

Centre :

Test Series : 04 NOVEMBER 2004 SERIES D

Module : 346017 ENERGY AND ELECTRICITY

**Candidate Number :****UCI :****Candidate Name :**

*For completion by the Examination Invigilator. Please fill this oval if the candidate is absent:*

## FOUNDATION TIER

▶ Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully. ◀

Questions ONE to FIVE: Choose **one** answer for each of the parts 1 to 4.

| QUESTION ONE | 1                     | 2                     | 3                     | 4                     |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| black        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| increase     | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| reduce       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| white        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION TWO                              | 1                     | 2                     | 3                     | 4                     |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| connects metal case of appliance to earth | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| holds the cable firmly                    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| insulates the plug                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| wire inside melts if current is too high  | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION THREE                 | 1                     | 2                     | 3                     | 4                     |
|--------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| current                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| frequency                      | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| potential difference (voltage) | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| power                          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION FOUR                | 1                     | 2                     | 3                     | 4                     |
|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| coal                         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| solar energy                 | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| tides                        | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| water pumped to a high level | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION FIVE | 1                     | 2                     | 3                     | 4                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| diode         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| filament lamp | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| LDR           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| thermistor    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Questions SIX and SEVEN: Choose **two** answers for each question.

| QUESTION SIX   |                       |
|--|-----------------------|
| all energy which is transferred eventually ends up as heat         | <input type="radio"/> |
| most of the wasted energy appears as electricity                   | <input type="radio"/> |
| some of the wasted energy is destroyed                             | <input type="radio"/> |
| the wasted energy becomes spread out                               | <input type="radio"/> |
| the wasted energy is always available for further useful transfers | <input type="radio"/> |

| QUESTION SEVEN |                       |
|----------------|-----------------------|
| P              | <input type="radio"/> |
| Q              | <input type="radio"/> |
| R              | <input type="radio"/> |
| S              | <input type="radio"/> |
| T              | <input type="radio"/> |

Questions EIGHT to TEN: Choose **one** answer for each of the parts 1 to 4.

| QUESTION EIGHT | A                     | B                     | C                     | D                     |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 8.1            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.2            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.3            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.4            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION NINE | A                     | B                     | C                     | D                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 9.1           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.2           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.3           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.4           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION TEN | A                     | B                     | C                     | D                     |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 10.1         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.2         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.3         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.4         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

# HIGHER TIER

Instructions on how to complete this answer sheet are given on the question paper. Please make sure you follow them carefully.

Questions ONE and TWO: Choose **one** answer for each of the parts 1 to 4.

| QUESTION ONE  | 1                     | 2                     | 3                     | 4                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| diode         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| filament lamp | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| LDR           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| thermistor    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION TWO | 1                     | 2                     | 3                     | 4                     |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| conduction   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| convection   | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| radiation    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| vibration    | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Questions THREE and FOUR: Choose **two** answers for each question.

| QUESTION THREE |                       |
|----------------|-----------------------|
| P              | <input type="radio"/> |
| Q              | <input type="radio"/> |
| R              | <input type="radio"/> |
| S              | <input type="radio"/> |
| T              | <input type="radio"/> |

| QUESTION FOUR                                      |                       |
|--|-----------------------|
| the reading on V2 is twice the reading on V1       | <input type="radio"/> |
| the reading on V2 is three times the reading on V1 | <input type="radio"/> |
| the reading on V3 is twice the reading on V1       | <input type="radio"/> |
| the reading on V3 is three times the reading on V1 | <input type="radio"/> |
| the reading on V3 is twice the reading on V2       | <input type="radio"/> |

Questions FIVE to TEN: Choose **one** answer for each of the parts 1 to 4.

| QUESTION FIVE | A                     | B                     | C                     | D                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 5.1           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.2           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.3           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5.4           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION SIX | A                     | B                     | C                     | D                     |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 6.1          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6.2          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6.3          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6.4          | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION SEVEN | A                     | B                     | C                     | D                     |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 7.1            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.2            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.3            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.4            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION EIGHT | A                     | B                     | C                     | D                     |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 8.1            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.2            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.3            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.4            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION NINE | A                     | B                     | C                     | D                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 9.1           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.2           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.3           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9.4           | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| QUESTION TEN | A                     | B                     | C                     | D                     |
|--------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 10.1         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.2         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.3         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10.4         | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

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