

B.E/B.TECH. DEGREE EXAMINATIONS: DECEMBER 2008

First Semester

U07GE102 FUNDAMENTALS OF COMPUTING**(Common to ALL Branches)****Time: Three Hours****Maximum Marks: 100****PART A (20 x 1=20 Marks)****Answer ALL Questions:-**

1. CD-ROM is a
 - (a) Semiconductor memory
 - (b) Memory register
 - (c) Magnetic memory
 - (d) Read Only Memory
2. The ALU of a computer normally contains a number of high speed storage elements called
 - (a) Semiconductor memory
 - (b) Registers
 - (c) Hard Disk
 - (d) Magnetic Disk
3. Which of the following is the fastest?
 - (a) CPU
 - (b) Magnetic tapes and Disks
 - (c) Video terminal
 - (d) Sensors, Mechanical controllers
4. Compilers and interpreters are themselves
 - (a) High-level language
 - (b) Codes
 - (c) Programs
 - (d) Mnemonics
5. One of the latest technologies in mobile computing is
 - (a) PSTN
 - (b) Multimedia
 - (c) GPRS
 - (d) News Pad
6. URL is _____
 - (a) A computer software program
 - (b) A type of web server
 - (c) The address of a document or 'page' on the world wide web
 - (d) An acronym for Unlimited Resources for Learning
7. The Internet is owned by
 - (a) The US government
 - (b) A consortium of telecommunication companies
 - (c) Internet Engineering Task Force (IETF)
 - (d) No owner for Internet
8. The string containing certain required formatting information is called
 - (a) argument
 - (b) character array
 - (c) character string
 - (d) control string
9. A computer system having 64 K memory will have its last address as
 - (a) 65536
 - (b) 64000
 - (c) 65535
 - (d) 65530
10. main () is an example of
 - (a) library function
 - (b) user-defined function
 - (c) header
 - (d) statement

11. A string is like an array because
 (a) an array is a kind of string (b) they are both character arrays
 (c) both of them access functions the same way (d) a string is a kind of array
12. A program can be terminated by any time by calling the function
 (a) fflush() (b) ferror() (c) exit() (d) clearer()
13. The declaration void f(int a) means
 (a) f accepts two floating-point arguments and returns a floating --point value
 (b) f accepts a long integer and returns a long integer
 (c) f accepts an integer and returns nothing
 (d) f accepts nothing but returns a character
14. The function that sets the position to a desired point in the file is
 (a) fseek() (b) ftell() (c) getw() (d) putc()
15. A function in C language contains
 (a) function body (b) argument declarations
 (c) a function header (d) other C functions
16. The argument printf() function is known as
 (a) control string (b) newline character (c) preprocessor (d) array
17. One structure cannot be
 (a) a member of some other structure (b) a member of the same structure
 (c) a member of a union (d) a member of some other union
18. Given the specification

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struct s_type{
  int i;
  char str [60];
}s, *p;

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 The statement that assigns to 'p' the address of 's' is
 (a) p=&s; (b) p=s,I; (c) s= &p; (d) p=*s;
19. A union consists of a number of elements that
 (a) occupy the same space in memory
 (b) must be structures
 (c) are grouped next to each other in memory
 (d) All may have same type.
20. Which of the following is a declaration for a function that accepts an argument which is a pointer to an integer quantity and returns a pointer to a six-element character array?
 (a) char(*p(int *a)[6]); (b) char p(int (*a)[6]);
 (c) char p(int *a[6]) (d) char *p(int a[6]);

PART B (5 x 16= 80 Marks)

21.(a) Explain various components of computer system, control unit and internal registers of CPU with memory diagrams

(OR)

(b) (i) Discuss briefly about 'generation of computers' (8)

(ii) Write about the classification of computers (8)

22. (a) Write about Internet services in detail, with necessary diagrams

(OR)

(b) (i) Explain about different flow chart symbols (8)

(ii) Discuss various program control structures (8)

23. (a) List and explain, in detail, various operators in C language

(OR)

(b) Explain about following with an example (4 x 4)

(i) Nested if-else statement

(ii) switch() case statement

(iii) Nested for loops

(iv) do while statements with while loops

24. (a) Explain the following operations with arrays (2 x 8)

(i) searching (ii) merging

(OR)

(b) List and explain various string functions

25. (a) (i) Write a program to show the increment on pointer variables. Display the changes in the memory locations before and after execution. (8)

(ii) Write a program to use structure within union. Display the contents of structure elements (8)

(OR)

(b) (i) Write a program to read string from the keyboard and display it using a character pointer. (8)

(ii) Write a program to display the string using pointer. (8)
