**MATHEMATICS**

**FORM FOUR PAPER ONE**

 **MARKING SCHEME**

|  |  |  |
| --- | --- | --- |
| No | Working | Marks  |
| 1 |  | M1M1A1 |
| 2 |  | M1M1A1 |
| 3 | Doctor A will give jabs to 3 teachers in 6 minutesDoctor B will give jabs to 2 teachers in 6 minutes minutes | MIM1A1 |
| 4 |  | M1M1A1 |
| 5 |  | M1M1A1 |
| 6 | Acc =  | M1M1 A1 |
| 7 | Heptagon Sum of interior angles =  | M1M1A1 |
| 8 | L.S.F = V.S.F = Volume of smaller cylinder =  | M1M1A1 |
| 9 |   | B1B1B1 |
| 10 |  Integral values area  | M1M1A1B1 |
| 11 |     | M1M1A1 |
| 12 | Balance after spending = Amount US dollars =  | M1M1A1 |
| 13 | C:\Users\user\Desktop\ML EXAMS\T2 2023\img20230706_18274721.jpg – completeLines Angle ABCShortest distance BX | B1B1B1B1 |
| 14 |  (4 s.f) | M1M1A1 |
| 15 | 1. Total capacity =

Capacity of P =  | B1M1M1 A1 |
| 16 | First day Second day Third day = Amount received =  | M1M1A1 |
| 17 |  |  |



|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 1.

|  |  |  |  |
| --- | --- | --- | --- |
| Class  |  |  |  |
|  | 152 | 5 | 760 |
|  | 157 | 13 | 2041 |
|  | 162 | 12 | 1944 |
|  | 167 | 10 | 1670 |
|  | 172 | 7 | 1204 |
|  | 177 | 3 | 531 |
|  |  | **50** | **8 150** |

 | B1B1 – columnB1 – columnM1A1 |



|  |  |  |
| --- | --- | --- |
| 19 | 1. Volume of hemisphere =

Volume of cylinder = Volume of reagent = 1. Volume of reagent in cylindrical part =

 height = 1. Hemisphere

Cylindrical part = Total Surface Area =  | M1M1A1M1M1A1M1M1M1 A1 |
| 20 | 1. (i) Distance moved by bus in 2.5 hours =

 Distance from Nairobi = (ii) Relative speed =  Time taken  Distance = 1. Remaining distance =

Time taken by bus = Time taken by car = Speed of the car =  | M1A1M1A1M1 A1M1M1M1 A1 |
| 21 | 1.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| t | 2 | 4 | 6 | 8 | 10 | 12 |
| V | 4 | 12 | 28 | 52 | 84 | 124 |

 Displacement = 1. (i)

   (ii) Acceleration   1. Percentage error =

  | B1M1 A1M1M1A1M1A1M1A1 |
| 22 | 1. Initial price =

New price = Number of fridges bought 1. Selling price of a fridge =

Buying price of a fridge = Profit made =  | M1M1M1M1A1B1M1M1M1 A1 |
| 23 | 1. (i)

(ii)  | M1A1M1M1A1M1A1M1M1 A1 |
| 24 | 1. (i)

 (ii)1. Area =
2. Area in hectares =
 | M1M1 A1M1M1M1 A1M1M1 A1 |