

Title of Course:		Integrated Plant Protection			
Nodal Department of HEI to run course					
Broad Area/Sector		Plant Protection			
Sub Sector		Plant Health Management			
Nature of Course-Independent/Progressive		Independent			
Name of suggestive Sector Skill Council		Agriculture Skill Council of India [ASCI]			
Aliened NSQF level		4			
Expected fees of the course- Free/Paid					
Stipend to student expected from industry					
Number of Seats					
Course Code:		Credits: 03 (1 Theory, 2 Practical)			
Max. Marks: 100		Min Marks:			
Name of proposed Skill Partner (Please specify Name of Industry, Company etc. for Practical/Training/internship/OJT)					
Job prospects-Expected Fields of occupation where student will be able to get job after completing this course (Please specify name/type of industry)		Agripreneurs, Organic Farming, Plant Health Consultancy			
Syllabus					
Unit	Topics	General/Skill component	Theory/Practical/OJ T/Internship/Training	No of Theory Hrs (Total-15 Hrs=1 Credit)	No of Skill Hrs (Total-60 Hrs=2 Credits)
I	Need for Plant Protection: Threat and Economic significance		Theory - 01	1 hr	--
II	Insect and Non-insect Pests. Pest management: Physical, Chemical and Biological Control		Theory - 03 Practical- 08	3 hrs	16 hrs
III	Plant diseases and symptoms; Common diseases of Horticultural crops- pathogen, symptoms, etiology and management		Theory - 05 Practical- 16	5 hrs	32 hrs
IV	Defence mechanisms in plants - Morphological, Anatomical and Physiological		Theory - 01 Practical- 02	1 hr	4 hrs
V	Weed management		Theory - 02 Practical- 02	2 hrs	4 hrs
VI	Good Practices for Plant Health Management		Theory - 03 Practical- 02	3 hrs	4 hrs
TOTAL				15 hours	60 hours
Suggested Readings:					
<ol style="list-style-type: none"> Gupta V K, Paul T S, 2004. <i>Fungi & Plant diseases</i>. Kalyani publishers, New Delhi 6. Kerruish, R M, Unger, P W. <i>Plant protection I: Pests, Diseases and Weeds</i>, 4th edition, Root Rot Press 22 Lynch Street, Hughes, Canberra, ACT, Australia (e-book available) Verma L R, Verma A K, Goutham D C, 2004. <i>Pest Management in Horticulture Crops: Principles and Practices</i>. Asiatech Publ., New Delhi. Susheela, K., Satyanarayana N. <i>Illustrative Guide on Weed Regulation</i>, NIPHM, Hyderabad, (ebook). Chaube H S, Ramji S, 2001. <i>Introductory Plant Pathology</i>. International Book Distributing Co. Lucknow. Plants Health Newsletter, NIPHM, Hyderabad, India. 					
Suggested Digital Platforms/Web Links for Reading: www.niphm.gov.in					
Suggested OJT/ Internship/Training/Skill Partner):					
Suggested Continuous Evaluation Methods: Projects/Assignments from the topics of the course.					

Course Pre-requisites:

To study this course, a student must have the subject BIOLOGY in class 12th/Certificate/Diploma.

Suggested equivalent online courses: Plant Pathology and Soil Health on SWAYAM portal

Any remarks/suggestions:**Notes:**

***Number of units in Theory/Practical may vary as per need.**

***Total Credits/semester-3 (There can be more credits, but student will get only 3 credits/semester or 6 credits/year)**

***Credits for Theory = 01 (Teaching Hours = 15)**

***Credits for Internship/Training/Practical = 02 (Training Hours = 60)**

Name: Dr Rohan John D'Souza

Department: Botany, St. John's College, Agra.