

**Bharati Vidyapeeth**  
**(Deemed to be University), Pune**  
**School of Distance Education**

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Assignment No.: 1

<b>Course:</b>	MCA	<b>Class:</b>	MCA I	<b>Semester:</b>	II
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<b>Subject:</b>	Data Structures and Algorithms
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**Q.1) Attempt ANY ONE of the Following (1000 Words) (10)**

- a) What is abstract data type? Explain stack as an ADT.
- b) Explain binary search algorithm with example.

**Q.2) Attempt ANY TWO of the Following (800 Words) (12)**

- a) Explain different applications of data structures.
- b) Explain different hashing techniques.
- c) Explain quick sort algorithm with example.
- d) What is binary tree? Explain its different properties.

**Q.3) Write Short Notes on (ANY TWO) (08)**

- a) B Tree
- b) Queue
- c) Array
- d) Linked List

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