

**RANIGANJ GIRLS' COLLEGE**  
**Department of Mathematics**  
**Six Semester Programme**  
**Question Paper cum answer Booklet**

**Subject: Mathematics**

**Paper: Core-DSEC-1(2)**

**Total Marks: 10**

**Answer the following questions:**

**5X2=10**

1. Show that the vectors  $(1,2,5)$  and  $(3,6,5)$  are linearly dependent.
  
  
  
  
  
  
  
  
  
  
2. What is unbalanced assignment problem?
  
  
  
  
  
  
  
  
  
  
3. What are slack and surplus variables?
  
  
  
  
  
  
  
  
  
  
4. Write Mathematical form of Assignment Problem.
  
  
  
  
  
  
  
  
  
  
5. Why we use artificial variable to solve L.P.P.