

ShriVaishnavVidyapeethVishwavidyalaya

ShriVaishnav Institute of Agriculture, Indore

Generic Elective Course	SEMESTER-II			Total Marks	100	100
				Sub total	4	4
			Credit	Theory Practical	0	Total
		EVALUATION SCHEME		Theory	4	
			Practical	Teachers Assessment*	00	
				End Sem Teachers University Assessment*	00	
			Theory	Teachers Assessment*	20	
				Mid Term Exam	20	
				End Sem University Exam	09	
				Course Name	Introduction to Agricultural Meteorology	
				Course Code	AGGE202	
			s	No.		

(Prof. VinodDhar)
Chairperson
Board of Studies
SVIAg, SVVV, Indore (M.P.)

(Dr. K. N. Guruprasad)
Dean
Faculty of Agriculture
SVVV, Indore (M.P.)

(Dr. Arvind Singh)
Registrar
SVVV, Indore (M.P.)

(Dr. Shishir Jain)
Controller of Examination
SVVV, Indore (M.P.)

(Prof. (Dr.) UpinderDhar) Vice Chancellor SVVV, Indore (M.P.)



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Shri Vaishnav Institute of Agriculture

				Generi	c Elective Cou	rse				
				SE	MESTER-II					
Sr. No.	Course Code	Course Name	EVALUATION 3CHEME							
			Theory			Practical		Credit		
			End Sem University Exam	Mid Term Exam	Teachers Assessment*	End Sem University Exam	Teachers Assessment*	ı.	P	Sub
1	AGGE202	Introduction to Agricultural Meteorology	60	20	20	00	00	4	0	4

Legends: L - Lecture; P – Practical; C-Credit;

Course Objective: Basic knowledge of Agricultural Meteorology in relation to agriculture

Course Outcomes:

- 1. Students know about Concept of agricultural meteorology
- 2. Students know about weather parameters

Unit-1

Meaning and scope of agricultural meteorology, Earth atmosphere- its composition, extent and structure; Atmospheric weather variables; Atmospheric pressure, its variation with height; Wind, types of wind, daily and seasonal variation of wind speed, cyclone, anticyclone, land breeze and sea breeze;

Unit-2

Weather and climate, Factors affecting on climate. Nature and properties of solar radiation, solar constant, depletion of solar radiation, short wave, long wave and thermal radiation, net radiation, albedo; Atmospheric temperature, temperature inversion, lapse rate, daily and seasonal variations of temperature, vertical profile of temperature, Energy balance of earth;

Unit-3

Atmospheric humidity, concept of saturation, vapor pressure, process of condensation, formation of dew, fog, mist, frost, cloud; Precipitation, process of precipitation, types of precipitation such as rain, snow, sleet, and hail, cloud formation and classification; Artificial rainmaking.

Unit-4

Monsoon- mechanism and importance in Indian agriculture, Weather hazards - drought, floods, frost, tropical cyclones and extreme weather conditions such as heat wave and cold wave. Agriculture and weather relations; Modifications of crop microclimate, climatic normals for crop and livestock production.

Unit-5

Weather forecasting - types of weather forecast and their uses .Climate change, climatic variability, global-warming, causes of climate change and its impact on regional and national Agriculture.

Reference Books

- 1) Agricultural Meteorology- G.S.L.H.V. Prasada Rao, Kerala Agricultural University Publications.
- 2) Text book of Agricultural Meteorology M. C. Varshneya and P. Balkrishna Pillai.
- 3) Introduction to Agro-meteorology- H. S. Mavi
- Atmosphere, weather and climate Barry R. G. and Charley R. J. The English Language Book Society and Mathuen and Co. Ltd., Sultolk.

^{*}Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class.



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Shri Vaishnav Institute of Agriculture

- 5) Climate, weather and crops in India D. Lenka.
- 6) Fundamentals of Meteorology S. R. Ghadekar
- Basic Principles of Agricultural meteorology, B.S. Publications, Koti, Hyderabad.Radha Krishna Murthy, V.

(Prof. Vinod Dhar) Chairperson Board of Studies SVIAg, SVVV, Indore (M.P.) (Dr. K. N. Guruprasad) Dean Faculty of Agriculture SVVV, Indore (M.P.) (Dr. Shishir Jain) Controller of Examination SVVV, Indore (M.P.) (Dr. Arvind Singh) Registrar

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