

Indian Maritime University
(A Central University, Govt of India)
End Semester Examinations – June 2024
Programme Name: B Sc (NS)
Semester: 2nd
Subject Code: UG21T5203
Subject Name: Computer Science

Date: 04.06.2024

Max Marks: 70

Duration: 03 Hrs

Pass Marks: 35

General Instructions

- (i) All Sections (A, B & C) are to be attempted.
- (ii) Options, if any, are specified in the respective section.

Section A

Answer all the questions [10 x 1 = 10]

1. The shortcut key for printing a document is:
 - (a) Shift+P
 - (b) Ctrl+P
 - (c) Esc+P
 - (d) Enter+P
2. In MS PowerPoint "Themes" are found under which tab?
 - (a) Transition
 - (b) Design
 - (c) Insert
 - (d) Animation
3. Which of the following is not a valid function in MS Excel?
 - (a) SUM
 - (b) SUBTRACT
 - (c) MAX
 - (d) MIN
4. State True or False:
Excess 3 code is self-complementary.
 - (a) True
 - (b) False
5. Identify the correct properties of a RAM from the following:
 - (a) Volatile, temporary storage
 - (b) Volatile, permanent storage
 - (c) Non-volatile, permanent storage
 - (d) Non-Volatile, temporary storage
6. What does the term "shopping cart" refer to in E-commerce?
 - (a) A secure payment gateway for online transactions
 - (b) A virtual reality shopping experience

- (c) A feature that allows customers to store selected products before checkout.
- (d) A physical shopping cart used in brick-and-mortar traditional stores.
7. State True or False:
In Python Programming, the name of an identifier cannot start with a digit.
- (a) True
(b) False
8. In Python Programming, the function of the 'Modulus (%)' operator is:
- (a) Performs exponential (power) calculation on operands. That is, raise the operand on the left to the power of the operand on the right.
- (b) Divides the operand on the left by the operand on the right and returns the quotient.
- (c) Divides the operand on the left by the operand on the right and returns the remainder.
- (d) None of the above.
9. What is the correct syntax of IF() function in MS Excel?
- (a) IF (logical_test-{[value_if_true]}, {[value_if_false]})
- (b) IF (logical_test=TRUE([value_if_true]), FALSE([value_if_false]))
- (c) IF (logical_test: [value_if_true], [value_if_false])
- (d) IF (logical_test, [value_if_true], [value_if_false])
10. Which of the following document settings can be changed from the 'Home' tab of MS Word?
- (a) Font Size
(b) Adding Bullets
(c) Adjusting Styles
(d) All of the above

Section B

Answer all questions [5 x 2 = 10]

11. Why 4 bits in a binary number are grouped together to get a hexadecimal number?
12. Following the precedence of operators how will the following expression be evaluated in Python? Determine the final answer.
 $15.0 / 4 + (8 + 3.0)$
In the given expression '/', '+', and '()' are operators.
13. What is mail merge in MS Word?
14. What is the 'B2B' business e-commerce model?
15. What do you understand by secondary memory in a computer system?

Section C

Answer any 5 questions [5 x 10 = 50]

- 16.
- (a) Enumerate the differences between Internet and Intranet.
- (b) What do you understand by EDI in e-commerce?

[6+4=10]

17. Figure 1 shows the entries of a stationary shop where 5 children bought some pens in MS Excel. Answer the following considering Figure 1.

	A	B	C	D	E	F
1		Name	Price of each pen(₹)	No. of Units	Total Price(₹)	
2		Ajay	35	3	105	
3		Anil	25	4	100	
4		Amit	50	4	200	
5		Ajay	100	5	500	
6		Arun	25	5	125	
7						

Figure 1

(a) What will be the output if we use the function '=SUM(E2:E6)' and '= AVERAGE(E2:E6)'?

(b) What will be the output if we use the function '=SUMIF(B2:B6,"Ajay",E2:E6)'?

(c) What will be the output if we use the function '=COUNTIF(D2:D6,"<4')' ?

[4+3+3=10]

18.

(a) Convert $(10101100.01011)_2$ to octal and hexadecimal number.

(b) Convert the following numbers into binary and then perform the binary subtraction using 2's complement method.

$$(121)_{10} - (76)_{10} = (\underline{\hspace{2cm}})_2$$

[4+6=10]

19.

(a) Explain the 'relational operators' and 'logical operators' of Python programming.

(b) In Python programming what do you understand by 'functions' and what are the advantages of using functions?

[4+6=10]

20.

(a) Enumerate the differences between SRAM and DRAM.

(b) Enumerate the differences between 'high-level languages' and 'low-level language' in computer systems.

[4+6=10]

21.

(a) Explain 'FlashFill', 'AutoFill' and 'Conditional Formatting' in MS Excel.

(b) Write a short note on BCD code.

[6+4=10]

22.

(a) Write the steps that are involved in inserting a new equation manually in MS Word.

(b) What is the output of the program code?

for num in range (5):

if num > 0:

print (num * 10)

[6+4=10]

TMM