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| 1075717_549909255068252_805887821_n.jpg | | **http://upload.wikimedia.org/wikipedia/commons/9/9c/Inu_peshawar_logo.gifIqra National University, Peshawar**  **Department of Electrical Engineering**  **Final – Term Examination summer2020**  **Date:24/9/2020** | | | | | | | | | | |
| **Course Code:** | | MTH 101 | |  | | | | **Course Title:** | | Linear Algebra | | |
| **Prerequisite:** | | NA | | | | |  | **Instructor:** | | HIMAYTULLAH | | |
| **Module:** | | 1 | **Program:** | | BEE | **Total Marks:** | | | 50 | **Time Allowed:** |  | |

Note: Attempt all questions.PLO: program learning outcome C:Cognitive

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| --- | --- | --- | --- |
| Q1. | (a) | . **Express** the equation of plane passing through the points A(2,-2,1) , B(-1,0,3), C(5,-3,4) | Marks 5 |
| PLO2 C2 |
|  | (b) | **Express** a pair of planes whose intersection is the given line, | Marks 5 |
| PLO2  C2 |
|  |
| Q2 |  | . **illustrate** that *L* is linear transformation ? | Marks 10 |
| PLO1  C3 |
|  |  |  |  |
|  |
| Q3 |  | Using the matrix then **interpret** to decode the message 77 54 38 71 49 29 68 51 33 76 48 40 86 53 52 | Marks 10 |
| PLO1  C3 |
| Q4 |  | Find an equation of the plane passing through the point (-1, 3, 2) and perpendicular to the vector n = (0, 1, -3) | Marks 10  C3 PLO1 |
| Q5 |  | Find an Eigen values and Eigen vectors of matrix . | Mark10 c3 plo1 |