DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE – RAIGAD -402 103

Winter Semester Examination - Dec. - 2019

Branch: - B Tech Computer Engineering Sem.:- I Marks: 60 Subject:-Basic Computer Programming (ICT106/ICT206) Date: - 23/12/2019 Time: - 3 Hr. Instructions to the Students: 1. Each question carries 12 marks. 2. Attempt any five questions of the following. 3. Illustrate your answers with neat sketches, diagram etc., wherever necessary. 4. If some part or parameter is noticed to be missing, you may appropriately assume it and should mention it clearly (Marks) $\mathbf{Q}.\mathbf{No.1}$ a) Explain Error checking and Debugging of program. (06)Explain in detail Arithmetic, Relational and Logical operators in C. b) (06)Q.No.2 Attempt any two of the following: (12)**a**) Why Compiling is important in C programming? How to compile Program? b) What is Conditional Expressions? How it is used in C? Write short note on both. c) i) Flowchart ii) Data Types in C Q.No.3 a) Write difference between While loop, Do While loop and For loop. (06)b) Suppose new generation of transport Bus (root Mumbai to Kolhapur) has no conductor in it, and there is machine at the door of bus has functionality for ticket booking, in that there are four options which indicates Stops of journey like 1-Panvel, 2 -Pune, 3-Satara, 4-Kolhapur. Passenger have to enter appropriate choice, if no option chosen then it will consider Kolhapur as default and book Ticket Accordingly. Write a program to develop such functionality. (06)O.No.4 a) Define following terms with proper example. (06)i) Static Variables ii) Register Variables iii) Function Q.No.4 b) What will be the output if you will compile and execute the following code? Choose correct option from given bellow and justify your answer. (06)

```
i)
                      void main(){
                      int i=10;
                      static int x=i;
                      if(x==i)
                             printf("Equal");
                      else if(x>i)
                             printf("Greater than");
                      else
                             printf("Less than");
       (A) Equal
                     (B) Greater than
                                           (C) Less than (D) Compiler error
                                                                                (E) None of above
              ii)
                     void start();
                     void end();
                     #pragma startup start
                     #pragma exit end
                     int static i;
                     void main(){
                                     printf("\nmain function: %d",++i);
                     void start(){
                                     clrscr();
                                     printf("\nstart function: %d",++i);
                     void end(){
                                    printf("\nend function: %d",++i);
                                     getch();
       (A) main function: 2
                               (B) start function: 1
                                                           (C) main function: 2
                                                                                  (D) Compiler error
          start function: 1
                                    main function: 2
                                                              end function: 3
          end function: 3
                                    end function: 3
                                                              start function: 1
                                                                                   (E) None of these
Q.No.5 a)
              Why do we use Arrays in C? What is Multidimensional Array?
                                                                                                     (06)
         b)
              What is Command Line Argument? How to use command line argument explain with
              any program.
                                                                                                     (06)
Q.No.6
              Attempt any two of the following:
                                                                                                    (12)
         a)
              What is structures? How to create structures? How to declare structure variable? How
              to initialize structure members? What is an array of structure?
              What happen if Standard Library is not present in C? Explain any Two Headers in
        b)
              Standard Library.
              Write a program to identify, number entered by user is EVEN or ODD.
         c)
                                           --PAPER END--
```