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| **Text  Description automatically generated** | | | | | |
| **Set 2** | | | | | |
| **PERIODIC TEST - III** | | | | | |
| **Subject: Mathematics**  **Grade: 12** | | | Max-Marks:35Time: 40 minutes | | |
| **Name:** | | | | **Section:** | **Roll No:** |
| **General Instructions:**   * **Questions in Section A carries 2 marks each** * **Questions in Section B carries 3 marks each**   **Questions in Section C carries 4 marks e.** | | | | | |
|  | **SECTION A** | | | | |
| **1** | | Evaluate: dx | | | |
| **2** | | Evaluate: | | | |
| **3** | | Find the area of the region bounded by the two parabolas y = and y=4 | | | |
| **4** | |  | | | |
| **5** | | Find a particular solution: = y tanx, it being gien by y = 1 when x = 0. | | | |
| **6** | |  | | | |
| **Section - B** | | | | | |
| **7** | | Evaluate: . | | | |
| **8** | | Evaluate: dx. | | | |
| **9** | | Find the area bounded by the circle + = 16 and the line y = x in the first quadrant. | | | |
| **10** | |  | | | |
| **11** | | Solve the following differential equation + 2xy = , x 1. | | | |
| **Section - C** | | | | | |
| **12** | | Evaluate the definite integral dx. | | | |
| **13** | | Show that the differential equation = in homogeneous and also solve it. | | | |