**FORM FOUR MATHEMATICS PAPER 2**

**MARKING SCHEME**

|  |  |  |
| --- | --- | --- |
| **No** | **Working** | **Remarks** |
| 1 |  | M1  M1  A1 |
| 2 | |  |  |  | | --- | --- | --- | | **No** | **Std form** | **Log** | | 45.3  0.00697 |  |  | | 0.534 |  |  | |  |  |  | |  |  |  | | M1 all correct logs  M1 addition & subtraction  M1 cube root  A1 correct answer |
| 3 | Actual area =  Maximum area =  Minimum area =  Absolute error =  Percentage error = | M1  M1  A1 |
| 4 | Amount as a result of borrowing =  Amount as a result of appreciation =  Profit = | M1  M1  A1 |
| 5 |  | M1  A1 |
| 6 |  | B1  M1  A1 |
| 7 | ........... (i)  .......... (ii)  Solving (i) and (ii) simultaneously, | M1 (both equations)  A1 (both k & m)  B1 |
| 8 |  | M1  M1  A1 |
| 9 |  | M1  M1  A1 Both values |
| 10 | Radius =  Centre | M1  M1  A1 |
| 11 |  | B1  B1  B1  B1 |
| 12 | Area = | M1  M1  A1 |
| 13 |  | M1  A1  B1 |
| 14 | Let | M1  A1  B1 |
| 15 | Let AC | M1  M1  A1 |
| 16 |  | M1 (both values)  M1  A1 |
| 17 | 1. (i)   (ii)         1. (i)   (ii) | B1  B1  B1  B1  B1  M1  M1  A1 (both )  B1  B1 |
| 18 | C:\Users\user\Desktop\T32021\img20220202_17354840.jpg | B1 –lines QR, PR  B1 -  B1 – complete figure |
|  | B1 |
|  | M1 M1  A1 |
|  | 1. Line bisectors   Circle correctly drawn | B2  B1 |
| 19 | 1. Taxable income =   pounds   1. 1st band   2nd band  3rd band  4th band  5th band  Total tax payable       1. Net salary | M1  A1  M1  M1  M1  A1  M1  A1  M1  A1 |
| 20 | 1. (i) Width = Length   and    (ii) Remaining area | M1  M1  M1  A1  M1  A1  M1  A1  M1  A1 |
| 21 | C:\Users\user\Desktop\T32021\P2 21.jpg   1. (i)           (iii)  (iv) | B2 – for all probability space  M1  A1  M1  M1  A1  M1 A1  M1  A1 |
| 22 |  | M1  M1  M1  A1  M1  M1 A1  M1  M1  A1 |
| 23 | 4. Total length = | M1  A1  B1  M1  A1  B1  M1  A1  M1  A1 |
| 24 | 1. Table of values  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | |  | 0 | 1 | 4 | 9 | 16 | 25 | 36 | |  | 0 |  |  |  |  |  |  | |  | 5 | 0 |  |  |  | 0 | 5 | | B1  B1  B1 - axes & scale  B1 - plotting  B1 - curve  B1  B1  B1  B1  B1 |
|  |
| 1. (i)   (ii) Draw a graph of    (iii) Draw graph of |