



Library **Brainware University** 398, Ramkrishnapur Road, Barasat Kolkata, West Bengal-700125

## **BRAINWARE UNIVERSITY**

## Term End Examination 2024-2025 Programme - B.Tech.(CSE)-AIML-2024/B.Tech.(CSE)-DS-2024/B.Tech.(CSE)-CYS-2024/B.Tech.(EE)-2024

**Course Name – Programming for Problem Solving Course Code - BES00006** (Semester II)

Time: 2:30 Hours Full Marks: 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

## Group-A

(Multiple Choice Type Question)

1 x 15=15

		,,	
1.	Choose the correct alternative from the following	:	
(i)	Select the correct symbol for taking input in the flowchart		
/::X	a) Square c) Parallelogram	b) Circle d) Rectangle	
(ii)	Identify invalid declaration a) 'c' c) "course"	b) "c" d) 'course'	
(iii)	Select the correct option to comment out multi-li	ne.	
	a) /* */ c) * *	b) // d) \	
(iv)	Select the size of data type int in byte/s (32 bit compiler)		
(v)	<ul><li>a) 1</li><li>c) 3</li><li>Identify the invalid declaration in C language</li></ul>	b) 2 d) 4	
	a) int 2roll	b) int roll	

(vi) State the case that is used in all keywords in C.

c) int Roll

a) True

a) LowerCase letters

c) CamelCase letters

c) Depends on the standard

(viii) The C-preprocessors are specified with

d) int roll

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	a) # Kolkata, West Bengal-700125	b) \$ d) &		
(ix)	hoose from the following option to show the byte in sizeof(char) in a 32-bit C compiler			
	a) 1 bit	b) 2 bits		
	c) 1 Byte	d) 2 Bytes		
(x)	<pre>petermine the output of the following C program *p; p = a; ++p; printf("%c ",*p); return 0; }</pre>	code. int main() { char a[] = { a , c , e ,},		
	a) a	b) b		
(xi)	<ul><li>c) c</li><li>Predict the output of the following program. int r</li><li>(&amp;i)); return 0; }</li></ul>	d) d nain() { int i,*p; i=10; p=&i printf("%d",*		
	a) 10	b) address of variable i		
(xii)	c) address of variable p Select the correct declaration of structure book.	d) error		
(xiii)	<ul><li>a) structure book{ char name[10]; float price; }</li><li>c) structure { char name[10]; float price; }book;</li><li>Predict the size of the following structure struct be</li></ul>	<ul><li>b) struct book{ char name[10]; float price</li><li>d) struct book{ char name[10]; float price</li><li>book{ char name[10]; };</li></ul>	; }; ; }	
	a) 1	b) 10		
, . ,	c) 20	d) 11		
(XIV)	Choose the option that is used to find the end of			
	a) END	b) EOF d) ER		
(xv)	<ul> <li>c) PTR</li> <li>Choose the data structure that is used to store m contiguous memory location.</li> </ul>			
	a) Array	b) Linked List		
	c) Stack	d) Queue		
	Grou	•		
	(Short Answer To	ype Questions)	3 x 5=15	
2. D	scuss conditional branching in C programming.		(3)	
	scuss the various types of operators in C		(3)	
	efine pointer in C with example.		(3)	
	efine algorithm with an example plain for loop with Example.		(3)	
о. E.	Qiain for loop with Example.	R	(3)	
E	plain recursive function.	•	(3)	
	Grou	р-С		
	(Long Answer Ty	/pe Questions)	5 x 6=30	
7.	Compare "Call by Value" and "Call by Reference" in	n C with examples.	(5)	
8.	llustrate the concept of accessing structure meml	pers using dot ( ) in C with example	(5)	
9. :	State a program to assign a structure variable to a	nother structure variable.	(5)	
10.	Write a program to count the number of words in	a file in C.	(5)	
11.	write an algorithm for (i) Simple interest calculation from two numbers	ons (ii) Circumference of a circle (iii) Larges	t (5)	

<ol><li>Write a C program to find the sum of the first N natural numbers using a for loop and expla the program.</li></ol>	ain (5)
OR  Develop a C program to find the greatest common divisor (GCD) of two numbers using a w loop	hile (5)
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