

Date :- 26/03/2022

Examination Roll No. :- 21312915017

Name of Program :- B. Tech. (Information Tech. and Mathematical Innovation)

Semester :- I<sup>st</sup> Sem.

Unique Paper Code :- 32861104

Title of the Paper :- Understanding Computer System Architecture.

### Solution 6

A/O.

$R_1 \rightarrow 120$

400	Instruction
401	Add field (700)

(i) Direct.

$$EA = 700$$

(ii) Immediate

$$EA = 401$$

(iii) Relative

$$EA = 700 + 402$$
$$= 1102$$

(iv) Register Indirect.

$$EA = 120$$

(v) Index with  $R_1$  as index register.

$$EA = 700 + 120$$
$$= 820.$$