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180010011

DECE

Tuesday

Assignment - 09QAM) Given cache size = $1KB = 2^{10}B$ i) line size = $64B = 2^6$

Total size of Memory = 32 Bits

offset size = 6 bits

$$\text{Cache size} = \frac{2^{10}}{2^6} = 2^4$$

Index size = 4

$$\text{Tag size} = 32 - 4 - 6 = 22.$$

Address Format \rightarrow

Tag(22)	Index(4)	Offset(6)
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ii) Associate Mapping -

$$\text{Line size} = 64B = 2^6B$$

$$\text{Cache size} = 1KB = 2^{10}B$$

$$\text{Memory size} = 32B$$

$$\text{Tag} = 32 - 6 = 26.$$

Address format \rightarrow

Tag(26)	offset(6)
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