Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **13MA201 / 14MA1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BASIC MATHEMATICS FOR ENGINEERING** | **Max. Marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Resolve into partial fraction | CO1 | 10 |
| b. | Write the binomial expansion of | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Resolve into partial fraction | CO1 | 10 |
| b. | Write the binomial expansion of | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Find | CO1 | 10 |
| b. | If  find | CO1 | 10 |
| **(OR)** | | | | |
| 4. | a. | Evaluate | CO1 | 10 |
| b. | Evaluate | CO1 | 10 |
|  |  |  |  |  |
| 5. |  | If , find the value of | CO1 | 20 |
| **(OR)** | | | | |
| 6. |  | Write Maclauran’s series expansion of the function  at | CO1 | 20 |
|  |  |  |  |  |
| 7. |  | If  and  then find (i)  (ii)  (iii)  (iv)  and (v) . | CO1 | 20 |
| **(OR)** | | | | |
| 8. |  | Show that the lines  and  are coplanar and hence find the point of intersection. | CO1 | 20 |
|  | | **Compulsory**: |  |  |
| 9. |  | Find the eigen values and eigen vectors of the matrix. | CO1 | 20 |