 'number'>

9. Whenever the computer is started or a software application is launched, the required program is loaded into _____ for processing.
a. ROM **b.** CPU
c. RAM **d.** CU

10. Identify the invalid identifier.
a. Keyword b. token
c. operator d. and

11. Which method is used to find the memory location of variable?
a. id( ) **b.** add( )
c. type( ) **d.** ord()

12. An ordered set of instructions to be executed by a computer to carry out a specific task is called _____
a. Algorithm **b.** Pseudocode
c. Program **d.** Flowchart

13. Multiline string in python can be created by enclosing text in ____
a. Single quotes(' ') **b.** Double quotes(" ")
c. Triple quotes(''' ''') **d.** Square brackets([ ])

14. An escape sequence is represented by _____ slash followed by one or two characters.
a. back **b.** forward
c. double **d.** None of the above

15. Which of the following is an invalid relational operator in Python?
a. **!=** **b.** = =
c. >= **d.** < >

16. print(bool(True and True or False)) evaluates to _____
a. False **b.** True
c. 1 **d.** 0

17. What type of error is returned by following statement?

>>> age = input("Enter your age: ")

Enter your age: 3
>>> age + 3

a. SyntaxError **b.** IndexError
c. ValueError **d.** TypeError

18. Binary number system is also referred as _____

a. base-2 system **b.** base-8 system
c. base-10 system **d.** base-16 system

19. Smallest element of python coding is called _____

a. Identifiers **b.** Token
c. Keywords **d.** Delimiters

20. Which of the following is not a system software?

a. Operating System **b.** System Utilities
c. Microsoft Word **d.** Device Drivers

21. Which of the following sequence is correct to convert decimal number to binary?
Step 1: Note the remainder.
Step 2: Divide the given number by 2.
Step 3: Write the noted remainders in the reverse order (from bottom to top)
Step 4: Keep on dividing the quotient by 2 and note the remainder till the quotient is zero.

a. Step 1, Step 2, Step 3, Step 4 **b.** Step 2, Step 1, Step 4, Step 3
c. Step 3, Step 2, Step1, Step 4 **d.** Step 2, Step 3, Step 1, Step4

22. Octal number equivalent to binary number 1110101 is _____

a. 117 **b.** 165
c. 75 **d.** **175**

23. Data items having fixed value are called ……. .

a. Identifiers **b.** functions
c. Keywords **d.** literals

24. Which of the following statement is wrong?

a. Literals are data items that have fixed value.
b. Keywords can not be used as identifier
c. Identifier can start with number
d. None of the above

25. In the given code, an integer value stored in variable num1 is added to a float value stored in variable num2, and the result is stored in variable sum1. This is an example of _____

```
sum1 = num1 + num2
```

a. implicit conversion **b.** explicit conversion
c. data conversion **d.** value conversion

SECTION B

Attempt 20 questions from this section.

Q26-Q35 Predict the output of the given code segment:

26.

```
x=1234
while x%10:
   x=x//10
   print(x)
```

a. 1234 **b.** 321
123 21
12 1

1

c. 123
12
1
0

d. 4321
321
21
1

27.
```
i=0
s='\'s'
while(i<5):
   for j in range(i):
      print(j,end=s)
   i=i+1
```

a. 0's0's1's0's1's2's0's1's2's3's

b. 0s0s1s0s1s2s0s1s2s3s

c. error

d. 0's1's0's1's2's0's1's2's3's

28.
```
ch=ord('A')
i=1
while(i<5):
 print(chr(ch))
 ch+=1
 i+=1
```

a. 65
66
67
68
69

b. A
B
C
D
E

c. 65
66
67
68

d. A
B
C
D

29.
```
j=12
c=9
while(j):
    if(j>5):
        c=c+j-2
        j=j-1
    else:
        break
print(j, c)
print(c)
```

a. 5 54
54

b. Infinite loop

c. 6 58
58

d. 5 58
58

30.
```
if  '234'.isdigit():
   print('cs' + 'ip')
else:
```

print('IT' + '-402')

a. No output **b.** error

c. csip **d.** IT-402

31. print 'abcefd'.replace('cd', '12')

a. ab1ef2 **b.** abcefd

c. ab1efd **d.** ab12ed2

32. str1 = "PYnative"
print(str1[1:4], str1[:5], str1[4:], str1[0:-1], str1[:-1])

a. PYn PYnat ive PYnativ vitanYP

b. Yna PYnat tive PYnativ vitanYP

c. Yna PYnat tive PYnativ PYnativ

d. None of the above

33. str1 = "my isname isisis jameis isis bond";
sub = "is";
print(str1.count(sub, 4))

a. 5 **b.** 6

c. 7 **d.** 8

34. When we convert 0010010100 binary to octal. Then the solution is :

a. 201 **b.** 226

c. 224 **d.** 161

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

```
if (9 < 0) and (0 < -9):
   print("hello")
elif (9 > 0) or False:
  print("good")
else:
  print("bad")
```

a. error **b.** hello

c. good **d.** bad

36. What will be the output of the following code

```
Msg=”CompuTer”
Msg1=”
for i in range(0, len(Msg)):
  if Msg[i].isupper():
     Msg1=Msg1+Msg[i].lower()
  elif i%2==0:
     Msg1=Msg1+’*’
  else:
      Msg1=Msg1+Msg[i].upper()
print(Msg1)
```

a. cO*P*t*R **b.** Co*p*t*R

c. co*p*t*r **d.** cOP*tR

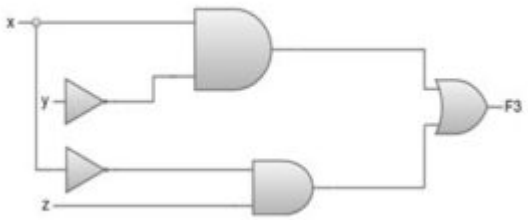
37. Identify the result generated:

A	B	C	Output
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

a. NOR GATE **b.** NAND GATE

c. AND GATE **d.** NOT GATE

38. Identify the value of F3



a. xyx + x' + y' + z' **b.** xy' + x'z'

c. x'y' + x'z' **d.** xy' + x'z

39. What is the output of the following?
print("abcdef".find("cd") == "cd" in "abcdef")

a. True **b.** False

c. Error **d.** 1

40. **Raju was solving a puzzle in which he wants to count the number of spaces.** Help him to complete the following code
str1=input("Enter the string")
_____ // Statement 1

a. print(str1.count(' ') + 1)

b. print(str1.count(' '))

c. print(str1.cnt(''))

d. print(str1.cnt('')+1

41. Binary representation of the hexadecimal number 98E is _____

a. 100110001111 **b.** 100110001110

c. 100110101110 **d.** 100110001010

42. Decimal number equivalent to binary number 1110101 is _____

a. 117 **b.** 165

c. 75 **d.** 175

43. Evaluate the following expression: 48 % 3 ** 3//5 +2

a. 5 **b.** 6

c. 7 **d.** 8

44. Evaluate the following expressions if x=29.0 , y=13 , z=2 , p=0.5
R=p+z-x//y*y**z//x%(p+z)

a. 1.5 **b.** 1

c. 2.5 **d.** 2

45. Write corresponding Python expressions for $2\text{-}ye^{2y}+4y$

a. 2-y*math.pow(2*y,e)+4*y **b.** 2-y*math.pow(e,2*y)+4y

c. 2-y*math.pow(e,2*y)+4*y **d.** 2-y*pow(e,2*y)+4*y

46. What would Python produce for the following code **bool(input("Enter data")) and 10<13-2** , if the input given is 11

a. True **b.** False

c. Error **d.** None of the mentioned

47. Predict the output:

```
ch='W'
for i in range(0,4):
   for j in range(0,i+1):
      print(chr((ord(ch)+j)),end=' ')
   print()
```

a.
W
W W
W W W W
W W W W W

b.
W
W X
W X Y
W X Y Z

c.
X
X Y
X Y Z
W X Y Z

d.
W X Y Z
W X Y
W X
W

Answer Q48 and Q49 by considering,

Address = "WAZ-1, New Ganga Nagar, New Delhi".

48. print(Address.split(',’))

a. [WAZ-1, New Ganga, Nagar, New Delhi]

b. [‘WAZ-1’, ‘New’, ‘Ganga’, ‘Nagar’, ‘New’, ‘Delhi’]

c. [‘WAZ-1, New Ganga Nagar, New Delhi’]

d. [**‘**WAZ-1’, ‘New Ganga Nagar’ , ‘New Delhi’]

49. print(Address.replace(‘New’,’Old’))

a. WAZ-1, New Ganga Nagar, Old Delhi

b. WAZ-1, Old Ganga Nagar, New Delhi

c. WAZ-1, Old Ganga Nagar, Old Delhi

d. WAZ-1, New Ganga Nagar, New Delhi

SECTION C

CASE STUDY based questions. This section consists of 6 questions. Attempt any 5.

```
t = _____________          #1
first = _____________
second = _____________
_____________________      #2
for i in range(2, t):
    next = first _____________ second     #3
    print(next, end= ' ')
    first = _____________  #4
    _____________ = _____________         #5
```

The output produced by the above code is:

0 1 1 2 3 5 8 13

50. Identify the suitable value for the blank space marked as #1

a. 10 **b.** 0

c. 6 **d.** 8

51. The identifiers first and second will take the given values respectively

a. 0, 1 **b.** 0, 0

c. 1, 1 **d.** 1, 0

52. Identify the suitable code for the blank space marked as #2

a. print(first, second) **b.** print(first)

c. print() **d.** next = 0

53. Identify the best operator for the blank space marked as #3

a. * **b.** +

c. - **d.** /

54. Identify the suitable code for the blank space marked as #4

a. second **b.** next

c. t **d.** 0

55. Identify the lvalue and rvalue of the statement marked as #5

a. second, first **b.** first, second

c. second, next **d.** next, second

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