

5. a) What is an 'array' ? How can it be declared ? How can it be initialised ? Discuss with examples.
- b) Write program to sort a set of numbers (use Bubble sort algorithm). 3+2
6. What is user-defined function ? How does it differ from the main function? Write a function to generate and print first 10 (ten) Fibonacci numbers. Discuss recursive function. 10
7. What is 'storage class'? Discuss different storage classes available in C language. 10

FIRST B. SC. EXAMINATION, 2019

(3rd Semester)

COMPUTER SCIENCE**PAPER - UNIT -2**

Time : Two hours

Full Marks : 50

Answer *any five* questions

1. a) What is an 'algorithm' ? Write three characteristics of an algorithm.
- b) Write a C program to find the value of 'e' using its series representation. 4+6
2. a) What is the difference between the H structure and loop structure? Discuss with appropriate example.
- b) Write a program to generate and print the following pattern. 5+5

```

      1
     2  3
    4  5  6
   7  8  9 10

```

3. a) What are 'break' and 'continue' statements ? Discuss with examples.
- b) Write a program to print first 25 prime numbers. 4+6
4. What is 'Switch case' structure? Explain the structure with the help of a program. How does it work ? 10

[Turn over

6. Discuss in brief different disk scheduling methods. 10
7. What is virtual memory in connection with memory management system. How can it be achieved with the help of 'Demand Paged Memory Allocation System' – Explain with figure. 10

INTER B. SC. EXAMINATION, 2019
 (2nd year, 1st Semester)
UNIT - 7 (COMPUTER SCIENCE)
 Time : Two hours
 Full Marks : 50
 Answer *any five* questions

1. What is translator ? Why do we need translator ? Write the different types of translator. Discuss in brief the functions of different phases of compiler. 10
2. What is 'three address code' ? What are the types of different 'three address code' ? Discuss in brief. 10
3. Define 'operating system'. Explain the following types of operating systems –
 i) Multiprogrammed Batched Systems
 ii) Time-Sharing systems
 iii) Parallel Systems.
4. Write the systems components of operating system. Discuss their functions in brief. 10
5. What is process ? What is process control block ? Write the informations associated with process control block. Explain in brief. 10

[Turn over