4008-04

Total Pages : 4

Degree (Part-II) (Vocational) Examination, 2022

(Honours)

COMPUTER APPLICATION

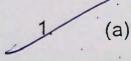
[Paper : Fourth]

[PPU-D-II-(H)-BCA-4]

Time : Three Hours]

[Maximum Marks: 75]

Note : Candidates are required to give their answers in their own words as far as practicable the questions are of equal value. Attempt any five questions.



Define Date Structure and Operations perform on it.

Define Time and Space Complexities analysis of an Algorithm.

2. (a)

(b)

Define the singly linked list. Also write a program to create singly linked list.

- (b) Define circular singly and doubly linked list.
- (a) Write an algorithm to convert an infix expression into postfix expression.
 - (b) Write a program to implement a stack using a array.
 - (a) Define linear queue. How circular queue is better than linear queue.
 - (b) Write a function to delete a number in circular queue.

(a) . Define binary tree and its types. PPULearn.com

- (b) Define the traverse of a Binary tree with an example.
- 6. (a) Define the Expression tree. Create the expression tree of the following expressions :

(i)
$$(a-b)+(c \times d)$$

- (i) $a+b/c \times d-e$
- (b) Write a function to insert a number into a Binary search tree.

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A.

https://ppulearn.com/

(a) Define the threaded Binary tree.

7.

- (b) Define the AVL tree and also discuss the advantages of it.
- 8. (a) Discuss the representation of Graph.
 - (b) Define the depth first search Algorithm.

9. Define the AUTOCAD with its features.

- 10. Write short notes on any three of the following :
 - (a) Binary search
 - (b) Bubble sort PPULearn.com
 - (c) Selection sort
 - (d) Minimum spanning tree

(3)