**MATHS**

**OPENER EXAMINATION TERM 3, 2022**

**PAPER 1 MARKING SCHEME**

|  |  |  |
| --- | --- | --- |
| No | Working | Comments  |
| 1 | LCM of 30, 45 and 54 = Least value of *x* =  | M1M1 A1 |
| 2 | N | M1M1A1 |
| 3 |  | B1 – B1 --- B1 ---  |
| 4 |    2.5 Integral values are  | M1A1A1 |
| 5 |  ...... (i) ..... (ii)From (i),  | M1M1A1 both values |
| 6 | Distance by bus in 2 hrs Time taken to catch up = Distance travelled =  | M1M1 A1 |
| 7 |  | M1M1A1 |
| 8 | Total charges = Fuel costs = Monthly bill =  | M1M1A1 |
| 9 | 1.
2.

  | B1B1B1 |
| 10 |  ......(i) ......... (ii)Subtracting (ii) from (i)   | M1M1A1 |
| 11 |  | M1A1 |
| 12 | 1.

C:\Users\user\Desktop\ML EXAMS\IMG_20220827_123903.jpg1. DM cm
 | B1 – line AB and BCB1 for angle ABCB1 – parallelogramB1 |
| 13 |  | M1A1 |
| 14 | Volume  | M1M1 A1 |
| 15 |  | M1M1M1A1 both values |
| 16 | At  | M1A1M1A1 |
| 17 | 1.

 1.
 | M1M1A1 both coordinatesM1A1M1M1 A1M1A1 |
| 18 | 1. (i) Area of circular base

 (ii)  1. Total S Area =
 | M1 A1B1M1M1 A1M1 A1M1A1 |
| 19 | 1. Det =

 1. Let the cost of Beans = *x* and rice = *y*

1. New price of beans =

New price of rice = Total cost =  | M1A1M1M1 M1M1A1M1M1A1 |
| 20 | 1. Using cosine rule

  Using sine rule1. Angle DAC =

 1. Area of

Area of Total area  | M1M1M1M1 A1M1A1M1M1A1 |
| 21 | Thus  | B1B1M1M1M1M1A1M1M1 A1 |
| 22 | 1.
2.
 | B1M1A1M1 A1M1 A1M1 A1B1 |
| 23 | 1.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Class  |  |  |  |  |
|  | 8.1 | 5 | 40.5 | 5 |
|  | 8.6 | 4 | 34.4 | 9 |
|  | 9.1 | 7 | 63.7 | 16 |
|  | 9.6 | 7 | 67.2 | 23 |
|  | 10.1 | 10 | 101 | 33 |
|  | 10.6 | 3 | 31.8 | 36 |
|  | 11.1 | 1 | 11.1 | 37 |
|  |  | **37** | **349.7** |  |

 1. (i)

  Median =   1.

 | B1B1M1 M1A1M1 M1A1B1 – correct scaleB1 --- correct frequency polygon |
| 24 | 1. (i)

    or  | M1A1M1M1A1M1M1A1 both valuesM1A1 |