

Total No. of Questions – [03]

Total No. of Printed Pages: 01

G.R. No.	
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paper code IT : U239-142(T1)
comp : U239-122(T1)

OCTOBER 2019/ INSEM (T1)
S. Y. B.TECH. (COMPUTER ENGINEERING/ INFORMATION TECHNOLOGY)
(SEMESTER – III)

COURSE NAME: DISCRETE MATHEMATICS
COURSE CODE: ES21182CS / ES21182IT
(PATTERN 2018)

Time: [1 Hour]

[Max. Marks: 20]

(* Instructions to candidates:

- 1) All questions are compulsory.
- 2) Figures to the right indicate full marks.
- 3) Use of scientific calculator is allowed.
- 4) Assume suitable data where ever required.

MARKING SCHEME

Q 1

- | | | |
|----|--------------------------------|-------|
| a) | I) 1 mark to each sub question | marks |
| | II) 1 mark basis step | 04 |
| | 1 mark hypothesis | 04 |
| | 2 marks inductive step | |

OR

- | | | |
|----|---------------------------|----|
| b) | I) 1 mark to formula | |
| | 2 marks for solving | 04 |
| | 1 mark for correct answer | |
| | II) Each diagram 1 marks | 04 |

Q 2

- | | | |
|----|---------------------------------|----|
| a) | I) 2 marks to each sub question | 04 |
|----|---------------------------------|----|

- | | | |
|--|-----------------------------------|----|
| | II) 2 marks to each hasse diagram | 04 |
|--|-----------------------------------|----|

OR

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|----|-----------------------------------|----|
| b) | I) 1 mark to each sub question | 04 |
| | II) 1 mark to each correct matrix | 04 |

Q 3

- | | | |
|----|--|----|
| a) | 3 marks for path calculation (distance calculation) steps, 1 mark for final path | 04 |
|----|--|----|

OR

- | | | |
|----|--|----|
| b) | 1 mark for answer and 1 mark for explanation - Hamiltonian | 04 |
| | 1 mark for answer and 1 mark for explanation - Eulerian | |