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|  | **BALOCHISTAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY KHUZDAR** |

DEPARTMENT: EED Examination**: Special Exam** 2023

SUBJECT: Advance Control System EE-517

SEMESTER: M.E(2nd Semester) Max: Marks: 60

Time Allowed: 3:00 hours

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| **Q.NO** | Description | Marks |
| 1. | **Obtain the Closed Loop TF, by Using Mason’s Gain Formula.** | 12 |
| 2. | 1. **State and Explain the PID Controller and its Advantages.** 2. **Draw and write the mathematical equations of P, I, D, PI, PD, and PID Controllers.** | 12 |
| 3. | **Consider a Single Input Single Output System whose State Variable description is given by**  = u | 12 |
| 4. | **Draw the Polar Plot, whose Open Loop Transfer Function is given by** | 12 |
| 5. | **Draw the root locus of the control system having open loop transfer  function** | 12 |

***THE END***