BISHOP HEBER COLLEGE (AUTONOMOUS), TIRUCHIRAPPALLI-620 017

Programme: I B.Sc CS **Semester: I**

Course Title: Introduction to Programming **Course Code: U15CS101**

Unit I

1. The C Language has been developed by
   (a) Patrick Naughton **(b) Dennis Ritchie**
   (c) Ken Thompson (d) Martin Richards
2. The C is a
   (a) High level language (b) Low- level language
   (c) Middle level language (d) Assembly language
3. The C programs are converted into machine language using
   (a) an assembler **(b) a complier**
   (c) an interpreter (d) an operating system
4. The C was developed in the year
   (a) 1972 (b) 1980
   (c) 1975 (d) 1971
5. The C language has been developed at
   (a) AT & T Bell Labs, USA (b) IBM, USA
   (c) Borland International, USA (d) Sun Microsystems
6. The C Language is an offspring of the
   (a) 'B' language (b) 'ALGOL' language
   (c) 'Basic' language (d) None of the above
7. The C Programs should be written only in
   (a) Lower case (b) upper case
   (c) Title case (d) sentence case
8. The role of a compiler is to translate source program statements to
   (a) Object codes (b) octal codes
   (c) Decimal codes (d) none of the above
9. The extension for C program files by default is
   (a) '.c' (b) '.d'
   (c) '.obj' (d) '.exe'
10. The C Language can be used with
    (a) Only UNIX operating system (b) only Linux operating system
    (c) Only MS-DOS operating system (d) all the above
11. The C language is closely associated with
    (a) MS-DOS (b) Linux
    (c) Unix (d) MS-Windows
12. The C Programs are highly portable. It means
    (a) Same Programs executes on different computers
    (b) Program executes only on the same computer
    (c) Program needs a lot of modification to run
    (d) None of the above
13. Each instruction in C Program is terminated by
    (a) dot (.) (b) Comma (,)
    (c) semi-colon (;) (d) Curly brace (})

14. Which one of the following statements is incorrect?
    (a) A compiler Complies the source program
    (b) An assembler takes an assembly program as input
    (c) A compiler does the same type of function as interpreter
    (d) None of the above
15. ANSI committee was setup in the summer of
    (a) 1983 (b) 1985
    (c) 1990 (d) 1976
16. The program which translates high level program into its equivalent machine Language program is called
    (a) Transformer (b) Language processor
    (c) Converter (d) None of the above
17. C is an offspring of the
    (a) Basic combine programming language
    (b) Basic Computer programming language
    (c) Basic programming language
    (d) None of the above
18. An interpreter reads the source code of a program
    (a) One line at a time (b) two lines at a time
    (c) Complete program in one stroke (d) none of the above
19. A complier complies the source code
    (a) Complete program in one stroke (b) one line at a time
    (c) Two lines at a time (d) none of the above
20. All the definitions and prototypes of function defined in ------- file.
    (a) C file (b) header file
    (c) OS file (d) batch file
21. Functions which are defined by the user are called ----------.
    (a) Self function (b) user defined function
    (c) predefined function (d) Header function
22. Every C program contains a number of several building blocks known as ----------.
    (a) Array (b) Structure
    (c) function (d) pointers
23. A character variable can store only
    (a) 1 character (b) 20 Characters
    (c) 254 Characters (d) None of the above
24. C variable cannot start with
    (a) A number (b) an alphabet
    (c) a character (d) none of the above
25. A short integer variable occupies memory
    (a) 2 bytes (b) 4 bytes
    (c) 1 byte (d) 8 bytes
26. C keywords are reserved words by
    (a) A compiler (b) an interpreter
    (c) header file (d) (b)&(c)
27. The declaration of C variable can be done
    (a) Anywhere in the program (b) in declaration part
    (c) in executable part (d) At the end of program

28. In C one statement can declare
    (a) Only one variable (b) two variables
    (c) ten variables (d) Any number of variables
29. The word 'int' is a
    (a) Keyword (b) password
    (c) header files (d) none of the above
30. The variables are initialized using
    (a) greater than(>) (b) equal to(=)
    (c) twice equal to(==) (d) An increment operator (++)
31. An unsigned integer variable contains values
    (a) Greater than or equal to zero (b) less than zero
    (c) only zeros (d) (a) & (b) both
32. The keyword 'const' keeps the value of a variable
    (a) Constant (b) mutable
    (c) variant (d) none of the above
33. Identifiers are
    (a) User defined names (b) reserved keywords
    (c) C statements (d) none of the above
34. In C every variables has
    (a) A type (b) a name
    (c) a value (d) a size
35. The range of character data type is
    (a) -128 to 127 (b) 0 to 255
    (c) 0 to 32767 (d) none of the above
36. The keyword 'volatile' keeps the value of variable
    (a) Constant (b) mutable
    (c) variant (d) none of the above
37. Which is the incorrect variable name
    (a) else (b) name
    (c) age (d) cha_r
38. How many keywords are there in ANSI C?
    (a) 32 (b) 33
    (c) 43 (d) 15
39. How many variables can be initialized at a time?
    (a) One (b) two
    (c) five (d) any number
40. The ANSI standard recognizes the maximum length up of a variable up tp
    (a) 31 characters (b) 8 characters
    (c) 25 characters (d) none of the above
41. The variable name can be started with
    (a) underscore (_) (b) asterisk symbol (*)
    (c) ampersand symbol (&) (d) none of the above
42. What will be the output of the following program?

```
# include <stdio.h>
# include <conio.h>
void main ( )
{
int ans = 2 ;
int m = 10 ;
```

```
int  k ;
k= ! ( ( ans<2) && (m>2) ) ;
printf("\n %d",k);
}
```

(a) 1 (b) 0
(c) -1 (d) 2

43. What will be the output of the following program?

```
#  include <stdio.h>
#  include <conio.h>
void main ()
{
int m, j=3, k;
m=2*j/2 ;
k=2*(j/2) ;
clrscr ( );
printf ("\n m=%d k=%d",m.k);
}
```

(a) m=3 k=2 (b) m=3 k=3
(c) m=2 k=3 (d) m=2 k=2

44. What will be the value of x,y and z after execution of the following program?

```
# include <stdio.h>
# include <conio.h>
void main ( )
{
 int x,y,z ;
y=2 ;
x=2 ;
x=2 * y++ ;
z=2  * (++y) ;
Printf ( ''\n x= %d y=%d z=%d'' ,x,y,z) ;
}
```

(a) x=4 y=4 z=8 (b) x=6 y=4 z=8
(c) x=2 y=4 z=8 (d) x=4 y=4 z=4

45. What will be the value of 'x' after execution of the following program?

```
# include <stdio.h>
# include <conio.h>
void main ( )
{
int x=!0*10 ;
}
```

(a) 10 **(b) 1**
(c) 0 (d) None of the above

46. What is the value of !0?

(a) 1 (b) 0
(c) -1 (d) none of the above

47. Hierarchy decides which operator

(a) is used first (b) is most important
(c) Operates on large numbers (d) None of the above

48. What will be the value of 'k' after execution of the following program?

```
# include  <stdio.h>
# include  <conio.h>
void main ( )
{
int k=8 ;
(k++ - k++);
}
```

(a) k= 10 (b) k=0
(c) k=8 (d) k=9

49. What will be the value of b after execution of the following program?

```
void main ( )
{
int  b,  k=8;
b=k++;
b--;
}
```

(a) b=11 (b) b=12
(c) b=7 (d) b=9

50. The '&' operator displays
(a) Address of the variable (b) value of the variable
(c) Both (a) and (b) (d) none of the above

51. Addition of two numbers is performed using
(a) Arithmetic operator (b) logical operator
(c) Unary operator (d) comma operator

52. What is the remainder of 8% 10?
(a) 8 (b) 2
(c) 1 (d) 0

53. What is the result of the expression (10/3)*3+5%3?
(a) 11 (b) 10
(c) 8 (d) 1

54. What is the result of expression (23*2) % (int) 5. 5?
(a) 2 **(b) 1**
(c) 3 (d) 0

55. What is the result of 16>>2?
(a) 4 (b) 8
(c) 2 (d) 5

56. What is the result of 5&&2?
(a) 0 **(b) 1**
(c) 2 (d) 5

57. What will be the value of c after execution of the program?

```
# include  <stdio.h>
# include  <conio.h>
void  main ( )
{
int a,b,c ;
a=9;
b=10;
```

```
c=(b<a  || b>a) ;
clrscr ( ) ;
printf ("\n c=%d",c);
}
```

(a) c=1 (b) c=0

(c) c=-1 (d) none of the above

58. What is the expansion of ASCII?
    (a) Asian Standard Code for Interchange Information.
    (b) American Standard Code for Interchange Information.
    (c) American Standard Code for Information Interchange.
    (d) American Section Code for Interchange Information
59. What is the value of 'z'?

```
int x=100;
int z;
z=(x==1 || x==100)? 1: 0;
```

(a) 100 (b) 0

(c) 1 (d) -100

60. What is the result of 'y'?

```
char x='a';
y=(x>=65 && x<=90? 1: 0);
```

(a) 0 (b) 1

(c) 65 (d) 90

Unit II

1. What will be the output of the following program?

```
main ( )
{
printf ("\n  %d%d%d%d",'A', 'B' ,'C' ,'D') ;
}
```

   (a) 65666768 (b) ABCD
   (c) 91929394 (d) none of the above

2. What will be the values of a and b after execution of the following program?

```
# include  <stdio.h>
# include <conio.h>
main ( )
{
int a,b ;
a= 65*66;
b='A'   * 'B' ;
Clrscr ( ) ;
Print f ("a=%d b=%d",a,b);
}
```

   (a) a=4290 b=4290 (b) a=4290 b=AB
   (c) a=4290 b=0 (d) none of the above

3. Which function is appropriate for accepting a string?
   (a) gets( ) (b) getch( )
   (c) getche ( ) (d) scanf ( )
4. What is the ASCII range for 0 to 9 digits?
   (a) 48 to 57 (b) 65 to 90
   (c) 97 to 122 (d) none of the above
5. What is the ASCII range for A to Z letters?
   (a) 65 to 90 (b) 48 to 57
   (c) 97 to 122 (d) none of the above
6. The escape sequence '\t' is a
   (a) Tab (b) next line
   (c) Back space (d) none of the above
7. What could be the value of x on execution of the program?

```
#  include  <stdio.h>
#  include  <conio.h>
void main ( )
{
float x=2.3;
clrscr ( ) ;
x+=.2;
Printf ("%g",x) ;
}
```

   (a) 2.5 (b) 4.3
   (c) 4 (d) none of the above

8. What will be the output of the following program?

```
main ( )
{
system ("dir") ;
}
```

(a) executing the dos command (b) syntax error
(c) Bad command or file name (d) none of the above

9. Which is the correct statement for finding the cube of 2?
(a) pow (2,3) ; (b) pow (3,2) ;
(c) pow (3) ; (d) none of the above
10. The abs ( ) function displays
(a) Absolute value (b) negative value
(c) zero value (d) none of the above
11. Which function is used for terminating the program?
(a) break() (b) close()
(c) exit() (d) none of the above
12. sleep() function is defined in ----------header file.
(a) dos.h (b)process.h
(c)stdlib.h (d)stdin.h
13. exit() function is defined in ---------- header file.
(a) dos.h (b)process.h
(c)stdlib.h (d)stdin.h
14. ---------- function is used to clear the screen.
(a) flush() (b)clear()
(c)clrscr() (d)clearscreen()
15. Which formatted string is used for printing hexa decimal value?
(a)%x (b) %h
(c)%hx (d)%xh
16. The ---------- statements checks the given condition and then executes its sub-block.
(a) Control (b) decision making
(c) assignment (d) none of the above
17. C uses the keyword --------- to execute a set of command lines or one command line when the logical condition is true.
(a) if (b) for
(c) break (d) none of the above
18. ---------- else statements are allowed with one if .
(a) no multiple (b) Multiple
(c) three (d) none of the above
19. The keyword ---------- allows the programmers to terminate the loop.
(a) Continue (b) goto
(c) break (d) if
20. The ---------- statement is used for continuing next iteration of loop statements.
(a) goto (b) continue
(c) break (d) none of the above
21. Which statement does not require any condition?
(a) goto (b)if
(c) switch (d) none of the above

22. The ---------- statement is a multi-way branch statement.
    (a) switch (b) if
    (c) for (d) while
23. Every case statement terminates with -----.
    (a) ; (b) :
    (c) ? (d) :-
24. The switch () can only test for ----------.
    (a) Logical (b) relational
    (c) equality (d) none of the above
25. The switch statement is used to
    (a) switch between functions in a program
    (b) switch from one variable to another variable
    (c) choose from multiple possibilities which may arise due to different values of a variable
    (d) use switching variables
26. The default statement is exceuted when
    (a) all the case statements are false (b) one of the case is true
    (c) one of the case is false (d) none of the above
27. Each case statement in switch ( ) is separated by
    (a) break (b) continue
    (c) exit ( ) (d) goto
28. The keyword else can be used with
    (a) if statement (b) switch ( ) statement
    (c) do. . while ( ) statement (d) none of the above
29. What will be the output of the following program?

```
# include <stdio.h>
# include <conio.h>
void main ( )
{
char x = 'H' ;
clrscr ( ) ;
switch (x)
{
case 'H': printf("%c",'H');
case 'E': printf("%c",'E');
case 'L': printf("%c",'L');
case 'I' : printf("%c",'L');
case'O': printf("%c",'O');
}
```

    (a) HELLO (b) HELLo
    (c) H (d) none of the above
30. What will be the output of the following program?

```
void main ( )
{
char x='G';
switch(x)
{
if (x=='B')
{
```

```
case 'd' :  printf("%,'o');
case 'B':  printf("%s","bad");
}
else
{
case'G' : printf("%s","Good");
default  : printf("%s","Boy");
}
}
```

(a) Good Boy (b) Bad Boy
(c) Boy (d) none of the above

31. What will be the output of the following program?

```
# include  <stdio.h>
# include  <conio.h>
void main ( )
{
char x='d' ;
clrscr ( ) ;
switch(x)
{
case 'b' :
puts ("0 1 001");
break;
default:
puts ( " 1  2  3 ") ;
break;
case 'R' :
puts ("I II III");
}
}
```

(a) 1 2 3 (b) 0 1 001
(c) I II III (d) none of the above

32. A------- is defined as a block of statements which are repeatedly executed for certain number of times
(a) loop (b) conditional
(c) input (d) none of the above
33. for(a=0;a<=20;) how many times this loop will execute?
(a) only one time (b) infinite
(c) 20 times (d) 19 times
34. ------ is the entry checking block.
(a) while (b) do while
(c) exit (d) none of the above
35. ------ is the exit checking block.
(a) while (b) do while
(c) exit (d) none of the above
36. What will be the value of 'c' after the execution of following program?

```
# include  <stdio.h>
# include  <conio.h>
```

```
void main ( )
{
int  c=1, d=0;
clrscr ( ) ;
while (d<=9)
{
printf("\n %d %d",++d,++c);
}
}
```

(a) 11 (b) 10
(c) 12 (d) 9

37. What will be the value of 'x' after the execution of following program?

```
# include  <stdio.h>
# include  <conio.h>
void main ( )
{
int k  ;
float  x=0;
clrscr ( ) ;
for (k=0; k<10; k++)
x+=.1;
printf ("\nx=%g",x);
}
```

(a) x=1.0 (b) x=0
(c) x=1.1 (d) none of the above

38. what will be the value of 'f' after the execution of following program?

```
# include  <stdio.h>
# include  <conio.h>
void main ( )
{
char k;
float f=65;
clrscr ( ) ;
for (k=1; k<=10; k++)
{
f-=.1;
}
printf ("\nf=%g",f);
}
```

(a) f=64 (b) f=-65
(c) f=-66 (d) none of the above

39. What would be the final value of 'x' after the execution of the following program?

```
#  include  <stdio.h>
#  include  <conio.h>
void main ( )
{
int x=1 ;
clrscr ( ) ;
do while (x<=10)
```

```
{
x++;
}
while (x<1);
printf ("\n x=%d",x);
}
```

(a) x=11 (b) x= 6

(c) x=2 (d) none of the above

40. What will be the final values of x and y?

```
# include  <stdio.h>
# include  <conio.h>
void main ( )
{
int x=1, y=1;
clrscr ( ) ;
do while (x<=8)
{
x++,y++;
} while (y<=5);
printf ("\n x=%d y=%d'',x,y) ;
}
```

(a) x=9 y=9 (b) x=9 y=6

(c) x=6 y=6 (d) none of the above

Unit III

1. An array is a collection of
   (a) different data types
   (b) same data types
   (c) both (a) and (b)
2. Array elements are stored in
   (a) scattered memory locations
   (b) sequential memory locations
   (c) both (a) and (b)
3. A character array always ends with
   (a) null ('\0') character.
   (b) Question mark (?).
   (c) Full stop (.).
4. If you declare array without stating the elements it will be set to
   (a) A null value
   (b) zero
   (c) garbage value
5. Arrays can not be initialized if they are
   (a) automatic
   (b) external
   (c) static
   (d) none of the above
6. All the elements in the array must be
   (a) initialized (b) efined
   (c) both (a) and (b) (d) none of the above
7. What will be the output of the following program?

```
#  include <stdio.h>
#  include <conio.h>
void main ( )
{
int al [5] = {1} ;
int b=0, k=0 ;
clrscr ( ) ;
for (b=0; b<=4; b++)
{
printf ("%3d",++a1[0])
}
}
```

   (a) 2 3 4 5 6 (b) 1 2 3 4 5
   (c) 1 1 1 1 1 1 (d) 1 2 2 2 2 2
8. The string always ends with
   (a) '\0' character (b) '\' character
   (c) '0\' character (d) None of the above
9. What will be the output of the program?

```
void main ( )
{
char nm [] = ( 'A', 'N', 'S', 'I', 'O','C','\0' }
int x=0
```

```
clrscr ( ) ;
while  (nm[x] !='\0')
printf ("%c",nm[x++]);
}
```

(a) ANSI (b)ANSI0C
(c)ANSIC (d)None of the above

10. What will be the size of character array?

```
void main ( )
{
char x [ ] = {'s','a', NULL};
printf ("\n  %d",sizeof(x) );
}
```

(a) 3 (b)2
(c)0 (d)None of the above

11. What will be the output of the following program?

```
# include <stdio.h>
# include <conio.h>
# include <string.h>
void main ( )
{
char x  [] = "a1b2c3d4e5f6g7h8i9j0" ;
int t=0 ;
clrscr ( ) ;
for (t=1;x[t]==0 && t<=strlen(x);t+=2)
printf ("%c",x[t]);
}
```

(a) 1234567890
(a) Abcdefghij
(b) A1b2c3d4e5f6g7h8i9j0
(c) None of the above

12. What will be the output of the following program?

```
#  include  <stdio.h>
#  include  <conio.h>

void main ( )
{
char txt [] ="12345\0abcdef";
clrscr ( );
printf ("%s",txt);
}
```

(a) 12345
(b) Abcdef
(c) 12345\0abcdef
(d) None of the above

13. What will be the output of the following program?

```
# include  <stdio.h>
```

```
# include  <conio.h>

void main ( )
{
char txt []="ABCDEF\0GHIJKL";
clrscr ( );
printf("%s %d",txt,sizeof(txt));
}
```

(a) ABCDEF 14
(b) ABCDEF\0GHIJKL 14
(c) ABCDEF 7
(d) None of the above

14. Which of the following statement is true after execution of following program?

```
int a[5]={2,3},*c;
c=a;
(*c)--;
```

(a) The value of a[0] will be 1;
(b) The value of a[0] will be 2;
(c) The value of a[1] will be 2;
(d) None of the above

15. The Fastest way to exchange two rows in a two-dimensional array is
    (a) Exchange the addresses of each element in the two rows
    (b) Exchange the elements of the two rows
    (c) Store the addresses of the two rows in an array of pointers and exchange the pointers
    (d) None of the above
16. Arrays are passed as arguments to a function by
    (a) value
    (b) reference
    (c) both (a) and (b)
    (d) none of the above

17. Is It necessary to declare the type of a function in the calling program if
    (a) the function returns a non-integer value
    (b) the function returns an integer
    (c) the function Is not defined in the same file
    (d) none of the above

18. Recursion is a process in which a function calls
    (a) itself
    (b) another function
    (c) main ( ) function
    (d) none of the above

19. By default the function returns
    (a) integer value
    (b) float value

(c) char value
(d) none of the above

20. The meaning of keyword void before the function name means
    (a) function should not return any value
    (b) function should return any value
    (c) no arguments are passed
    (d) none of the above

21. The function name itself is
    (a) an address
    (b) value
    (c) definition
    (d) none of the above

22. A global pointer can access variable of
    (a) all user-defined functions
    (b) only main ( ) functions
    (c) only library functions
    (d) none of the above

23. What will be the value of x and s on execution?

```
int x,s ;
void main (int) ;

void main(x)
{
printf ("\n x   = %d s = %d", x,s) ;
}
```

    (a) x=1 s=0
    (b) x=0 s=0
    (c) x=1 s=1
    (d) none of the above

24. The main ( ) is a
    (a) user defined function
    (b) library function
    (c) keyword
    (d) none of the above

25. What will be the value of x after execution

```
#  include <stdio.h>

void main ( )
{
float x=2.2,sqr(float), y;

y=(int) sqr (x) ;
printf ( "\n x=%g ", y) ;
}
```

```
float sqr (float m)
{  return (m*m) ; }
```

(a) x=4
(b) x=4.84
(c) x=4.50
(d) none of the above

26. what is the data type of variable m

```
void main ( )
{
int x=2 ;
Sqr (x) ;
}
Sqr (m)
{  return (m*m) ; }
```

(a) int
(b) float
(c) char
(d) void

27. A Static variable is one that
    (a) retains its value throughout the life of the program
    (b) cannot be initialized
    (c) is initialized once at the commencement of the execution and cannot be changed at the runtime
    (d) is same as an automatic variable but is placed at the head of the program.

28. An external variable is one
    (a) which is globally accessible by all functions
    (b) which is declared outside the body of any function
    (c) which resides in the memory till the end of the program
    (d) all the above

29. If a storage class is not mentioned in the declaration then default storage class is
    (a) automatic
    (b) static
    (c) external
    (d) register

30. If the CPU fails to keep the variables in CPU registers, in that case the variables are assumed
    (a) automatic
    (b) static
    (c) external
    (d) none of the above

31. What will be the value of variable 'x' on execution of the following program

```
# include <stdio.h>
# include <conio.h>
```

```
int x ;
void main ( )
{
clrscr ( ) ;
x++ ;
printf ("\n %d",x);
}
```

(a) x=1
(b) x=0
(c) garbage value
(d) none of the above

32. ---------- is the outcome of the function.

(a) Return value (b) formal value (c) actual value (d) none of the above

33. A ---------- Statement helps the compiler to check the return type and argument type of the function.

(a) function calling (b) function prototype (c) function return (d) none of the above

34. The ---------- variables defined within the body of the function or the block.

(a) Global variable (b) External variable (c) static variable (d) Local variable

35. ---------- variables can be accessed by multiple functions.
(a) Global variable (b) External variable (c) static variable (d) Local variable

36. A ---------- is a self contained block or a sub program of one or more statements that performs a special task when called.
(a) Array (b) structure (c) function (d) pointer

37. The arguments of calling functions are ----------.
(a) Formal arguments (b) actual arguments (c) called arguments (d) none of the above

38. The arguments of called functions are ----------.

(a) Formal arguments (b) actual arguments (c) called arguments (d) none of the above

39. Value of actual arguments are passed to the formal arguments and the operation is done on the formal arguments is called ----------.
(a) Call by value (b) call by reference (c) array (d) none of the above

40. Function operates on addresses rather than value is called ----------.

(a) Call by value (b) call by reference (c) array (d) none of the above

41. Which function is used for appends source string to destination string.

(a) strlen() (b)strcpy() (c)strcmp() (d) strcat()

42. Which function is used for comparing two strings without discriminate between small
and capital letters?

(a) strcmp() (b)strncmp() (c)stricmp() (d) strcpy

43. ---------- function is used for comparing characters of two strings upto specified length with ignoring case.

(a) strcmp() (b)strncmp() (c)strnicmp() (d)none of the above

44. ---------- function determines first occurrence of a given string in another string.
(a) strstr() (b) strchr() (c) strrchr() (d) none of the above.

45. Which function is used for finding number of characters in a given string?

(a) strlength() (b) stringlen() (c) strlen() (d)numchar()

Unit IV

1. Which is the correct way to declare a pointer?
(a) int *ptr; (b)* int ptr ; (c)int ptr *; (d)int_ptr x;

2. What will be the result of the following program?

```
void main ( )
{
int a=8, b=2, c, *p;
a=a+b;
 b=a/b;
 a=a*b;
 b=a-b;
c=b;
p=&c;
clrscr ( ) ;
printf ("\n %d",++*p);
}
```

(a) 45 (b)46 (c)50 (d)5

3. What will be the resulting string after the execution of the following program?

```
# include  <stdio.h>
# include  <conio.h>
# include  <string.h>

main ( )
{
      char *strl, *strl2, * str3;
       strl="The capital of India is " ;
       str2="!!ihleD weN" ;
       str3= "Bangalore";

       strncat ( strl, strrev (str2), strlen(str3)) ;
      clrscr ( ) ;
      puts (str1);
  }
```

(a) The capital of India is New Delhi
(b) The capital of India is New Delhi!!
(c) The capital of India is Bangalore
(d) None of the above

4. What will be the values of variables a and b after execution?

```
#  include <stdio.h>
#  include <conio.h>
#  include <string.h>

void main ( )
{
int a, *b=&a, **c=&b;
```

```
a=5 ;
**c=15;
*b=**c;
clrscr ( ) ;
printf ("A=%d, B=%d", a,*b);
}
```

(a) A=15, B= 15
(b) A=15, B=5
(c) A=15, B=16
(d) None of the above

5. What will be the value of variable a1 and a2 after execution?

```
#  include <stdio.h>
#  include <conio.h>

main ( )
{
int a1, a2, c=3,*pt;
pt=&c
a1=3*(c+5) ;
a2=3*(*pt+5) ;
}
```

(a) A= 24, B=24
(b) A=12, B=24
(c) A=12, B=24
(d) None of the above

6. What will be the value of x after execution of the following program?

```
# include <stdio.h>
#  include <conio.h>

void main ( )
{
int x,*p ;
p=&x;
*p=2 ;
clrscr ( ) ;
printf (\n value of x =%d",x);
}
```

(a) x=2
(b) x=0
(c) x=65504
(d) none of the above

7. The structure combines variables of
(a) Dissimilar data types (b) similar data types (c) unsigned data types
(d) none of the above

8. The member variable of structure are accessed by using
(a) dot(.) operator (b) arrow (->) operator (c)asterisk (*) operator

(d) ampersand (&) operator

9. Identify the most appropriate sentence to describe union

(a) unions contain members of different data types which share the same storage area in memory
(b) unions are like structure
(c) unions are less frequently used in the program
(d) unions are used for set operations

10. The typedef statement is used of
(a) Declaring user defined data types (b) declaring variant variables (c) for typecasting of variables (d) none of the above

11. The union holds
(a) one object at a time (b) multiple objects
(c) both (a) and (b) (d) none of the above

12. Observe the following program neatly and choose the appropriate printf( ) statement from the options

```
struct month
{
char *month;
};
void main ( )
{
struct month m = {"March"};
------
}
```

(a) **printf("\n Month : %s", m.month);**
(b) printf("\n Month : %s", m->month);
(c) printf("\n Month : %s", m.*month);
(d) printf("\n Month : %s", *m.month);

36. Enumeration is used for creating ----------data type.
(a) predefined (b) user defined (c) builtin (d) none of the above

37. enum month {jan,feb,mar,aug,sep};
int m;
m=mar;

What is the value of m?

(a) 0 (b) 2 (c) 3 (d) 5

38. struct book

```
{
char name[15];
char author[25]
int pages;
};
struct book *ptr;
```

Which statement is correct for accessing structure member variable name?

(a) *ptr.name (b)ptr.name (c) ptr->name(d) *ptr->name

39. One structure variable as the member of another structure is called as ----------.
(a) Array of structure (b) structure within structure (c) pointer structure (d) none of the above

17. An ---------- is a set of named integer constants that specify all the legal values a variable of that type may have.

(a) Enumeration (b) typedef (c) structure (d) union

18. enum {bombay,delhi,chennai=13, Calcutta};
What is value assigned to Claucutta?
(a) 4 (b) 12 **(c) 14** (d)3

19. ---------- defined a new name for an existing type.

(a) union (b) structure (c) typedef (d) enum

20. The variables that make up the structure are called ----------.
(a) Structure variables (b) structure definition (c) structure operator (d) none of the above

21. Structure is used for storing ---------- type of data.
(a)heterogeneous (b) homogeneous (c) none of the above

22. A pointer variable is a place to store ----------.
(a) Values (b) addresses (c) variables (d) none of the above

23. An array name is truly a pointer to the ---------- element in that array.
(a) last (b) first (c) last-1 (d) none of the above

24. A ---------- is an array of characters, terminated with a null character.
(a) int (b) double (c) string (d) character

20. What is value of c?

```
int c=10,*ptr;
ptr=&c;
```

++*ptr ;

(a) 10 **(b) 11** (c) 100 (d) 101

26. A ---------- enables us to access a variable that is defined outside the function.
(a) Array (b) function (c) pointer (d) none of the above
27. The computer's memory is a sequential collection of ----------.
(a) Storage cells (b) rows (c) columns (d) none of the above

28. &125 points what?
(a) Pointing at expressions (b) pointing at array names (c) pointing at constants (d) none of the above

29. int x[10];
&x; points what?
(a) Pointing at expressions (b) **pointing at array names** (c) pointing at constants (d) none of the above

30. &(x+y) points what?
(a) **Pointing at expressions** (b) pointing at array names (c) pointing at constants (d) none of the above

31. datatype *pt_name;
In the above syntax the asterisk(*) tells that the variable pt_name is a ---------- variable.
(a) Local (b) Global (c) pointer (d) none of the above
32. int x,*pt;
Pt=&x;
Pt points to a variable of type----------.
(a) **int** (b) float (c) double (d) long int
33. astrisk(*) usually known as the ---------- operator.
(a) Direction (b) multiplication (c) concatenation (d) **indirection**

34. The character arrays with the rows of varying length are called ----------.
(a) Single array (b) ragged array (c)stringlength (d) none of the above

35. The process of calling a function using pointers to pass the addresses of variable is known as ----------.
(a) Call by call (b) call by reference (c) call by value (d) none of the above

36. ---------- that provides information about their location and visibility.
(a) Variable (b) function clauses (c) storage clauses (d) none of the above

37. Local variable known to only to the function in which it is declared
(a) Auto (b) static (c) extern (d) register

38. Local variables which exist and retain its value even after the control is transferred to the calling function.
(a) Auto (b) static (c) extern (d) register

39. Global variable known to all functions in the file.
(a) Auto (b) static (c) extern (d) register

40. Local variable which is stored in the register.
(a) auto (b) static (c) extern (d) register

UNIT V

1. The fscanf() statements reads data from
(a) file (b) keyboard (c) both(a) and (b) (d) none of the above

2. When fopen() fails to open a file it returns
(a) NULL (b) 1 (c) -1 (d) none of the above

3. A file opened in w+ mode can be
(a) read / write (b) only read (c) only write (d) none of the above

4. This function is used to detect the end of file
(a)feof() (b) ferror (c) fputs() (d) fgetch()

5. At the beginning feof() return the value

(a) -1 (b) 0 (c)1 (d) none of the above

6. The fprintf() statements write data into
(a) file (b)monitor (c) both(a) and (b) (d) none of the above

7. --------- is used to find out error when file read write operation is carried out.
(a) errorfile() (b) errorf() (c) ferror() (d) none of the above

8. What is the value of SEEK_CUR, SEEK_END and SEEK_SET?
(a)0,1,2 (b) 1,2,0 (c)2,1,0 (d)1,0,2

9. ---------- allow us to store information permanently in the disk.
(a) file (b) keyboard (c)monitor (d) none of the above

10. The preprocessor directives are always initialized at the ---------- of the program.
(a) Ending (b) middle (c) beginning (c) anywhere

12. ---------- is used for reads the character from current pointer position and advances the pointer to next character.
(a) fscanf() (b) fgetc() (c)gets() (d)none of the above

13. ---------- is used for writing numerical data into a file
(a) getw() (b)getn() (c) getw() (d)geti()
.
14. ---------- is used for reading structure data from a file
(a) fprintf() (b) fread() (c) fscanf() (d)fgetc()

15. ---------- is used for sets the pointer position anywhere in the file.

(a) fseek (b) ftell (c)fpointer() (d) none of the above

15. ---------- function is used for returns the current pointer position
(a) fseek() (b)fpointer() (c) ftell() (d) none of the above

16. ---------- function sets the record pointer at the beginning of the file.
(a) rewind () (b)ftell() (c)fseek() (d) none of the above

40. ---------- is a program that processes the source code before it passes through the compiler.
(a) Array (b) structure (c) pointers (d) preprocessor

41. Preprocessor directives are starts with symbol
(a) = (b) & (c) # (d)*

19. ---------- is a process where an identifier in a program is replaced by a predefined string composed of one or more tokens

(a) fileinclusion (b) compiler control directives (c) macro substitution(d) none of the above

20. Using of one macro in the definition of another macro is called ----------.
(a) Simple macro (b) macro with arguments (c) file inclusion (d)nested macro

21.A defined macro can be undefined ,using the statement
(a) #undef (b)#undo (c)#redo (d) *undo

22. An external file containing functions are macro definitions can be included as a part of program so that we need not rewrite those functions or macros definition. This is achieved by ---------- method.
(a) Simple macro (b) file inclusion (c) compiler control (d) nested file

23. ---------- mode is used for adding a new content with already existing content and also read the existing content.

(a) w (b) r (c)a (d) a+

24. ---------- function is used for getting a single character from file.
(a) getc (b)getw() (c) putchar() (d)putc()

25. ---------- function is used to handled a group of mixed data simultaneously read from a file
(a) getc() (b) fscanf() (c) getchar() (d)getw()

26. The ---------- function is used to test for an end of file condition.
(a) EOF (b) eoffile (c) feof() (d)none of the above

27. The ---------- function reports the status of the file indicated.
(a) feof() (b)EOF() (c)fopen() (d)ferror()
28.If end of file reached then what is the return value of feof()?
(a) 1 (b) -1 (c) 0 (d) none of the above

29. ftell function takes a file pointer and returns a number of type --------.
(a) int (b) string (c) long (d) double

30. The ---------- specifies the number of positions to be moved from the location specified by position.
(a) Offset (b) file pointer (c) position (d) none of the above

31. To go the end of the file, past the last character of the file which is used?
(a) fseek(fp,0L,0) (b) fseek(fp,0l,1)

(c) fseek(fp,m,0) (d) fseek(fp,0L,2)

32. To go backward by m bytes from the current position which command is used?
(a) fseek(fp,0L,0) (b) fseek(fp,-m,1)

(c) fseek(fp,m,0) (d) fseek(fp,0L,2)

33. The C language includes the header file standard input & output in
(a) stdlib.h library (b) stdio.h library
(c) conio.h library (d) #include library

34. What is the output of the following program segment?

```
main()
{
int i = 1;
do
{ printf("%d..", i);
} while(i--);
}
```

(a) 0..1.. (b) 1..0.... (c) 0 (d) -1

35. What is the output of the following program segment?

```
main()
{
int i = ++2;
printf("%d\n", i);
```

}
(a) 3 **(b)** 2 **(c)** 0 **(d)** -1

36. The function fprintf is used in a program
(a) When too many printf calls have been already used in the program.
(b) In place of printf, since printf uses more memory.
(c) When the output is to be printed on to a file.
(d) When the type of variables to be printed are not known before.

37. The purpose for mode "w+b" in file operation is
(a) create a binary file for write
(b) create a binary file for read/write
(c) open a binary file for writing
(d) open a binary file for reading/writing

38. Which of the following is FALSE in C
(a) Keywords can be used as variable names
(b) Variable names can contain a digit
(c) Variable names do not contain a blank space
(d) Capital letters can be used in variable names
39. int **ptr; is
(a) Invalid declaration (b) Pointer to pointer
(c) Pointer to integer (d) none of the above

40. Which of the following numerical value is invalid constant
(a) .75 (b) 9.3e2 (c) 27,512 (d) 123456

INTRODUCTION TO PROGRAMMING

Answer key

SEMESTER:I **Code: U15CS101**

Unit I

Qno	Answer	
1.	b	Dennis Ritchie
2.	c	Middle level language
3.	b	A compiler
4.	a	1972
5.	a	AT &T Bell Labs, USA
6.	a	'B' language
7.	a	Lower case
8.	a	Object codes
9.	a	.c
10.	d	All the above
11.	c	Unix
12.	a	Same program executes on different computers
13.	c	Semicolon(;)
14.	c	A compiler does the same type of function as interpreter
15.	a	1983
16.	c	Converter
17.	a	Basic combined programming language
18.	a	One line at a time
19.	a	Complete program in one stroke
20.	b	Header file
21.	b	User defined function
22.	c	Function
23.	a	1 character
24.	a	A number
25	a	2 bytes
26.	a	A compiler
27.	b	In declaration part
28.	d	Any number if variables
29.	a	Keyword
30.	b	Equal to(=)
31.	a	Greater than or equal to zero
32.	a	Constant
33.	a	User defined names
34.	e	All the above
35.	a	-128 to 127
36.	b	Mutable
37.	a	Else

38.	**a**	**32**
39.	**a**	**One**
40.	**a**	**31 characters**
41.	**a**	**Underscore(_)**
42.	**a**	**1**
43.	**a**	**M=3 k=2**
44.	**a**	**X=4 y=4 z=8**
45.	**b**	**1**
46.	**a**	**1**
47.	**a**	**Is used first**
48.	**a**	**10**
49.	**c**	**7**
50.	**a**	**Address of the variable**
51.	**a**	**Arithmetic operator**
52	**a**	**8**
53.	**a**	**11**
54.	**b**	**1**
55.	**a**	**4**
56.	**a**	**0**
57.	**a**	**C=1**
58	**c**	**American Standard code for Information Interchange**
59.	**c**	**1**
60.	**a**	**0**

Unit II

Qno.	Answer	
1.	a	65666768
2.	a	a=4290 b=4290
3.	a	gets()
4.	a	48 to 57
5.	a	65 to 90
6.	a	tab
7.	a	2.5
8.	a	executing the dos command
9.	a	pow(2,3);
10.	a	absolute value
11	c	exit()
12.	a	dos.h
13.	b	process.h
14.	c	clrscr()
15.	c	%hx
16.	b	decision making
17.	a	if
18.	a	no multiple
19.	c	break
20.	b	continue
21.	a	goto
22.	a	switch
23.	b	:
24.	c	equality
25.	c	Choose from multiple possibilities which may arise to different values of a variable.
26.	a	all the case statements are false
27.	a	break
28.	a	if statement
29.	a	HELLO
30.	a	Good Boy
31.	d	none of the above
32.	a	loop
33.	b	infinite
34.	a	while();
35.	b	do while
36	c	12
37.	a	x=1.0
38.	a	f=64
39.	a	x=11
40.	a	x=9 y=9

UNIT III

Qno	answer	**
1.	b	same datatypes
2.	b	sequential memory locations
3.	a	null('\0') character
4.	c	garbage value
5.	a	automatic
6.	c	both (a) and (b)
7.	a	23456
8.	a	'\0 ' character
9.	b	ANSI0C
10.	a	3
11.	a	1234567890
12.	a	12345
13	b	ABCDE FGHIJKL13
14.	a	The value of a[0] will be 1
15.	c	Store the addresses of the two rows in an array of pointers and exchange the pointers
16	b	Reference
17.	a	The function returns a non-integer value
18.	a	Itself
19.	a	Integer value
20.	a	Function should not return any value
21	a	An address
22.	a	all user-defined functions
23.	b	x=0,s=0
24	a	User defined function
25.	a	4.0
26	a	int
27.	a	Retains its value throughout the life of a program
28.	a	Which is globally accessible by all functions
29.	a	Automatic
30	a	Automatic
31.	a	1
32	a	Return value
33	b	Function prototype
34.	d	Local variable
35.	a	Global variable
36.	c	Function
37.	b	Actual arguments
38.	a	Formal arguments
39.	a	Call by value

40	**b**	**Call by reference**
41.	**d**	**Strcat**
42.	**c**	**Stricmp()**
43.	**c**	**Strnicmp**
44	**a**	**Strstr**
45.	**c**	**Strlen()**

UNIT IV

Qno	Answer	
1.	a	int *ptr
2.	b	46
3.	a	The capital of Inida is New Delhi
4.	a	a=15,b=15
5.	a	a=24, B=24
6.	a	x=2
7.	a	Dissimilar data types
8.	a	dot(.) operator
9.	a	unions contain members of different data types which share the same storage area in memory.
10.	a	Declaring user defined datatypes
11.	a	one object at a time
12.	a	printf("\nMOnth: %s",m.month);
13.	b	user defined
14.	b	2
15	c	ptr->name
16.	b	structure within structure
17.	a	enumeration
18	c	14
19	c	type def
20	b	addresses
21	a	heterogeneous
22	b	addresses
23	b	first
24	c	string
25.	b	11
26.	c	pointer
27.	a	stroage cells
28.	c	pointing at constants
29.	b	pointing at array names
30.	a	pointing at expressions
31.	c	pointer
32	a	int
33	d	indirection
34.	b	ragged array
35.	b	call by reference
36.	c	storage clauses
37.	a	Auto
38.	b	static
39.	c	extern
40.	d	register

UNIT V

Qno.	Answer

1.	**a**	**file**
2.	**a**	**NULL**
3.	**a**	**read/write**
4.	**a**	**feof()**
5.	**b**	**0**
6.	**a**	**file**
7.	**c**	**ferror()**
8.	**b**	**1,2,0**
9.	**a**	**file**
10.	**c**	**begining**
11.	**b**	**fgetc()**
12.	**a**	**getw()**
13.	**b**	**fread()**
14.	**a**	**fseek()**
15.	**c**	**ftell()**
16.	**a**	**rewind()**
17.	**d**	**preprocessor**
18.	**c**	**#**
19.	**c**	**macro substitution**
20	**d**	**nested macro**
21	**a**	**#undef**
22.	**b**	**file inclusion**
23.	**c**	**a+**
24.	**a**	**getc()**
25.	**b**	**fscanf()**
26.	**c**	**feof()**
27.	**d**	**ferror()**
28.	**C**	**0**
29.	**c**	**long**
30	**a**	**offset**
31	**d**	**fseek(fp,0l,2);**
32.	**b**	**fseek(fp,-m,1)**
33.	**b**	**stdio.h library**
34	**b**	**1….0….**
35.	**a**	**3**
36	**c**	**When the output is to be printed on to a file**
37	**b**	**Create a binary file for read/write**
38	**a**	**Keywords can be used as variable names**
39	**b**	**Pointer to pointer**
40	**c**	**27,512**