



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, July 2020

Course: Programming for Problem Solving
Semester: II
Course Code: CSEG 1003
Time: 10 AM
Programme: B.Tech ASE+ASEA
Max. Marks: 100
Instructions: Attempt all questions
Backtracking is prohibited.

Mitali Chugh 128



My Institution

Courses

Community

Edit Mode is: ON ?

H Tests, Surveys and Pools Tests Test Canvas : PPS_ESE_July 2020

Test Canvas: PPS_ESE_July 2020

The Test Canvas lets you add, edit and reorder questions, as well as review a test. [More Help](#)

Question Settings

You can edit, delete or change the point values of test questions on this page. If necessary, test attempts will be regraded after you submit your changes.

Description	Number of Question 60
	Time to attempt 2 hours
	MM 100
Instructions	Attempt all Questions.
Total Questions	60
Total Points	100
Number of Attempts	28

[Type here]

Select: [All](#) [None](#) Select by Type: - Question Type - ▼

Delete and Regrade

Points

Update and Regrade

Hide Question Details

1. Multiple Choice:

Points: **2**

Question

Answer

c,a,d,b

a,b,c,d

c,a,b,d

b,d,c,a

2. Multiple Choice:

Points: **2**

Question

What will be the output of the program ?

```
#include<stdio.h>
void main()
{
    int a[5] = {5, 1, 15, 20, 25};
    int i, j, m;
    i = ++a[1];
    j = a[1]++;
    m = a[i++];
    printf("%d, %d, %d", i, j, m);
}
```

Answer

3,2,15

2,3,20

2,1,15

1,2,5

3. Multiple Choice:

Points: **2**

Question

What will be the output of following program code?

```
#include <stdio.h>
int main(void)
{
    char p;
    char buf[10] = {1, 2, 3, 4, 5, 6, 9, 8};
    p = (buf + 1)[5];
    printf("%d", p);
    return 0;
}
```

Answer 5

6

9

error

4. Multiple Choice: Find the line of code hidden in the...

Points: 1

Question

```
#include <stdio.h>

int main()
{
    int num;
    FILE *fptr;

    // use appropriate location where the files is saved
    fptr = fopen("E:\\program.txt", "w");

    printf("Enter num: ");
    scanf("%d", &num);

    [REDACTED]

    fclose(fptr);
    return 0;
}
```

Find the line of code hidden in the highlighted portion above to store the number obtained into the file.

Answer

fprintf(fptr, "%d", num);

```
fprintf(fp, num);  
-----  
printf(fp, "%d", num);  
-----  
printf(fp, num);
```

5. Multiple Choice: **/**/ document.oncopy = new Function...**

Points: **1**

Question	*** in pointers is _____ operator.
Answer	<input type="radio"/> Indirection operator
	<input type="radio"/> Address Operator
	<input checked="" type="radio"/> Multiple Indirection Operator
	<input type="radio"/> Dereferencing Operator

6. Multiple Choice: **/**/ document.oncopy = new Function...**

Points: **1**

Question	Modularity and Code reusability concept is achieved in C by ?
Answer	<input type="radio"/> Structures
	<input type="radio"/> Unions
	<input type="radio"/> Arrays
	<input checked="" type="radio"/> Function

7. True / False: **/**/ document.oncopy = new Function...**

Points: **1**

Question	C language has a string datatype.
Answer	<input type="radio"/> True

False

8. Multiple Choice: `/**/ document.oncopy = new Function...`

Points:

Question	In C Programming, If we need to store word "INDIA" then syntax is as below – char name[]; name = "INDIA"
Answer	<p>char name[6] = {'I','N','D','I','A'};</p> <hr/> <p><input checked="" type="checkbox"/> char name[6] = {'I','N','D','I','A','\0'}</p> <hr/> <p>char name[6] = {"I","N","D","I","A"}</p> <hr/> <p>name = "INDIA"</p>

9. Multiple Choice: A computer program that converts an ...

Points:

Question	A computer program that converts an entire program into machine language is called a/an
Answer	<p>Interpreter</p> <hr/> <p><input checked="" type="checkbox"/> Compiler</p> <hr/> <p>Commander</p> <hr/> <p>Simulator</p>

10. Multiple Choice: On which aspect the analog computers...

Points:

Question	On which aspect the analog computers are better than digital?
Answer	<p>Speed</p> <hr/> <p><input checked="" type="checkbox"/> Accuracy</p> <hr/> <p>Reliability</p> <hr/> <p>Automatic</p>

11. Multiple Choice: Which of the following is internal m...

Points:

Question	Which of the following is internal memory?
Answer	Disks
	Pendrive
	RAM
	CDs

12. Multiple Choice: "In C, if you pass an array as an arg..."

Points: 1

Question	"In C, if you pass an array as an argument to a function, what actually gets passed?"
Answer	Value of elements in array
	First element of the array
	<input checked="" type="checkbox"/> Base address of the array
	Address of the last element of array

13. Multiple Choice: A compiler is a translating program w...

Points: 2

Question	A compiler is a translating program which
Answer	Translates instruction of a high level language into machine language
	It is not involved in program s execution
	both a and b
	<input checked="" type="checkbox"/> Translates entire source program into machine language program

14. True / False: A sentinel value is used to indicate ...

Points: 1

Question	A sentinel value is used to indicate that the user is done entering data.
Answer	<input checked="" type="checkbox"/> True
	False

15. Multiple Choice: Abstraction simply means that how abl...

Points: 1

Question	Abstraction simply means that how able one can or we can say that it means the ability to look at something without knowing about its inner details. In C structured programming language, _____ satisfies its requirement and performs a specific task.
Answer	Structures ----- Unions ----- incorrect ----- <input checked="" type="checkbox"/> Function

16. Multiple Choice: Actual execution of program instructi...

Points: **2**

Question	Actual execution of program instructions takes place inside
Answer	Central Processing Unit ----- <input checked="" type="checkbox"/> Arithmetic Logic Unit ----- Control Unit ----- Memory Unit

17. Multiple Choice: Algorithm halts in

Points: **1**

Question	Algorithm halts in
Answer	<input checked="" type="checkbox"/> Finite time ----- Infinite time ----- Logarithmic time ----- Exponential time

18. Multiple Choice: An Algorithm represented in the form ...

Points: **1**

Question	An Algorithm represented in the form of programming languages is _____
Answer	Flowchart ----- Pseudo code

Program

None

19. Multiple Choice: Array passed as an argument to a func...

Points: 1

Question	Array passed as an argument to a function is interpreted as
Answer	Address of the array
	<input checked="" type="checkbox"/> Address of the first element of the array
	Value of the first element of the array
	Number of the element in the array

20. Multiple Choice: Assuming int is of 4bytes, what is th...

Points: 2

Question	Assuming int is of 4bytes, what is the size of int arr[15];?
Answer	15
	19
	11
	<input checked="" type="checkbox"/> 60

21. Multiple Choice: Assuming that x=5, y=0,and z=1 initia...

Points: 2

Question	Assuming that x=5, y=0,and z=1 initially ,what will be their values after executing the following code segments? if(x && y) x=10; else y=10;
----------	--

Answer	<input checked="" type="checkbox"/> 5,10
	10,5
	10,10
	5,5

22. Multiple Choice: C allows the three way transfer of co...

Points: 1

Question	C allows the three way transfer of control by using
Answer	<input type="checkbox"/> Unary operator
	<input checked="" type="checkbox"/> Ternary operator
	<input type="checkbox"/> Conditional operator
	<input type="checkbox"/> Comparison operator

23. Multiple Choice: Central Processing Unit is combinatio...

Points: 2

Question	Central Processing Unit is combination of
Answer	<input type="checkbox"/> Control and Input Unit
	<input type="checkbox"/> Control and Output Unit
	<input type="checkbox"/> Arithmetic and Control Unit
	<input checked="" type="checkbox"/> "Arithmetic, Logic and Control Unit"

24. Multiple Answer: Check the valid preprocessor directiv...

Points: 2

Question	Check the valid preprocessor directives in C
Answer	<input checked="" type="checkbox"/> #if
	<input checked="" type="checkbox"/> #include

✔ #define

#redefine

25. Multiple Choice: Consider the program.txt as Find t...

Points: 2

Question

Consider the program.txt as

```
program - Notepad
File Edit Format View Help
This is my First Line
This is my Second Line.
```

Find the output of the below given program

```
#include <stdio.h>
#include <stdlib.h>
int main()
{
    char c[1000];
    FILE *fptr;

    if (( fptr = fopen("E:\\program.txt", "r")) == NULL)
    {
        printf("Error! opening file");
        //Program exits if file pointer returns NULL.
        exit(1);
    }

    // reads text until newline is encountered
    fscanf(fptr, "%s", c);
    printf("Data from the file:\n%s", c);
    fclose(fptr);

    return 0;
}
```

Answer

✔ Data from the file:
This

Data from the file:
This is my First Line
This is my Second Line

Data from the file:
This is my First Line

Data from the file:

26. Multiple Choice: Convert 11001001 (binary) to decimal.

Points: 2

Question	Convert 11001001 (binary) to decimal.
Answer	210
	<input checked="" type="checkbox"/> 201
	2001
	20

27. Multiple Choice: Convert octal 6125 into binary

Points: 2

Question	Convert octal 6125 into binary
Answer	<input checked="" type="checkbox"/> 110001010101
	10111000100
	100000100111
	10101010101010

28. Multiple Choice: Convert the binary number 1011010 to ...

Points: 2

Question

Convert the binary number 1011010 to hexadecimal.

Answer

5A

5B

5F

5C

29. Multiple Choice: Find the correct choice after compila...

Points: 2

Question

Find the correct choice after compilation and executing the given program

```
#include <stdio.h>
struct sample
{
    int a=0;
    char b='A';
    float c=10.5;
};
int main()
{
    struct sample s;
    printf("%d,%c,%f",s.a,s.b,s.c);
    return 0;
}
```

Answer

Compiler Time Error

Run Time Error

0 , A , 10.50001

0,A,10.5

30. Multiple Choice: Find the correct code to get the belo...

Points: 2

Question

Find the correct code to get the below output

```
Enter the first Name:UPES
```

```
The full name is UPES
```

Answer

```
✔ #include<stdio.h>

#include<string.h>
void main()
{
    char fname[20];
    printf("Enter the first Name:");
    scanf("%s",fname);
    printf("\n The full name is %s",fname);
}
```

```
#include<stdio.h>
#include<string.h>
void main()
{
    char fname[20];
    printf("Enter the first Name:");
    scanf("%s",&fname);
    printf("\n The full name is %s",fname);
}
```

```
#include<stdio.h>
#include<string.h>
void main()
{
    string fname;
    printf("Enter the first Name:");
    scanf("%s",fname);
    printf("\n The full name is %s",fname);
}
```

[Type here]

```
#include<stdio.h>
#include<string.h>
void main()
{
    string fname;
    printf("Enter the first Name:");
    scanf("%s",&fname);
    printf("\n The full name is %s",fname);
}
```

31. Multiple Choice: Find the missing highlighted line to ...

Points: **2**

Question

Find the missing highlighted line to get the below given output

```
#include<stdio.h>

float myprintf(int x)
{
    return x;
}

void main()
{
    float ans;
    _____
    printf("ans=%f",ans) ;
}
```

Output:

```
ans=20.000000
-----
```

Answer

ans=myprintf(20);

myprintf(20);

ans=myprintf();

ans=30;

32. Multiple Choice: Find the output

Points: 2

Question

Find the output

```
# include <stdio.h>
void myfun(int x)
{
    x = 30;
}

int main()
{
    int y = 20;
    myfun(y);
    printf("%d", y);
    return 0;
}
```

Answer

20

30

Compiler Error

No Output

33. Multiple Choice: Find the output

Points: 2

Question

Find the output

```
#include <stdio.h>
int main()
{
    union myunion
    {
        char x[2];
        int y;
    };

    union myunion v;
    v.x[0]='A';
    v.x[1]='B';

    printf("\n%c,%c,%d",v.x[0],v.x[1],v.y);
    return 0;
}
```

Answer

A,B,0

 A,B,16961 B,B,66 A,A,65 34. Multiple Choice: Find the output

Points: 2

Question

Find the output

```
#include<stdio.h>
int myfun()
{
    static int a = 0;
    a++;
    return a;
}

int main()
{
    printf("%d ", myfun());
    printf("%d ", myfun());
    return 0;
}
```

Answer

1 1

 1 2 Compile Time Error Run Time Error 35. Multiple Choice: Find the output for the given program

Points: 2

Question

Find the output for the given program

```
# include <stdio.h>
void fun(int *ptr)
{
    *ptr = 30;
}

int main()
{
    int y = 20;
    fun(&y);
    printf("%d", y);

    return 0;
}
```

Answer

30

20

Compiler Error

No Output

36. Multiple Choice: Find the output of the below given pr...

Points:

Question

Find the output of the below given program

```
#include <stdio.h>

struct sample
{
    int x;
}x1;

int main()
{
    x1.x=500;
    printf("%d",x1.x);
    return 0;
}
```

Answer

200

No Output

Compile Time Error

Run Time Error

37. Multiple Choice: Find the output of the code given

Points:

Question

Find the output of the code given

```
#include<stdio.h>
void main()
{
    char sample[5]={'a','e','i','o','u'};
    int i;
    printf("Enter the vowels");
    printf("The vowels are\n");
    for(i=0;i<5;i++)
        printf("%c\t",sample[i]);
}
```

Answer

Enter the vowelsThe vowels are
a e i o u

Enter the vowelsThe vowels are

a e o u i

Enter the vowelsThe vowels are

a e o u i

38. Multiple Choice: Find the output of the given program

Points: 2

Question

Find the output of the given program

```
#include<stdio.h>
void main()
{
    int a;
    int *ptr;
    a=10;
    ptr=&a;
    printf("%d\n",a);
    printf("%p\n",ptr);
}
```



Answer

10
000000000062FE00

10
54

10
10

10

39. Multiple Choice: Find the output of the given program

Points:

Question

Find the output of the given program

```
#include <stdio.h>

void main()
{
    int *p;
    int x;

    p = &x;
    *p = 0;
    printf(" The value of x is %d\n", x);
    *p += 100;
    printf(" The value of x is %d\n", x);
    printf(" The value of the pointer ptr = %d\n", *p);
}
```

Answer

The value of x is 0
The value of x is 100
The value of the pointer ptr = 100

The value of x is 89456
The value of x is 100
The value of the pointer ptr = 100

The value of x is
The value of x is 100
The value of the pointer ptr = 100

The value of x is 0
The value of x is 100
The value of the pointer ptr =

40. Multiple Choice: Guess the output for the given program

Points:

Question

Guess the output for the given program

```
#include<stdio.h>

struct aa
{
    int a[10];
    float b;
};

struct bb
{
    int c[30];
    struct aa a1;
};

void main()
{
    struct bb b1;
    printf("%d", sizeof(b1));
}
```

Answer

164

70

160

74

41. Multiple Choice: Identify the highlighted statement in...

Points: 2

Question

Identify the highlighted statement in the given program below

```
#include<stdio.h>
void myprintf() ;
void main()
{
    myprintf();
}
void myprintf()
{
    printf("Hello myprintf function");
}
```

Answer

Function Prototype

Function Declaration



Function Call

Function Definition

42. Multiple Choice: If a = 5 and b = 7 then the statement...

Points: 2

Question

If a = 5 and b = 7 then the statement p = (a > b) : a ? b

Answer

assigns a value 5 to p

assigns a value 7 to p

give an error message

assigns a value 8 to p



43. Multiple Choice: If a is an integer variable, a= 5/2 w...

Points:

2

Question	If a is an integer variable, a= 5/2 will return a value
Answer	<p>2.5</p> <hr/> <p>3</p> <hr/> <p><input checked="" type="checkbox"/> 2</p> <hr/> <p>0</p>

44. True / False: Keyword void is a datatype in C

Points: **1**

Question	Keyword void is a datatype in C
Answer	<p><input checked="" type="checkbox"/> True</p> <p><input type="checkbox"/> False</p>





45. Multiple Choice: Match the following

Points: **2**

Question	Match the following																														
	<p>Match the following</p> <table border="1"> <tr> <td>1</td> <td>String Function to find the Length</td> <td></td> <td>a</td> <td>strjoin()</td> </tr> <tr> <td>2</td> <td>String Function to join</td> <td></td> <td>b</td> <td>strcmpare()</td> </tr> <tr> <td>3</td> <td>String Function to Compare</td> <td></td> <td>c</td> <td>strlen()</td> </tr> <tr> <td>4</td> <td>String Function to reverse</td> <td></td> <td>d</td> <td>strcmp()</td> </tr> <tr> <td></td> <td></td> <td></td> <td>e</td> <td>strcat()</td> </tr> <tr> <td></td> <td></td> <td></td> <td>f</td> <td>strrev()</td> </tr> </table>	1	String Function to find the Length		a	strjoin()	2	String Function to join		b	strcmpare()	3	String Function to Compare		c	strlen()	4	String Function to reverse		d	strcmp()				e	strcat()				f	strrev()
1	String Function to find the Length		a	strjoin()																											
2	String Function to join		b	strcmpare()																											
3	String Function to Compare		c	strlen()																											
4	String Function to reverse		d	strcmp()																											
			e	strcat()																											
			f	strrev()																											
Answer	<p><input checked="" type="checkbox"/> c,e,d,f</p> <hr/> <p><input type="checkbox"/> c,a,b,f</p> <hr/> <p><input type="checkbox"/> c,a,d,f</p> <hr/> <p><input type="checkbox"/> c,e,b,f</p>																														

46. Multiple Choice: Match the following:

Points: **2**

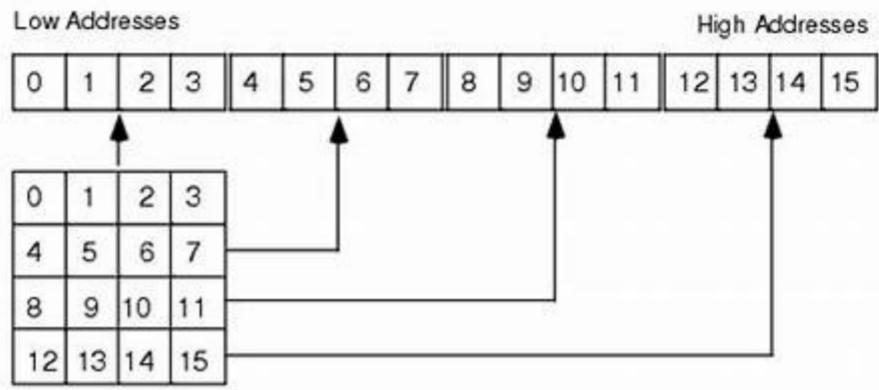
Question	Match the following: 1.  2.  3.  4. 	a. Computational steps or processing function of a program b. Start or end of program. c. Decision making and branching d. Input or output operation
Answer	1-a, 2-b, 3-c, 4-d <hr/> 1-b, 2-d, 3-a, 4-c <hr/> 1-c, 2-a, 3-b, 4-d <hr/> 1-b, 2-d, 3-c, 4-a	

47. Multiple Choice: The following figure shows which stor...

Points: **2**

Question

The following figure shows which storage organization for 2D arrays



Answer

Column major

Row major

Row minor

column minor

48. Multiple Choice: The operator used for dereferencing is

Points: 1

Question	The operator used for dereferencing is
Answer	<p>&</p> <p>scope</p> <p><input checked="" type="checkbox"/> *</p> <p>arrow</p>

49. Multiple Choice: To get the below given output ...

Points: 2

Question	To get the below given output <pre>The full name is WelcomeUPES</pre> Identify the correct code
Answer	<input checked="" type="checkbox"/>

```
#include<stdio.h>
#include<string.h>
void main()
{
char fname[20]="Welcome",lname[5]="UPES";
strcat(fname,lname);
printf("\n The full name is %s",fname);
}
```

```
#include<stdio.h>
#include<string.h>
void main()
{
char fname[20]="Welcome",lname[5]="UPES";

fname+=lname;

printf("\n The full name is %s",fname);
}
```

```
#include<stdio.h>
#include<string.h>
void main()
{
char fname[20]="Welcome",lname[5]="UPES";

fname=fname+lname;

printf("\n The full name is %s",fname);
}
```

```
#include<stdio.h>
#include<string.h>
void main()
{
char fname[20]="Welcome",lname[5]="UPES";

strjoin(fname,lname);

printf("\n The full name is %s",fname);
}
```

50. Multiple Choice: What happens in the given code snippet

Points: 2

Question	What happens in the given code snippet <pre>#include <stdio.h> void function() { function(); } void main() { function(); }</pre>
Answer	The code will be executed successfully and no output will be generated ----- The code will be executed successfully and random output will be generated ----- The code will show a compile time error ----- The code will run for some time and stop when the stack overflows

51. Multiple Choice: What is the highlighted variable call...

Points: 1

Question	What is the highlighted variable called\ <pre>#include<stdio.h> void main() { int a[5]={10,20,30,40,50}; int *j; int *i; j=&a[0]; printf("%u\n",j); }</pre>
Answer	<input checked="" type="checkbox"/> Pointer Variable -----

Static Variable

Local Variable

Global Variable

52. Multiple Choice: What will be the output of the follow...

Points: **2**

Question

What will be the output of the following code?

```
main.c
1 - /*****
2
3
4
5
6
7
8 #include<stdio.h>
9
10 void main()
11 {
12 int a,b,x=10,y=10;
13
14 a = x--;
15 b = --y;
16
17 printf("Value of a : %d",a);
18 printf("Value of b : %d",b);
19
20 }
```

Answer

Value of a: 9

Value of b: 10

Value of a: 10

Value of b: 9

Program will give an error

The program won't terminate, No output

53. Multiple Choice: What will be the output of the follow...

Points: **2**

Question

What will be the output of the following code?

```
Online C Compiler.  
Code, Compile, Run and Debug C program online.  
Write your code in this editor and press "Run" button to compile and execute it.  
*****/  
#include <stdio.h>  
int main ()  
{  
  int a;  
  while (1)  
  {  
    printf("enter the number:");  
    scanf("%d", &a);  
    if ( a == 0 )  
      break;  
  }  
  return 0;  
}
```

Answer

0

- 1
- 2
- 3
- 4
- 5

No output. while is an infinite loop that will be repeated forever and there is no exit from the loop.

The program will ask for input repeatedly until the user will input 0.

54. Multiple Choice: What will be the output of the follow...

Points: 2

Question

What will be the output of the following program?

```
main.c
1 /*****
2
3 Online C Compiler.
4 Code, Compile, Run and Debug C program online.
5 Write your code in this editor and press "Run" button to compile and execute it.
6
7 *****/
8
9 #include<stdio.h>
10 void main()
11 {
12     int a = 1, b = 2;
13     a += b -= a;
14     printf("%d %d", a, b);
15 }
16
```

Answer

11

12

21

22

55. Multiple Choice: Which of these is not a valid file op...

Points: 1

Question	Which of these is not a valid file operation
Answer	Open
	Close
	Read
	<input checked="" type="checkbox"/> Permission

56. Multiple Choice: Which will be the data structure used...

Points: 2

Question

Which will be the data structure used in C programming for every possible situation where you need to gather similar objects at one place. For example can be collection of all the book titles in a Library Management systems

Answer Structures

Unions

Arrays

Function

57. Multiple Choice: _____ is a technique in C to ke...

Points: 1

Question _____ is a technique in C to keep breaking the problem down into smaller and smaller pieces, until one of those pieces become small enough to be a piece-of-cake.

Answer Repetition Function

Iterative Function

Recursive Function

Looping Function

58. Multiple Choice: $a=3>2?1:0$; the value of a will be

Points: 2

Question $a=3>2?1:0$; the value of a will be

Answer 0

1

2

3

59. Multiple Choice: $i=\text{scanf}("%d\%d",&a,&b)$; then $i=?$

Points: 2

Question $i=\text{scanf}("%d\%d",&a,&b)$; then $i=?$

Answer 1

2

[Type here]

6

5

60. Multiple Choice: Which of the following is not a vali...

Points: 1

Question	Which of the following is not a valid C variable name?
Answer	<input type="checkbox"/> int number;
	<input type="checkbox"/> float rate;
	<input type="checkbox"/> int variable_count;
	<input checked="" type="checkbox"/> int \$main;

Select: All None Select by Type:

Delete and Regrade

Points

Update and Regrade

Hide Question Details

← OK