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N-3166

Name & Reg. No.
Higher Secondary (Vocational) - First Year
NSQF Based Examination (Theory)
March - 2024

JUNIOR SOFTWARE DEVELOPER (JSD)

[For Continuous Evaluation & Grading (NSQF based) Scheme]

[Time : $2^1/2$ hours.

Cool off time : 15 min.]

(Maximum score : 50)

Instructions :

1. Read questions carefully before answering them.
2. Maximum time allowed is 2 hours 45 minutes including cool off time.
3. First 15 minutes is "Cool off time". The time is meant to read, select the questions carefully and planning .the answer.
4. The questions are prepared on the basis of the Employability Skill and Vocational Skill.
5. Attempt the questions according to the instructions.
6. Keep in mind the score and time while answering the questions.
7. The maximum score for questions 1 to 33 will be 50 score.
8. Calculations, figures and graphs should be shown in the answer sheet itself.

PART I
EMPLOYABILITY SKILL

I. Answer all Questions from 1 to 3. Each carries 1 score.(1 score x 3=3

1. Write the shortcut key for printing a word document.
2. Write the full form of GIM in Green Skills.
3. Which menu option in word document has the command save, print and close ?
   (a) insert(b)file(c) tools(d) format

II. Answer all Questions from 4 to 5. Each carries 2 scores.(2 score x 2=4)

4. Write the importance of personal Hygiene in your day to day life.
5. Explain any two methods for waste management in green economy.

III. Answer any 1 Question from 6 to 7. Each carries 3 scores.(3 score x 1=3)

6. Explain any 3 types of Non-Verbal communication.
7. Who is an entrepreneur ? Write any 4 qualities of a successful entrepreneur.

PART-II

VOCATIONAL SKILL

IV. Answer all Questions from 8 to 12. Each carries 1 score.(1 score x 5=5)

8. Pictorial representation of algorithm is called
9. FTP stands for _____
10. Find the odd one out :
    (a) Linux(b) Windows(c) Unix(d) Python
11. Name the data type in Python which holds data items in key : Value pairs.
12. Write any one example of non-linear data structure.

V. Answer any 13 Questions from 13 to 29. Each carries 2 scores.(2 score x 13=26)

13. Convert the decimal number 341 to Binary number.
14. Convert the Binary number 110101 to Decimal number.
15. Write algorithm to print first N natural numbers.
16. Draw a flow chart to find sum of two numbers.
17. Compare primary memory and Secondary memory.
18. Draw the logical diagram and truth table of AND gate
19. List any 4 functions of operating system
20. What is computer Network ? List any two advantages of computer network.
21. Compare LAN and WAN with example.
22. Explain the use of MODEM in computer network.
23. Explain any 4 Arithmetic operators in Python.

24. Match the following :

	A		
(a)	abs *(x)*		
(b)	max (x,y,z,...)	(i)	Return smallest among the arguments
(c)	min (x,y,z,...)	(ii)	Find absolute value of x
(d)	len (s)	(iii)	Return length of object
		iv)	Return largest among the arguments

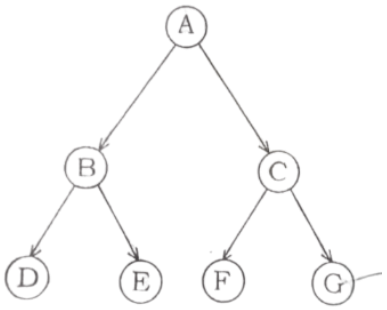
25. Predict the output of the following print statements in Python

```
print(a11:71)
print(a1-4:-61)
print(a1::-1])
```

26, Explain any two Tuple functions with examples.

27. Write a Python program to check whether a given number is odd/even

28. Consider the following Binary tree :



Perform post order traversal, on the tree and give the output.

29. Write a short note on stack in data structure.

VI. Answer any 3 Questions from 30 to 33. Each carries 3 scores.(3 score x 3=9)

30. Draw and explain block diagram of computer.

31. Explain any 3 Network topologies.

32. Write a Python- program to check whether a given string is palindrome or not.

33. Write programs in Python to print first N natural numbers using Tor' loop and 'while' loop. (Hint : two programs)