

M.Sc. (Physics) (NEP Pattern) Semester-II
02MSCPH4-3 - DSE-III : Practical Electronics

P. Pages : 1

Time : Three Hours



GUG/S/25/15420

Max. Marks : 80

Either:

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|----|----|--|---|
| 1. | a) | Explain the programming of a ROM. | 8 |
| | b) | What is semiconductor memory? Explain in details Read Only Memory (ROM). | 8 |

OR

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| | e) | Explain Random Access Memory (RAM) & explain their uses. | 8 |
| | f) | Explain the Read & Write operation of RAM. | 8 |

Either:

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| 2. | a) | Explain internal microprocessor architecture of 8086. | 8 |
| | b) | Explain stack memory addressing modes. | 8 |

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| | e) | Draw the pin diagram of IC8085 microprocessor and label all pins clearly. | 8 |
| | f) | Explain clock generator (8284A) | 8 |

Either:

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| 3. | a) | Describe the LED and LCD display devices. | 8 |
| | b) | Explain the operation of TFT. | 8 |

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| | e) | Explain the principle and working of CRT display with neat diagram. | 8 |
| | f) | Explain the operation of Touch Screen. | 8 |

Either:

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| 4. | a) | Explain working of amplitude modulation with suitable circuit diagram. | 8 |
| | b) | Discuss fundamentals of optical communications. | 8 |

OR

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| | e) | Discuss microwave oscillators. | 8 |
| | f) | Explain the construction & working of Klystron. | 8 |

5. Attempt all of the followings:

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|--|----|--|---|
| | a) | Write short notes on Seven-Segment display device. | 4 |
| | b) | Describe recent trends in microprocessor technology. | 4 |
| | c) | Explain technical issues in display devices. | 4 |
| | d) | Explain phase modulation. | 4 |
