QUESTIONS FOR VIVA VOCE (PSLP) LAB

1. Write a general linear programming problem and explain unbounded and infeasible solution graphically.
2. When is a linear programming problem considered infeasible in a simplex table?
3. When is a linear programming problem considered unbounded in a simplex table?
4. When is a linear programming problem considered to have a multiple optimal solution in a simplex table?
5. Describe the conditions for a non-degenerate solution in a transportation problem.
6. How is an assignment problem a special case of transportation problem?
7. What is mean and standard deviation of a standard normal distribution?
8. What is skewness of a standard normal distribution?
9. What is the area under the standard normal curve?
10. Explain Poisson distribution as a limiting case of Binomial distribution.
11. What is probability of 'r' success in a binomial distribution? Also write mean and variance.
12. What is probability of 'r' success in a Poisson distribution? Also write mean and variance.
13. Write the normal equations for fitting a parabola $y = ax^2 + bx$
14. If two lines of regression coincide, what is the expected correlation between the two variables?

15. If two lines of regression cut at right angles, what is the correlation between the two variables?
16. Can two lines of regression have slopes of opposite signs? If not, why?
17. Explain slack, surplus and artificial variables in a linear programming problem.
18. Can we use graphical method for a 3 variable problem? If not, which methods can be using for solving a 3 or more variable optimization problem?
19. Name some methods for finding an initial basic feasible solution of a transportation problem. Which method is used for optimal solution?
20. Which method is used for solving an assignment problem? How can we solve an assignment problem with maximization objective?