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| **FT/CSQP/1121/A 21-SEP-2021** | | | | | | | |
| **FIRST TERM EXAMINATION (2021-22)** | | | | | | | |
| **Subject: COMPUTER SCIENCE**  **Grade: XI** | | | Max. Marks: 35Time: 90 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 10 printed pages | | | | | | | |
|  | **Section-A** | | | | | |  |
| **This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.** | | | | | | | |
|  | The tokens which trigger some computation action when applied to variables and other objects | | | | | | |
|  | **a.** | literals | | **b.** | identifiers | | |
|  | **c.** | operators | | **d.** | punctuators | | |
| **2.** | Which of the following expressions result is an error? | | | | | | |
|  | **a.** | float(‘12’) | | **b.** | int(‘12’) | | |
|  | **c.** | float(’12.5’) | | **d.** | int(’12.5’) | | |
| **3.** | x=10  y=5  for i in range(x-y\*2):  print(“%”,i)  What will the above code print? | | | | | | |
|  | **a.** | All numbers from 0 to 50 | | **b.** | No output | | |
|  | **c.** | All numbers from 0 to 49 | | **d.** | error | | |
| **4.** | What will be the output of this code?  >>> int (“3”\*5) | | | | | | |
|  | **a.** | “33333” | | **b.** | 555 | | |
|  | **c.** | “555” | | **d.** | 33333 | | |
| **5.** | Which line of code produces an error? | | | | | | |
|  | **a.** | “one”+’two’ | | **b.** | 1+2 | | |
|  | **c.** | ‘’’one’’’+’2’ | | **d.** | ‘1’+2 | | |
| **6.** | Execution time of i.\_\_\_\_\_\_\_\_\_\_ is less than ii.\_\_\_\_\_\_\_\_\_\_. | | | | | | |
|  | **a.** | i. source code ,ii.object code | | **b.** | i. object code ,ii. target code | | |
|  | **c.** | i. object code ,ii. source code | | **d.** | i. target code, ii. object code | | |
| **7.** | General Purpose software are a type of | | | | | | |
|  | **a.** | Application Software | | **b.** | System Software | | |
|  | **c.** | Utility Software | | **d.** | Device Drivers | | |
| **8.** | The octal literal and hexadecimal literals start with which of the following symbols respectively? | | | | | | |
|  | **a.** | O0 and X0 | | **b.** | 0O and 0X | | |
|  | **c.** | Oct0 and Hex0 | | **d.** | 0o and 0x | | |
| **9.** | Which of the is a correct statement? | | | | | | |
|  | **a.** | x, y, z = 10, 100, 1000 | | **b.** | x y z= 10, 100, 1000 | | |
|  | **c.** | xyz = 10 100 1000 | | **d.** | x y z = 10 100 1000 | | |
| **10.** | The default value of separator ( sep parameter) in print statement in python is | | | | | | |
|  | **a.** | comma | | **b.** | whitespace | | |
|  | **c.** | tab space | | **d.** | newline | | |
| **11.** | What keyword would you use an alternative condition in an if statement? | | | | | | |
|  | **a.** | else | | **b.** | elseif | | |
|  | **c.** | elif | | **d.** | else if | | |
| **12.** | Which of the following is a membership operator? | | | | | | |
|  | **a.** | in | | **b.** | is | | |
|  | **c.** | not | | **d.** | and | | |
| **13.** | What abandons the current iteration of the loop | | | | | | |
|  | **a.** | continue | | **b.** | pass | | |
|  | **c.** | break | | **d.** | jump | | |
| **14.** | Which of the following statement is correct for and operator? | | | | | | |
|  | **a.** | Python only evaluates the second argument if the first one is False. | | **b.** | Python only evaluates the second argument if the first one is True. | | |
|  | **c.** | Python only evaluates True if any one argument is True. | | **d.** | Python only evaluates False if any one argument is False. | | |
| **15.** | When the result of any boolean statement is always 1 is known as \_\_\_\_\_\_\_\_\_\_\_. | | | | | | |
|  | **a.** | True | | **b.** | Tautology | | |
|  | **c.** | Fallacy | | **d.** | False | | |
| **16.** | Which of the following are logical statements:   1. The Indian cricket team is a world champion in 2011. 2. What are the parts of the boolean function? 3. There are three types of boolean operators. 4. The NOT function can be operated on more than one Boolean function. | | | | | | |
|  | **a.** | 1 and 2 | | **b.** | 2 or 3 | | |
|  | **c.** | 2 or 4 | | **d.** | 1 and 4 | | |
| **17.** | In hexadecimal system, each alphanumeric digit is represented as a group of \_\_\_\_\_\_\_\_\_\_\_\_\_ binary digits | | | | | | |
|  | **a.** | 1 | | **b.** | 2 | | |
|  | **c.** | 3 | | **d.** | 4 | | |
| **18.** | ISCII code is a \_\_\_\_\_\_ bit code. | | | | | | |
|  | **a.** | 7 | | **b.** | 8 | | |
|  | **c.** | 32 | | **d.** | 16 | | |
| **19.** | Which of the following symbol is used to write comment? | | | | | | |
|  | **a.** | ? | | **b.** | // | | |
|  | **c.** | # | | **d.** | \*\* | | |
| **20.** | The i.\_\_\_\_\_\_ loop is a counting loop where as ii.\_\_\_\_\_\_\_\_\_\_\_ loop is conditional loop in python. | | | | | | |
|  | **a.** | i. for, ii. while | | **b.** | i.while,ii.for | | |
|  | **c.** | i. for, while ii. for, while | | **d.** | i. for ,ii.while and do while | | |
| **21.** | The process by which data and programs are defined with a representation similar in form to its meaning (semantics), while hiding away the implementation details is | | | | | | |
|  | **a.** | decomposition | | **b.** | flowchart | | |
|  | **c.** | pseudocode | | **d.** | abstraction | | |
| **22.** | The error which occurs due to infinite looping is a | | | | | | |
|  | **a.** | Syntax error | | **b.** | Semantic error | | |
|  | **c.** | Runtime error | | **d.** | Compile Time error | | |
| **23.** | Which one of the following is the default extension of a Python file? | | | | | | |
|  | **a.** | .exe | | **b.** | .p++ | | |
|  | **c.** | .py | | **d.** | .p | | |
| **24.** | \_\_\_\_\_\_\_\_\_\_\_ function is which returns the objects memory address | | | | | | |
|  | **a.** | type( ) | | **b.** | id( ) | | |
|  | **c.** | len( ) | | **d.** | value( ) | | |
| **25.** | A sequence of characters that does not represent itself when used inside a character or string literal, but is translated into another character or a sequence of characters that may be difficult or impossible to represent directly | | | | | | |
|  | **a.** | comments | | **b.** | doc strings | | |
|  | **c.** | identifiers | | **d.** | escape sequence | | |
| **II.** | **Section-B** | | | | | | |
|  | **This section consists of 24 Questions (26 to 49). Attempt any 20 questions.** | | | | | | |
| **26.** | Give the output of the following code:  >>>7\*(8/(5//2)) | | | | | | |
|  | **a.** | 28 | | **b.** | 28.0 | | |
|  | **c.** | 20 | | **d.** | 60 | | |
| **27.** | In the nested loop ……………..loop must be terminated before the outer loop starts with next iteration. | | | | | | |
|  | **a.** | Outer | | **b.** | enclosing | | |
|  | **c.** | inner | | **d.** | None of these | | |
| **28.** | If a=1,b=2 and c= 3 then which statement will give the output as : 2.0 from the following: | | | | | | |
|  | **a.** | >>>a%b%c+1 | | **b.** | >>>a%b%c+1.0 | | |
|  | **c.** | >>>a%b%c | | **d.** | >>>a%b%c-1 | | |
| **29.** | What will be the output of the following code:  for i in range(10):  if i%3==0:  continue  print(i,end=” “) | | | | | | |
|  | **a.** | 1 2 3 4 5 6 7 8 9 10 | | **b.** | 1 2 4 5 7 8 10 | | |
|  | **c.** | 0 1 2 3 4 5 6 7 8 9 10 | | **d.** | 1 2 4 5 7 8 | | |
| **30.** | What will be the output of the following code:  x=0  for i in range(4):  for j in range(i):  if i+j-1<=0:  x+=1  elif i+j-1<=3:  x+3  else:  x+=5  print(x,end=" ") | | | | | | |
|  | **a.** | 0 1 1 6 | | **b.** | 0 2 2 5 | | |
|  | **c.** | 0 1 2 4 | | **d.** | 0 1 1 5 | | |
| **31.** | What will be the output of the following code:  value=15  for i in range(1,5):  value - = 2  if value%4==0:  print(value\*4)  else:  print(value+4) | | | | | | |
|  | **a.** | 19  19  19  19 | | **b.** | 17  15  13  11  9 | | |
|  | **c.** | 17  15  13  11 | | **d.** | No output | | |
| **32.** | What will be the output of the following code:  v=3  if v<5:  for j in range(v):  print("ABC\*")  else:  print("XYZ") | | | | | | |
|  | **a.** | ABC\*  ABC\*  ABC\* | | **b.** | ABC\*  ABC\*  ABC\*  XYZ | | |
|  | **c.** | XYZ | | **d.** | ABC\*  ABC\*  ABC\*  ABC\* | | |
| **33.** | What will the following program print?  counter = 1  sum = 0  **while** counter <= 6:  sum = sum + counter  counter = counter + 2  print(sum) | | | | | | |
|  | **a.** | 12 | | **b.** | 7 | | |
|  | **c.** | 9 | | **d.** | 8 | | |
| **34.** | What will the following code print?  output = ""  x = -5  **while** x < 0:  x = x + 1  output = output + str(x) + " "  print(output) | | | | | | |
|  | **a.** | 5 4 3 2 1 | | **b.** | -4 -3 -2 -1 0 | | |
|  | **c.** | -5 -4 -3 -2 -1 | | **d.** | 4 3 2 1 0 | | |
| **35.** | Which of the following Python loop statement works different from the others? | | | | | | |
|  | **a.** | for i in range(0,5): | | **b.** | for j in [0,1,2,3,4]: | | |
|  | **c.** | for l in range(0,5,1): | | **d.** | for k in [0,1,2,3,4,5]: | | |
| **36.** | What will be the output of the following code? | | | | | | |
|  | **a.** |  | | **b.** | TRUE  None  Program over | | |
|  | **c.** |  | | **d.** | None  Program Over | | |
| **37.** | The range function to create the sequence: [7, 4 ,1 ,-2, -5,-8] | | | | | | |
|  | **a.** | range (7 , -8 , 3 ) | | **b.** | range ( 8 , -8 , -3 ) | | |
|  | **c.** | range (7 , -11 , -3) | | **d.** | range (7 , -8 , -3) | | |
| **38.** | What output will the following code produce? for x in range(3):  for y in range(4):  print(x,y,x+y) | | | | | | |
|  | **a.** |  | | **b.** |  | | |
|  | **c.** |  | | **d.** |  | | |
| **39.** |  | | | | | | |
|  | **a.** | F=A.B+A.B’ | | **b.** | F=(A+B’).(A’+B) | | |
|  | **c.** | F=A.B’+A’B | | **d.** | F=(A+B).(A+B’) | | |
| **40.** | Fill the missing term:  i. 0 + X = ……..  ii. 1. X = ……… | | | | | | |
|  | **a.** | i. X ,ii. X | | **b.** | i. 0 ,ii.1 | | |
|  | **c.** | i. X , ii. 1 | | **d.** | i. X, ii. 0 | | |
| **41.** | What will be the outcome of the following :  i. 12 or “abc”  ii. 12 and “abc” | | | | | | |
|  | **a.** | i. True  ii. True | | **b.** | i. True  ii. False | | |
|  | **c.** | i. 12  ii.”abc” | | **d.** | i. “abc”  ii. 12 | | |
| **42.** | Convert (110011110)2  into hexadecimal equivalent. | | | | | | |
|  | **a.** | CF0 | | **b.** | CE0 | | |
|  | **c.** | 19D | | **d.** | 19E | | |
| **43.** | Convert (1010100.01)2 - (?)10 | | | | | | |
|  | **a.** | 54.25 | | **b.** | 44.50 | | |
|  | **c.** | 74.50 | | **d.** | 84.25 | | |
| **44.** | What will be the output of the following boolean expression using truth table.  XY’+YZ’ | | | | | | |
|  | **a.** | 0  0  1  0  1  1  1  0 | | **b.** | 0  1  1  0  0  1  1  0 | | |
|  | **c.** | 0  0  1  1  1  1  0  1 | | **d.** | 1  1  0  1  0  0  0  1 | | |
| **45.** |  | | | | | | |
|  | **a.** | 1+(1)+(1+2)+(1+2+3)+.......n | | **b.** | 1+(1+2)+(1+2+3)+(1+2+3+4)+(1+2+3+4+5) | | |
|  | **c.** | 1+(1+2)+(1+2+3)+(1+2+3+4)++(1+2+3+4+5)++(1+2+3+4+5+6) | | **d.** | 1+(1+2)+(1+2+3)+(1+2+3+4) | | |
| **46.** |  | | | | | | |
|  | **a.** | Sum=56 | | **b.** | Infinite loop | | |
|  | **c.** | Sum=20 | | **d.** | Sum=35 | | |
| **47.** | What function in a flowchart does the following symbol of parallelogram represent? | | | | | | |
|  | **a.** | Start/End | | **b.** | Input/Output | | |
|  | **c.** | Process | | **d.** | Decision | | |
| **48.** | Observe the program below:    It also give output as follows:  Which type of error is this? | | | | | | |
|  | **a.** | Syntax | | **b.** | Semantic | | |
|  | **c.** | Logical | | **d.** | Runtime | | |
| **49.** | Which of the following is an invalid variable name? | | | | | | |
|  | **a.** | my\_string\_1 | | **b.** | 2\_lst\_string | | |
|  | **c.** | foo | | **d.** | \_ | | |
| **III.** | **Section-C**  **Case Study based Questions** | | | | | | |
|  | **This section consists of 6 Questions (50 -55) Attempt any 5 questions.** | | | | | | |
|  | Mukesh has made a python program using nested for printing a pattern. He used two functions chr( ) and ord( )to get the following output.    He wrote the following code to get this pattern. | | | | | | |
| **50.** | Identify the suitable code for blank space in the line marked as Statement-1. | | | | | | |
|  | **a.** | 75 | | **b.** | print | | |
|  | **c.** | Y | | **d.** | K | | |
| **51.** | Identify the suitable code for blank space in the line marked as Statement-2. | | | | | | |
|  | **a.** | 5 | | **b.** | 7 | | |
|  | **c.** | 6 | | **d.** | Y | | |
| **52.** | Identify the suitable code for blank space in the line marked as Statement-3. | | | | | | |
|  | **a.** | i+1 | | **b.** | i | | |
|  | **c.** | 6 | | **d.** | Y | | |
| **53.** | Identify the suitable code for blank space in the line marked as Statement-4. | | | | | | |
|  | **a.** | temp | | **b.** | i | | |
|  | **c.** | j | | **d.** | ch | | |
| **54.** | Identify the suitable code for blank space in the line marked as Statement-5. | | | | | | |
|  | **a.** | ord | | **b.** | chr | | |
|  | **c.** | input | | **d.** | len | | |
| **55.** | Identify the suitable code for blank space in the line marked as Statement-6. | | | | | | |
|  | **a.** | input | | **b.** | ord | | |
|  | **c.** | chr | | **d.** | print | | |

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