

## **GENERAL EDUCATION AND TRAINING CERTIFICATE**

## **NQF LEVEL 1**

## **ABET LEVEL 4 SITE-BASED ASSESSMENT**

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| **LEARNING AREA** | **:** | **MATHEMATICAL LITERACY** |
| **CODE** | **:** | **MLMS4** |
| **TASK** | **:** | **TEST** |
| **DURATION** | **:** | **90 MINUTES** |
| **MARKS** | **:** | **50** |

**This assessment task consists of 5 pages** **and 1 addendum.**



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| **INSTRUCTIONS AND INFORMATION** |  |  |

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| 1. | Answer ALL the questions. |  |  |

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| 2. | Calculators may be used. |  |  |

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| 3. | ALL calculations must be shown and all answers must be rounded off to TWO decimal places, unless otherwise stated. |  |  |

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| 4. | Use ADDENDUM (attached), to answer QUESTIONS 2.1.1 and 2.1.3. Write your NAME and EXAMINATION NUMBER in the space provided and submit it with the ANSWER BOOK. |  |  |

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| QUESTION 1 |  |  |

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| 1.1 | Calculate the following: |  |  |

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|  | 1.1.1 | 68,8 – 33,464 |  | (1) |

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|  | 1.1.2 | 64,4 × 3 – (125 + 25,4) |  | (2) |

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|  | 1.1.3 | 23 × ( ) |  | (2) |

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|  | 1.1.4 |  |  | (2) |

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|  | 1.1.5 |  |  | (3) |

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| 1.2 | (FIGURE 1–FIGURE 3) below shows patterns of stars.  How many stars will figure 4 have? |  |  |

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|  | |  | | --- | |  |         **FIGURE 1 FIGURE 2 FIGURE 3 FIGURE 4** |  | (1) |

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| 1.3 | Express 25% as a decimal fraction. |  | (1) |

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| 1.4 | Which ONE of the following is greater:  or 6 |  | (1) |

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| 1.5 | Write  in percentage form. |  | (1) |

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| 1.6 | Arrange the following measurements in descending order:  3 000 m*ℓ*  30 *ℓ*  3 k*ℓ* |  | (3) |

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| 1.7 | A mine operates 24 hours per day and the mine employees work in three equal shifts per day. |  |  |

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|  | 1.7.1 | How many hours does each shift have? |  | (1) |

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|  | 1.7.2 | In April 2016, the mine was shut down for 2 days for maintenance purposes.  Determine the ratio of the lost hours in April 2016. |  | (2) |

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|  | 1.7.3 | Calculate the number of minutes which mine employees spent working in April 2016. |  | (2) **[22]** |

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| QUESTION 2 |  |  |

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| 2.1 | The following record represents the duration (in minutes) MLMS4 students spend studying Mathematical Literacy in a day:  31; 54; 29; 23; 20; 47; 43; 49; 28; 26; 34; 45; 47; 47; 33; 53; 53; 49; 41; 48; 38; 35; 37; 43; 44; 40; 41; 43; 44; 42; 39; 36; 52; 44; 41; 55; 53; 46; 45; 56 |  |  |

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|  | 2.1.1 | Use ADDENDUM (attached) to complete the tally table representing the information given above.   |  |  |  | | --- | --- | --- | | **Number of students spending a specific duration studying** | | | | **Time (*min*)** | **Tallies** | **Frequency (*f*)** | |  |  |  | | **<30** | **~~/ / / /~~** |  | | 30 – 34 |  | **3** | | 35 – 39 |  |  | | 40 – 44 |  |  | | 45 – 49 |  |  | | 50 – 54 |  |  | | 55 – 59 |  |  | |  | (10) |

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|  | 2.1.2 | How many students took part in the survey? |  | (1) |

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|  | 2.1.3 | Use ADDENDUM (attached) to complete a bar graph using the information given in QUESTION 2.1.1. |  |  |

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|  | **Number of students** | **Number of students spending a specific duration studying**    **Time in (*min*)** |  | (5) |
| 2.2 | The marks of learners who spend 45 – 49 minutes studying are presented below: | |  |  |

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|  | 52; 33; 45; 49; 61; 57; 33; 46; 68 |  |  |

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|  | Find the following: |  |  |

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|  | 2.2.1 | Mean |  | (1) |

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|  | 2.2.2 | Median |  | (2) |

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|  | 2.2.3 | Range |  | (1)  **[20]** |

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| QUESTION 3 |  |  |

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| 3.1 | Jane participated in a game of luck called the Wheel of Fortune and the wheel can only spin once. Use the information in the Wheel of Fortune to answer the following questions: |  |  |

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|  | **WHEEL OF FORTUNE**  **300**  **200**  **200**  **400**  **300**  **700**  **600**  **400**  **100**  **500**  **100**  **500**  **JP**  **BR**  **BR**  **1000**    **KEY:**  JP – Jackpot  BR – Bankrupt  Amount in Rands |  |  |

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|  | 3.1.1 | How many possible outcomes are there in this wheel of fortune? |  | (1) |

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|  | 3.1.2 | What is the probability of getting R500? |  | (1) |

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|  | 3.1.3 | What is the probability of not spinning bankrupt? |  | (1) |

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| 3.2 | The distance from Johannesburg to Durban as the crew flies is 800 km. Use the formula: Average speed =  to answer the following questions: |  |  |

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|  | 3.2.1 | It takes Mr Makobe 6 hours to travel from Johannesburg to Durban by car. Calculate the average speed at which Mr Makobe was travelling in km/h. |  | (2) |

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|  | 3.2.2 | If a jet aeroplane is travelling at an average speed of 800 km/h, how many minutes will it take the jet to complete the journey from Johannesburg to Durban? |  | (3)  **[8]** |

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| TOTAL: |  | **50** |

**ADDENDUM A**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| **EXAMINATION NUMBER:** |  |  |  |  |  |  |  |  |  |  |  |  |  |

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| --- | --- |
| **NAME:** |  |

**QUESTION 2**

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|  | 2.1.1 | Complete the following frequency table:   |  |  |  | | --- | --- | --- | | **Number of students spending a specific duration studying** | | | | **Time (*min*)** | **Tallies** | **Frequency (*f*)** | |  |  |  | | **< 30** | **~~/ / / /~~** |  | | 30 – 34 |  | **3** | | 35 – 39 |  |  | | 40 – 44 |  |  | | 45 – 49 |  |  | | 50 – 59 |  |  | |  | (10) |

