



SOURASHTRA COLLEGE (Autonomous), MADURAI-625 004.

Lesson Plan / Teaching Plan

Name of the Staff	Dr. S. K . KANCHANA	Subject Code	17UMSA21	Year	2019-20
Title of the Subject	ANCILLARY MATHEMATICS-II	Programme	B.sc(PHYSICS&CHEMISTRY)	Semester	II

Unit	Learning Objectives	Teaching Content	Teacher(s) Activities or Application	Students Activities	Review and Assessment	Teaching Hours
1.	(i) To make the students to formulate a linear programming problem (ii) To make the students to understand various concepts, definitions about slack and surplus variables (iii) To make the students to apply various results to solve the problems	Introduction - Definition of a LPP – Formulation of LPP – Mathematical formulation of LPP (simple problems only) – Slack and surplus variables - Definition of a Standard linear programming problem.	*Explanation of various concepts, definitions, examples, theorems and problems * Providing learning materials	*Discussion on topics * preparing/writing notes and multiple choice questions	*Quiz *Seminar *Assignment *Class test *Unit test *Internal test	18 Hours

2.	<p>(i) To make the students gain knowledge about finding the solutions of a LPP</p> <p>(ii) To make the students to understand various concepts, definitions of many types of solutions to attain optimality</p> <p>(iii) To make the students to understand how to solve a LPP by graphical method</p>	<p>Solutions of a LPP - Definition of Basic solution -Basic feasible solution – Optional Solution – Optimum basic feasible solution – Degenerate solutions of a LPP (Theorems not included) – Graphical solution of a LPP.</p>	<p>*Explanation of various concepts, definitions, examples, theorems and problems by using graphs</p> <p>* Providing learning materials</p>	<p>*Discussion on topics</p> <p>*preparing writing notes and multiple choice questions</p>	<p>*Quiz</p> <p>*Seminar</p> <p>*Assignment</p> <p>*Class test</p> <p>*Unit test</p> <p>*Internal test</p>	18 Hours
3.	<p>(i) To train the students to solve a LPP by simplex and Big-M method</p>	<p>Simplex method (simple problems only) - Big – M method (Method of penalties) (simple problems only) - Two phase method (simple problems only)</p>	<p>*Explanation of various concepts, definitions, examples, theorems and problems</p> <p>* Providing learning materials</p>	<p>*Discussion on topics</p> <p>*preparing/writing notes and multiple choice questions</p>	<p>*Quiz</p> <p>*Seminar</p> <p>*Assignment</p> <p>*Class test</p> <p>*Unit test</p> <p>*Internal test</p>	18 Hours

4.	<p>(i) To make the students gain knowledge about the transportation problem</p> <p>(ii) To train the students how to minimize the transportation cost by finding IBFS using various methods and solve by MODI method</p>	<p>Transportation problem – Finding IBFS by North West Corner method, and Vogel's Approximation method – Solving by MODI method</p>	<p>*Explanation of various concepts, definitions, examples, theorems and problems</p> <p>* Providing learning materials</p>	<p>*Discussion on topics</p> <p>*preparing/writing notes and multiple choice questions</p>	<p>*Quiz</p> <p>*Seminar</p> <p>*Assignment</p> <p>*Class test</p> <p>*Unit test</p> <p>*Internal test</p>	18 Hours
5.	<p>(i) To make the students gain knowledge about the Assignment problem</p> <p>(ii) To train them how to assign various jobs or works to various persons or machines so as to minimize the cost or maximize the profit and solve by Hungarian method</p>	<p>Assignment problem – Solving Assignment Problem by Hungarian method.</p>	<p>*Explanation of various concepts, definitions, examples, theorems and problems</p> <p>* Providing learning materials</p>	<p>*Discussion on topics</p> <p>*preparing/writing notes and multiple choice questions</p>	<p>*Quiz</p> <p>*Seminar</p> <p>*Assignment</p> <p>*Class test</p> <p>*Unit test</p> <p>*Internal test</p>	18 Hours

Shumana
(S.K. KANCHANA)
STAFF

H. O. D.