**Text

Description automatically generated**

|  |  |  |  |
| --- | --- | --- | --- |
| **PT1/APMAQP/1223/A 08-MAY-2023** | | | |
| **PERIODIC TEST I (2023-24)** | | | |
| **Subject: Applied Mathematics (Answer key)**  **Grade: XII** | | | **Max. Marks:35**  **Time:I Hr 20 min** |
| **Multiple Choice Questions (1 mark each )** | | | |
|  | c)(−∞,−1);(4,+∞) | | |
|  | -3 | | |
| **3.** | (1, +∞) | | |
| **4.** | 20 | | |
| **Section B(2marks)** | | | |
| 5 | | Find the matrix A for which  A=. | |
| 6 | | X= {…,18,25,32,39,46…} | |
| 7 | | X=7.y=-3 | |
| **Section C ( 3 marks )** | | | |
| 8 | | A-1 == | |
| 9 | | Let, C.P of the mixture ‘m’             = m= 21620/115, m = 188  (Quantity of c)/(Quantity of d)=(d-m)/(m-c)                 = (200-188)/(188-180)= 3/2 | |
| 10 | | The speed of the boat in still water and that of the stream.  8km/hr, 3km/hr | |
| 11 | | **the speed of B=**3m/sec | |
| **Section D ( 4 Marks )** | | | |
| 12 | | 1. b) 3 3/7 hours 2. a)12 hours   **iii)** d) 24 hours  **iv)** c) 4.8 hours | |
| 13 | | x= 2 y= 1, y = -1 | |
| **SectionE( 5 marks )** | | | |
| 14 | *x* = 1; *y* = 3; *z* = -2 | | |

\*\*\*