



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## INFORMATION TECHNOLOGY

### DEFINITIONS AND TERMINOLOGY

<b>Course Name</b>	:	<b>PROGRAMMING FOR PROBLEM SOLVING</b>
<b>Course Code</b>	:	<b>ACSB01</b>
<b>Program</b>	:	<b>B.Tech</b>
<b>Semester</b>	:	<b>II</b>
<b>Branch</b>	:	<b>Information Technology</b>
<b>Section</b>	:	<b>A &amp; B</b>
<b>Academic Year</b>	:	<b>2018– 2019</b>
<b>Course Faculty</b>	:	<b>Ch Suresh Kumar Raju, Assistant Professor Dr. B.Venkateswara Rao, Associate Professor</b>

### OBJECTIVES

I	To help students to consider in depth the terminology and nomenclature used in the syllabus.
II	To focus on the meaning of new words / terminology/nomenclature

## DEFINITIONS AND TERMINOLOGY QUESTION BANK

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
MODULE I					
1	<p>What is the output of program?</p> <pre>int main() { int x = 100; printf("decimal = %d; octal = %o; hex = %x\n", x, x, x); printf("decimal= %d; octal = %o; hex = %#x\n", x, x, x); return 0; }</pre>	<p>decimal = 100; octal = 144; hex = 64</p>	Understand	CLO4	ACSB01.04
2	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; int main() { int i=-3, j=2, k=0, m; m = ++i &amp;&amp; ++j &amp;&amp; ++k; printf("%d, %d, %d, %d\n", i, j, k, m); return 0; }</pre>	<p>Output: -2, 3, 1, 1</p>	Understand	CLO3	ACSB01.03
3	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { int num1 = 10, num2 = 20; int result; result = num1 * 2 + num2; printf("\nResult is : %d", result); return 0; }</pre>	<p>40</p>	Understand	CLO4	ACSB01.04
4	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; int main() {</pre>	<p>It will run without any error and prints 3</p>	Understand	CLO5	ACSB01.05

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int main = 3; printf("%d", main); return 0; }</pre>				
4	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; int main() { printf("crazyfor\code\n"); return 0; }</pre>	codeyfor	Understand	CLO4	ACSB01.04
5	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; int main() { int x=10; int y; { y=x++; } printf("%d",x); }</pre>	11	Understand	CLO6	ACSB01.06
6	<p>What is the output of program?</p> <pre>#include int main() { int x=10; int a=1,b=2,c=3,d=4; x+=a=b*c+d-a; printf("%d,%d",a,x); }</pre>	9,19	Understand	CLO6	ACSB01.06
7	<p>What is the output of program?</p> <pre>void main() { int a=22; a=a&gt;&gt;4; printf("%d",a); }</pre>	1	Understand	CLO6	ACSB01.06

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
8	What is the output of program? <pre>void main() {   int a,b;   a=3,1;   b=(5,4);   printf("%d",a+b); }</pre>	7	Understand	CLO6	ACSB01.06
9	What is the output of program? <pre>#include &lt;stdio.h&gt; main ( ) {   int a=5;   int b = a % ( a-a /2 ) * ( a - 3 ) + a ;   printf("%d",b);   return 0 ; }</pre>	9	Understand	CLO6	ACSB01.06
10	What is the output of program? <pre>#include&lt;stdio.h&gt; int main() {   int i=1;   i += i*i&gt;&gt;2+3;   printf("%d",i);   return 0; }</pre>	1	Understand	CLO6	ACSB01.06
12	What is the output of program? <pre>#include&lt;stdio.h&gt; int main() {   int i=1;   i += i*i&lt;&lt;2+3;   printf("%d",i);   return 0; }</pre>	33	Understand	CLO6	ACSB01.06
13	What will be printed by printf statement? <pre>char a,b,c; a = 'b';</pre>	AABACA	Understand	CLO4	ACSB01.04

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>b = 'c'; c = 'A'; b=c; c=b; a=c; c=a; printf("A%cB%cC%c",a,b,c);</pre>				
14	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; int main() {   charchr;   chr = 128;   printf("%d\n", chr);   return 0; }</pre>	128	Understand	CLO4	ACSB01.04
15	<p>What is the output of program?</p> <pre>#include&lt;stdio.h&gt; main() {   int c=-2;   Printf("c=%d",c); }</pre>	2	Understand	CLO6	ACSB01.06
16	<p>What will be the output of the program if value 25 given to scanf()?</p> <pre>#include&lt;stdio.h&gt; int main() {   int i;   printf("%d\n", scanf("%d", &amp;i));   return 0; }</pre>	1	Understand	CLO5	ACSB01.05
17	<p>What is the output of this C code?</p> <pre>#include &lt;stdio.h&gt; int main() {   short int i;</pre>	Somegarbage value	Understand	CLO5	ACSB01.05

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>scanf("%*d", &amp;i); printf("%hd", i); return 0; }</pre>				
18	<p>What is the correct order of evaluation for the given expression? a = w % x / y * z;</p>	% / * =	Remember	CLO6	ACSB01.06
19	<p>What will be the output of the C program? #include&lt;stdio.h&gt; int main() { printf("%d",printf("cprogram")); return 0; }</p>	cprogram 8	Remember	CLO6	ACSB01.06
20	<p>What will be the output of the C program in 32 bit c compiler? #include&lt;stdio.h&gt; int main() { int a = 1; printf("%d %p",a,a); return 0; }</p>	1 00000001	Understand	CLO5	ACSB01.05
21	<p>What will be the output of the C program? #include&lt;stdio.h&gt; int main() { char num = '010'; printf("%d", num); return 0; }</p>	8	Remember	CLO5	ACSB01.05
22	<p>What will be the output of the C program? #include&lt;stdio.h&gt; int main()</p>	Compilation error	Remember	CLO5	ACSB01.05

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>{ void num=10; printf("%v", num); return 0; }</pre>				
23	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { float a = 5.0; printf ("Result is = %d ", (24 / 5) * a); return 0; }</pre>	0	Remember	CLO5	ACSB01.05
24	<p>Which of the following data type is right C programming?</p> <pre>#include&lt;stdio.h&gt; int main(){ int num = - -2; printf("num = %d", num); return 0; }</pre>	2	Remember	CLO6	ACSB01.06
25	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { 10; printf("%d", 10); }</pre>	10	understand	CLO6	ACSB01.06
26	<p>What will be the output of the C program ?</p> <pre>#include&lt;stdio.h&gt; int main() { char num = 127; num = num + 1; }</pre>	-128	understand	CLO5	ACSB01.05

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>printf("%d", num); return 0; }</pre>				
27	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { int size = sizeof(volatile) + sizeof(const); printf("%d",++size); return 0; }</pre>	9	understand	CLO4	ACSB01.04
28	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { printf(" %%% "); return 0; }</pre>	%	Understand	CLO4	ACSB01.04
29	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { float x = 3.14; double y = 3.14; printf("%f %ff",x, y); return 0; }</pre>	3.140000 3.140000f	Understand	CLO5	ACSB01.05
30	<p>What will be the output of the C program?</p> <pre>#include&lt;stdio.h&gt; int main() { printf("%d",3 * 2--); }</pre>	Compilation error	Understand	CLO4	ACSB01.04



S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
MODULE II					
1	Predict the output of following C program. <pre>#include&lt;stdio.h&gt; int main() {     char X;     if ('X' &gt; X)     printf ( "\nASCII value of X is smaller than that of x");     return 0; }</pre>	ASCII value of X is smaller than that of x	Remember	CLO7	ACSBO1.07
2	Predict the output of following C program. <pre>main() {     int x = 10 ;     if ( x &gt;= 2 ) then     printf ( "\n%d", x ); }</pre>	Error	Remember	CLO7	ACSBO1.07
3	Predict the output of following C program. <pre>#include&lt;stdio.h&gt; int main() {     int x = 10 ;     if ( x &gt;= )     printf ( "\n%d", x );     return 0; }</pre>	Error	Remember	CLO7	ACSBO1.07
4	Predict the output of following C program. <pre>main() {     int x = 10 ;     if x &gt;= 2     printf ( "\n%d", x ); }</pre>	Error	Remember	CLO7	ACSBO1.07
5	Predict the output of following C program. <pre>main() {</pre>	10	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int x = 10 ; if (x &gt;= 2) printf ( "\n%d", x ) ; }</pre>				
6	Predict the output of following C program. <pre>main() { int x = 10 ; if (x &gt;= 2) printf ( "\n%d", x ) ; }</pre>	Error ;	Remember	CLO7	ACSBO1.07
7	Predict the output of following C program. <pre>main() { int x = 10 ; if (x != 2) printf ( "IF %d", x ) ; else printf("ELSE %d",x); }</pre>	ELSE0	Remember	CLO7	ACSBO1.07
8	Predict the output of following C program. <pre>main() { int x = 10 ; if (x != 0) printf ( "IF %d", x ) ; else printf("ELSE %d",x); }</pre>	IF 1	Remember	CLO7	ACSBO1.07
9	Predict the output of following C program. <pre>main() { int x = 10 ; if (x == ! 0) printf ( "IF %d", x ) ; else printf("ELSE %d",x); }</pre>	ELSE 10	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
10	Predict the output of following C program. <pre>main() { int x = 10, y = 15 ; if ( x % 2 = y % 3 ) printf ( "\nCarpathians" ) ; }</pre>	Error	Remember	CLO7	ACSBO1.07
11	Predict the output of following C program. <pre>main() { int x = 10, y = 15 ; if ( x % 2 = =y % 3 ) printf ( "\nCarpathians" ) ; }</pre>	Carpathians	Remember	CLO7	ACSBO1.07
12	Predict the output of following C program. <pre>main() { int x = 10, y = 15 ; if ( x =y % 3 ) printf ( "\nCarpathians" ) ; }</pre>	No Output	Remember	CLO7	ACSBO1.07
13	Predict the output of following C program. <pre>#include &lt;stdio.h&gt; main() { int x = 30 , y = 40 ; if ( x == y ) printf( "x is equal to y" ) ; elseif ( x &gt; y ) printf( "x is greater than y" ) ; elseif ( x &lt; y ) printf( "x is less than y" ) ; }</pre>	Error .	Remember	CLO7	ACSBO1.07
14	Predict the output of following C program. <pre>#include &lt;stdio.h&gt; main() { int x = 30 , y = 40 ;</pre>	x is less than y	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre> if ( x == y ) printf( "x is equal to y" ) ; elseif ( x &gt; y ) printf( "x is greater than y" ) ; elseif ( x &lt; y ) printf( "x is less than y" ) ; } </pre>				
15	<p>Predict the output of following C program.</p> <pre> #include &lt;stdio.h&gt; main( ) { int x = 40 , y = 40 ; if ( x ==y ) printf( "x is equal to y" ) ; else if ( x &gt;= y ) printf( "x is greater than y" ) ; else if ( x &lt;=y ) printf( "x is less than y" ) ; } </pre>	x is equal to y	Remember	CLO7	ACSBO1.07
16	<p>What will be the output of the program?</p> <pre> #include&lt;stdio.h&gt; int main() { int i=0; for(; i&lt;=5; i++); printf("%d", i); return 0; } </pre>	6	Remember	CLO7	ACSBO1.07
17	<p>What is the output of the program?</p> <pre> #include&lt;stdio.h&gt; int main() { unsigned int i = 65535; </pre>	Infinite loop	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>while(i++ != 0)     printf("%d",++i); printf("\n"); return 0; }</pre>				
18	<p>What will be the output of the program, if a short int is 2 bytes wide?</p> <pre>#include&lt;stdio.h&gt; int main() {     short int i = 0;     for(i&lt;=5 &amp;&amp; i&gt;=-1; ++i; i&gt;0)         printf("%u,", i);     return 0; }</pre>	1 ... 65535	Remember	CLO7	ACSBO1.07
19	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() {     unsigned int i = 65536;     while(i != 0)         printf("%d",++i);     printf("\n");     return 0; }</pre>	No output	Remember	CLO7	ACSBO1.07
20	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() {</pre>	<p>2 1 3 1 4 1 5 1 6 1</p>	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int x=1, y=1; for(; y; printf("%d %d\n", x, y)) {     y = x++ &lt;= 5; } printf("\n"); return 0; }</pre>	7 0			
21	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() {     int i = 5;     while(i-- &gt;= 0)         printf("%d,", i);     i = 5;     printf("\n");     while(i-- &gt;= 0)         printf("%i,", i);     while(i-- &gt;= 0)         printf("%d,", i);     return 0; }</pre>	<p>4, 3, 2, 1, 0, -1 4, 3, 2, 1, 0, -1</p>	Remember	CLO7	ACSBO1.07
22	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() {     unsigned int i = 65536;     while(i != 0)         printf("%d", ++i); }</pre>	<p>No output</p> <p>Explanation: Here unsigned int size is 2 bytes. It varies from 0,1,2,3, ... to 65535.</p>	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>printf("\n"); return 0; }</pre>				
23	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() { int x=1, y=1; for(; y; printf("%d %d\n", x, y)) { y = x++ &lt;= 5; } printf("\n"); return 0; }</pre>	<pre>2 1 3 1 4 1 5 1 6 1 7 0</pre> <p>Explanation: printf executes right to left and in for loop for ( stmt1 ; stmt2; stmt3) { // instructions } for ( stmt1 ; stmt2; stmt3) { // instructions } stmt3 execute after all instructions in the for loop is executed</p>	Remember	CLO7	ACSBO1.07
24	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() { int i = 5; while(i-- &gt;= 0) printf("%d,", i); i = 5; printf("\n"); while(i-- &gt;= 0) printf("%i,", i); while(i-- &gt;= 0) printf("%d,", i); return 0; }</pre>	<pre>4, 3, 2, 1, 0, -1 4, 3, 2, 1, 0, -1</pre>	Remember	CLO7	ACSBO1.07

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
25	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; int main() {     char j=1;     while(j &lt; 5)     {         printf("%d, ", j);         j = j+1;     }     printf("\n");     return 0; }</pre>	1, 2, 3, 4	Remember	CLO7	ACSBO1.07
26	<p>What will be the output of the program?</p> <pre>int main() {     int val=1;     do{         val++;         ++val;     }while(val++&gt;25);     printf("%d\n",val);     return 0; }</pre>	4	Remember	CLO7	ACSBO1.07
27	<p>How many times will the following code print "Welcome to Python"?</p> <pre>count = 0 while (count &lt; 10) {     print("Welcome to Python") }</pre>	10	Remember	CLO7	ACSBO1.07



S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>count += 1 }</pre>				
28	<p>What is the output of the following code?</p> <pre>x = 0 while (x &lt; 4)     x = x + 1 print("x is %d", x)</pre>	x is 4	Remember	CLO7	ACSB01.07
29	<p>At what point count&lt;100 is always True</p> <pre>int count = 0; while (count &lt; 100)     # Point A     print("Welcome to Python!")     count += 1     # Point B     # Point C</pre>	Point A	Remember	CLO7	ACSB01.07
<b>MODULE III</b>					
1	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() {     char str[] = "India\0BIX\0";     printf("%d\n", sizeof(str));     return 0; }</pre>	11	Remember	CLO13	ACSB01.13
2	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() {     char str[25] = "IndiaBIX";     printf("%s\n", &amp;str+2);     return 0; }</pre>	Garbage value	Remember	CLO13	ACSB01.13
3	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt;</pre>	Error	Remember	CLO13	ACSB01.13

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int main() {     char str = "IndiaBIX";     printf("%s\n", str);     return 0; }</pre>				
4	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() {     char str[] = "Nagpur";     str[0]='K';     printf("%s, ", str);     str = "Kanpur";     printf("%s", str+1);     return 0; }</pre>	Error	Remember	CLO13	ACSB01.13
5	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() {     printf(5+"IndiaBIX\n");     return 0; }</pre>	BIX	Remember	CLO13	ACSB01.13
6	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; #include&lt;string.h&gt;  int main() {     char sentence[80];     int i;     printf("Enter a line of text\n");     gets(sentence);     for(i=strlen(sentence)-1; i &gt;=0; i--)         putchar(sentence[i]);     return 0; }</pre>	The sentence will get printed in reverse order	Remember	CLO13	ACSB01.13

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
7	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; void swap(char *, char *);  int main() {     char *pstr[2] = {"Hello", "IndiaBIX"};     swap(pstr[0], pstr[1]);     printf("%s\n%s", pstr[0], pstr[1]);     return 0; }  void swap(char *t1, char *t2) {     char *t;     t=t1;     t1=t2;     t2=t; }</pre>	<p>Hello IndiaBIX</p>	Remember	CLO13	ACSB01.13
8	<p>What will be the output of the program (Turbo C in 16 bit platform DOS) ?</p> <pre>#include&lt;stdio.h&gt; #include&lt;string.h&gt;  int main() {     char *str1 = "India";     char *str2 = "BIX";     char *str3;     str3 = strcat(str1, str2);     printf("%s %s\n", str3, str1);     return 0; }</pre>	<p>IndiaBIX IndiaBIX</p>	Remember	CLO13	ACSB01.13
9	<p>If the size of pointer is 4 bytes then What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() {     char *str[] = {"Frogs", "Do", "Not", "Die",</pre>	<p>24, 5</p>	Remember	CLO13	ACSB01.13

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>"They", "Croak!"; printf("%d, %d", sizeof(str), strlen(str[0])); return 0; }</pre>				
10	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt;  int main() {     int i;     char a[] = "\0";     if(printf("%s", a))         printf("The string is not empty\n");     else         printf("The string is empty\n");     return 0; }</pre>	The string is empty	Remember	CLO13	ACSB01.13
12	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; #include&lt;string.h&gt;  int main() {     char str1[5], str2[5];     int i;     gets(str1);     gets(str2);     i = strcmp(str1, str2);     printf("%d\n", i);     return 0; }</pre>	Unpredictable integer value	Remember	CLO13	ACSB01.13
13	<p>What will be the output of the program in Turbo C?</p> <pre>#include&lt;stdio.h&gt;  int main()</pre>	Error	Remember	CLO13	ACSB01.13

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>{ char str[10] = "India"; str[6] = "BIX"; printf("%s\n", str); return 0; }</pre>				
14	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt;  int main() { char str1[] = "Hello"; char str2[] = "Hello"; if(str1 == str2) printf("Equal\n"); else printf("Unequal\n"); return 0; }</pre>	Unequal	Remember	CLO13	ACSB01.13
15	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; int main() { char t; char *p1 = "India", *p2; p2=p1; p1 = "BIX"; printf("%s %s\n", p1, p2); return 0; }</pre>	BIX India	Remember	CLO9	ACSB01.9
16	<p>What will be the output of the program ?</p> <pre>#include&lt;stdio.h&gt; #include&lt;string.h&gt;  int main() { printf("%c\n", "abcdefgh"[4]); }</pre>	e	Remember	CLO9	ACSB01.9

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>return 0; }</pre>				
17	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; #define MAX(a, b) (a &gt; b ? a : b)  int main() {     int x;     x = MAX(3+2, 2+7);     printf("%d\n", x);     return 0; }</pre>	9	Remember	CLO10	ACSB01.10
18	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; #define MIN(x, y) (x&lt;y)? x : y; int main() {     int x=3, y=4, z;     z = MIN(x+y/2, y-1);     if(z &gt; 0)         printf("%d\n", z);     return 0; }</pre>	3	Remember	CLO10	ACSB01.10
19	<p>What will be the output of the program?</p> <pre>#include&lt;stdio.h&gt; #define MIN(x, y) (x&lt;y)? x : y; int main() {     int x=3, y=4, z;     z = MIN(x+y/2, y-1);     if(z &gt; 0)         printf("%d\n", z);     return 0; }</pre>	print 'multiply'	Remember	CLO10	ACSB01.10

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
20	What will be the output of the program? <pre>#include&lt;stdio.h&gt; #define str(x) #x #define Xstr(x) str(x) #define oper multiply  int main() {     char *opername = Xstr(oper);     printf("%s\n", opername);     return 0; }</pre>	MESS	Remember	CLO10	ACSB01.10
21	What will be the output of the program? <pre>#include&lt;stdio.h&gt; #define MESS junk  int main() {     printf("MESS\n");     return 0; }</pre>	2, 3, 4,	Remember	CLO10	ACSB01.10
22	What will be the output of the program? <pre>#include&lt;stdio.h&gt; #define PRINT(i) printf("%d,",i)  int main() {     int x=2, y=3, z=4;     PRINT(x);     PRINT(y);     PRINT(z);     return 0; }</pre>	10	Remember	CLO10	ACSB01.10
23	What will be the output of the program? <pre>#include&lt;stdio.h&gt; #define MAX(a, b, c) (a&gt;b ? a&gt;c ? a : c: b&gt;c ? b : c)</pre>	Value of a is: 10 Value of b is: 20	Remember	CLO10	ACSB01.10

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int main() {     int x;     x = MAX(3+2, 2+7, 3+7);     printf("%d\n", x);     return 0; }</pre>				
24	<pre>#include &lt;stdio.h&gt; int calculate_fact(int); int main() {     int n=5,f;     f=calculate_fact(n); // calling a function     printf("factorial of a number is %d",f);     return 0; } int calculate_fact(int a) {     if(a==1)     {         return 1;     }     else     return a*calculate_fact(a-1); //calling a function     recursively. }</pre>	<p>Output:</p> <p>Value of a is: 13 Value of b is: 17</p>	Remember	CLO10	ACSB01.10
25	<pre>#include &lt;stdio.h&gt; int main() {     int arr[5]={1,2,3,4,5}; //an array consists of five     integer values.     for(int i=0;i&lt;5;i++)     {         printf("%d ",arr[i]);     }     return 0; }</pre>	<p>Output:</p> <p>factorial of a number is 120</p>	Remember	CLO10	ACSB01.10



S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
26	<p>What is the output of below C program?</p> <pre>#include&lt;stdio.h&gt; int function1(int);  int main() {     int k=30;     k = function1(k=function1(k=function1(k)));     printf("k=%d\n", k);     return 0; } int function1(int k) {     k++;     return k; }</pre>	<p>Output:</p> <p>1 2 3 4 5</p>	Remember	CLO10	ACSB01.10
27	<p>If the integer data type (int) is 2 bytes wide, what is the output of below program?</p> <pre>#include &lt;stdio.h&gt; void fun(char**); int main() {     char *argmntv[] = {"gh", "ef", "cd", "ab"};     fun(argmntv);     return 0; } void fun(char **x) {     char *y;     y= (x+= sizeof(int))[-1];     printf("%s\n", y); }</pre>	<p>k=33</p>	Remember	CLO10	ACSB01.10
28	<p>Find out the error in the below program?</p> <pre>#include&lt;stdio.h&gt; int main() {</pre>	<p>ef</p>	Remember	CLO10	ACSB01.10

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int b=15; void f1(); b = f1(); printf("%d\n", b); return 0; } void f1() { printf("Hello"); }</pre>				
29	<p>What is the output of below program?</p> <pre>#include&lt;stdio.h&gt; int chk (int, int);  int main() { int x; x = check(10, 20); printf("x=%d\n", x); return 0; } int check(int a, int b) { int *y, *z; y=&amp;a; z=&amp;b; a&gt;=45 ? return(*y): return(*z); }</pre>	Error: Not allowed assignment	Remember	CLO10	ACSB01.10
30	<p>What is the output of below program?</p> <pre>#include&lt;stdio.h&gt; int j; int function();  int main() { while(j) {</pre>	Compile error	Remember	CLO10	ACSB01.10

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre> function(); main(); } printf("Hiiii\n"); return 0; } int function() { printf("Hello"); } </pre>				
	<p>What is the output of below program?</p> <pre> #include&lt;stdio.h&gt; int j; int function();  int main() { while(j) { function(); main(); } printf("Hi\n"); return 0; } int function() { printf("Hello"); } </pre>	Hi	Remember	CLO10	ACSB01.10
<b>MODULE IV</b>					
1	<p>Predict the output of following C program.</p> <pre> #include&lt;stdio.h&gt; int main() { int **q, *p, i=8; p = &amp;i; q = &amp;p; </pre>	8	Understand	CLO14	ACSB01.14

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>printf("%d\n", **q); return 0; }</pre>				
2	<p>Predict the output of following C program.</p> <pre>#include &lt;stdio.h&gt; int main() {     int a[][3] = {1, 2, 3, 4, 5, 6};     int (*ptr)[3] = a;     printf("%d\n ", (*ptr)[2]);     return 0; }</pre>	3	Understand	CLO14	ACSB01.14
3	<p>Predict the output of following C program.</p> <pre>void foo(int*); int main() {     int i = 10, *p = &amp;i;     foo(p++); } void foo(int *p) {     printf("%d\n", *p); }</pre>	10	Understand	CLO14	ACSB01.14
4	<p>Predict the output of following C program.</p> <pre>#include&lt;stdio.h&gt; int main() {     intarr[] = {12, 13, 14, 15, 16};     printf("%d\n", sizeof(*arr));     return 0; }</pre>	4	Understand	CLO14	ACSB01.14
5	<p>Consider a compiler where int takes 4 bytes and pointer takes 4 bytes.</p> <pre>#include &lt;stdio.h&gt; int main() {     int arri[] = {1, 2 ,3};</pre>	8	Understand	CLO14	ACSB01.14

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>int *ptr1 = arri; printf("sizeof ptr1 = %d ", sizeof(ptr1)); return 0; }</pre>				
6	<p>Predict the output of following C program.</p> <pre>#include &lt;stdio.h&gt; void second() {     printf("first"); } void third() {     second(); } void main() {     void (*ptr)();     ptr = third;     ptr(); }</pre>	first	Understand	CLO14	ACSB01.14
7	<p>Predict the output of following C program.</p> <pre>#include &lt;stdio.h&gt; int main() {     char *p = NULL;     if (p)         printf(" p ");     else         printf("nullp"); }</pre>	nullp	Understand	CLO14	ACSB01.14
8	<p>Predict the output of following C program.</p> <pre>#include&lt;stdio.h&gt; int main() {     int arr[] = { 10, 20, 30, 40, 50, 60};     int *ptr1 = arr;     int *ptr2 = arr + 5;     printf("%d", (char*)ptr2 - (char*) ptr1); }</pre>	20	Understand	CLO14	ACSB01.14

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>return 0; }</pre>				
9	<p>Predict the output of following C program.</p> <pre>#include&lt;stdio.h&gt; int main() { int *iptr; int i, arr[2][2] = {10, 11, 12, 13}; iptr = *arr ; printf("%d ", *(iptr+2)); return 0; }</pre>	12	Understand	CLO14	ACSB01.14
10	<p>Predict the output of following C program.</p> <pre>#include &lt;stdio.h&gt; char* strFun(void) { char *str="IncludeHelp"; return str; } int main() { char *x; x=strFun(); printf("%s",x); return 0; }</pre>	IncludeHelp	Understand	CLO14	ACSB01.14
11	<p>Predict the output of following C program.</p> <pre>#include &lt;stdio.h&gt; int main() { char ch=20; void *ptr=&amp;ch; printf("%d,%d",*(char*)ptr,++(*(char* )ptr)); return 0; }</pre>	21 21	Understand	CLO14	ACSB01.14

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
12	Predict the output of following C program. <pre>#include&lt;stdio.h&gt; int main() { int a[3][4] = { 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 }; printf(" %u\n", *(a+0)+1)); return 0; }</pre>	2	Understand	CLO14	ACSB01.14
13	Predict the output of following C program <pre>int main() { int a[]={1,2,9,8,6,3,5,7,8,9}; int *p=a+1; int *q=a+6; printf("\n%d",q-p); }</pre>	5	Understand	CLO14	ACSB01.14
14	Predict the output of following C program <pre>#include &lt;stdio.h&gt; void fun(int *ptr) { *ptr=100; } int main() { int num=50; int *pp=# fun(&amp; *pp); printf("%d,%d",num,*pp); return 0; }</pre>	100,100	Understand	CLO14	ACSB01.14
15	Predict the output of following C program <pre>#include&lt;stdio.h&gt; int main() { char *p; p="hello";</pre>	h	Understand	CLO14	ACSB01.14

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>printf("%c",&amp;*p); }</pre>				
16	<p>What is the output of this C code?</p> <pre>int main() { struct node { int data; struct node *link; }; struct node *p, *q; p = (struct node *) malloc(sizeof(struct node)); q = (struct node *) malloc(sizeof(struct node)); printf("%d, %d\n", sizeof(p), sizeof(q)); return 0; }</pre>	2, 2	Understand	CLO15	ACSB01.15
17	<p>What is the output of this C code?</p> <pre>int main() { struct byte { int one:1; }; struct byte var = {1}; printf("%d\n", var.one); return 0; }</pre>	-1	Understand	CLO15	ACSB01.15
18	<p>What is the output of this C code?</p> <pre>struct course { int courseno; char coursename[25]; }; int main() { struct course c[] = { {102, "PPS"}, {103,</pre>	103 DotNet	Understand	CLO15	ACSB01.15



S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>"PYTHON"}, {104, "DotNet"} }; printf("%d ", c[1].courseNo); printf("%s\n", *(c+2).courseName); return 0; }</pre>				
19	<p>What is the output of this C code?</p> <pre>int main() { enum value{ VAL1=0, VAL2, VAL3, VAL4,             VAL5} var; printf("%d\n", sizeof(var)); return 0; }</pre>	2	Understand	CLO15	ACSB01.15
20	<p>What is the output of this C code?</p> <p>Size of the following union (assume size of int=2, size of float=4 and size of char=1);</p> <pre>union ABC { int a; float b; char c; };</pre>	4	Understand	CLO15	ACSB01.15
21	<p>What is wrong with the following code?</p> <pre>struct Book { char *name; struct Book PPS, JAVA; }Programming;</pre>	struct Book PPS and JAVA must be defined as struct Book *PPS, *JAVA;	Understand	CLO15	ACSB01.15
22	<p>What will be the output of the following code?</p> <pre>struct abc { int a; int b; } v[3], *p; main() { p=v;</pre>	3,3	Understand	CLO15	ACSB01.15

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>p-&gt;a=3; p-&gt;b=p-&gt;a; printf("\n%d\t%d", v[0].a, v[0].b); }</pre>				
23	<p>What will be the output of the following code?</p> <pre>struct {     int a;     double d;     float cp; }; void main() { printf("%d\t%d\t%d\t%d",sizeof(s.a),sizeof(s.d), sizeof(s.cp), sizeof(s)); }</pre>	4, 8, 4, 24	Understand	CLO15	ACSB01.15
24	<p>Consider the following declaration.</p> <pre>struct addr {     char city [10];     char street [20];     int pincode; }; struct {     char name[20];     int sex;     struct addr locate; } criminal, *kd * &amp;criminal; The third character in the criminal name can be accessed by</pre>	<p>criminal . name [2] B. kd —&gt; name [2] C. ( *kd) . name) [2]</p>	Understand	CLO15	ACSB01.15
25	<p>Consider the following structure.</p> <pre>struct numname {     int no;     char name[25]; };</pre>	18, 18	Understand	CLO15	ACSB01.15

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	<pre>struct numname n1[] = {{12, "Raja"}, {15, Selvan}, {18, Prema}, {21, "Naveen"}} }; The output of the following statement would be: printf("%d, %d", n1[2].no, ( *( n1 + 2)).no);</pre>				
26	<p>For the following declaration</p> <pre>union x {     char ch;     int I;     double j; } u_var; What is the value of sizeof( u_var)?</pre>	Same as sizeof( double)	Understand	CLO15	ACSB01.15
27	<p>What is the output of the following program?</p> <pre>typedef struct NType {     int i;     char c;     long x; } NewType; main() {     NewType *c;     c = ( NewType *) malloc( sizeof(NewType));     c-&gt;i = 100;     c-&gt;c = 'C';     (*c).x = 100L;     printf("(%d %c %4Ld)", c-&gt;i, c-&gt;c, c-&gt;x); }</pre>	100 C 100	Understand	CLO15	ACSB01.15
28	<p>The size of the following union, where an int occupies 4 bytes of memory is</p> <pre>union arc {     char x;     int y;     char ax[8]; }aha;</pre>	8 byte	Understand	CLO15	ACSB01.15

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
29	<p>What is the output of the following program?</p> <pre>union rainbow {     int a [5];     float x [5]; }; union rainbow color [20]; void *ptr = color; Which of the following is the correct way to increment the variable "ptr" to point to the next member of the array from the sample above?</pre>	<pre>ptr = ( void*)((union rainbow*) ptr + 1);</pre>	Understand	CLO15	ACSB01.15
30	<p>What is the output of the following program?</p> <pre>struct {     int x;     int y; }abc; You cannot access x by the following.</pre>	<pre>abc -&gt; x abc[0] -&gt;x (abc) -&gt;x</pre>	Understand	CLO15	ACSB01.15
<b>MODULE V</b>					
1	What is return value If there is any error while opening a file?	NULL	Understand	CLO17	ACSB01.17
2	What is the function is used to detect the end of the file?	feof()	Understand	CLO17	ACSB01.17
3	What is the index of the last argument in command line arguments is	argc – 1	Understand	CLO17	ACSB01.17
4	What are first and second arguments of fopen()?	A character string containing the name of the file & the second argument is the mode	Understand	CLO17	ACSB01.17
5	What mode is used to append binary files?	"b"	Understand	CLO17	ACSB01.17
6	What is the meaning if fseek() return 0?	successful	Understand	CLO17	ACSB01.17
7	What is the meant by 'a' in the following operation? fp = fopen("Random.txt", "a");	Append	Understand	CLO17	ACSB01.17
8	What is the mode used to truncate file handling?	w	Understand	CLO17	ACSB01.17

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
9	What is the value of EOF ?.	-1 or NULL	Understand	CLO17	ACSB01.17
10	Define the sequential file access method?	read bytes one at a time in order	Understand	CLO17	ACSB01.17
11	What are the arguments passed to fseek function?	FILE *pointer, long int offset, int position	Understand	CLO17	ACSB01.17
12	What is the statement used to create a file?	fp = fopen("textfile name", "mode");	Understand	CLO17	ACSB01.17
13	What is reserved word used to create file pointer?	FILE	Understand	CLO17	ACSB01.17
14	<pre>#include &lt;stdio.h&gt; int main() { FILE *fp = stdin; int n; fprintf(fp, "%d", 45); }</pre>	No Output	Understand	CLO17	ACSB01.17
15	Predict the output of following C program <pre>#include &lt;stdio.h&gt; #include &lt;stdlib.h&gt; int main() { FILE *fp = stdout; int n; fprintf(fp, "%d", 45); }</pre>	45	Understand	CLO17	ACSB01.17
16	Which sorting method is slowest among all the sorting techniques?	Bubble sort is slowest among all the sorting techniques.	Remember	CLO18	ACSB01.18
17	Define Bubble sort?	A sort which compares adjacent elements in a list and switches where necessary.	Remember	CLO18	ACSB01.18
18	Which of the following sorting methods will be the best if number of swapping done, is the only measure of efficiency	Selection sort	Remember	CLO18	ACSB01.18
19	As part of the maintenance work, you are entrusted with the work of rearranging the library books in a	Insertion sort	Remember	CLO18	ACSB01.18

S No	QUESTION	ANSWER	Blooms Level	CLO	CLO Code
	shelf in proper order, at the end of each day. The ideal choice will be				
20	Which sort is known as sinking sort	Bubble Sort	Remember	CLO18	ACSB01.18
21	In a selection sort of n elements, how many times is the swap function called in the complete execution of the algorithm?	n - 1	Remember	CLO18	ACSB01.18
22	When is insertion sort a good choice for sorting an array	The array has only a few items out of place	Remember	CLO18	ACSB01.18
23	What is time complexity of an algorithm?	Time complexity of an algorithm signifies the total time required by the program to run till its completion.	Remember	CLO19	ACSB01.19
24	What technique is used if the number of records to be sorted is small	Selection sort is used when the sorted data is less.	Remember	CLO18	ACSB01.18
25	What is the complexity of bubble sort algorithm?	$O(n^2)$	Remember	CLO19	ACSB01.19
26	What sorting is applied in the concept of storage purpose?	Internal sorting are applied when the entire collection if data to be sorted is small enough that the sorting can take place within main memory.	Remember	CLO18	ACSB01.18
27	What is the advantage of insertion sorting?	Insertion Sorting is a technique which puts an element in the appropriate place in a sorted list yields a larger sorted order list.	Remember	CLO18	ACSB01.18
28	Which Sorting algorithm is frequently used when total numbers of elements are less?	Insertion sorting is used when n is small where n is total number of elements.	Remember	CLO18	ACSB01.18
29	What sorting algorithm is used as priority queue sorting type?	Selection sort used as priority queue sorting type.	Remember	CLO18	ACSB01.18
30	What is the algorithm used if the given input array is sorted or nearly sorted and performance?	Insertion sort is the algorithm used if the given input array is sorted or nearly sorted and performance.	Remember	CLO18	ACSB01.18

Signature of the Faculty

Signature of the HOD