

SUBJECT: Field Crops Producer (FCPR)**CLASS XII
SEMESTER III****THEORY****FULL MARKS:20****[MCQ Type (1 Mark) Question]**

UNIT	Topic	No of periods assigned	Marks
1	Introduction for field crops	4	2
2	Production technology of <i>kharif</i> cereals (rice)	11	5
3	Production technology of <i>kharif</i> pulses (pigeonpea,mungbean and urdbean)	12	5
4	Production technology of fibre crops (jute)	10	4
5	Production technology of <i>kharif</i> forage crops (cowpea, ricebean, para grass and napier grass)	8	4
	Total	45	20

DETAILED SYLLABUS

UNIT	Topic / Sub Topic	No of periods assigned
1	Introduction for field crops: Definition,types (cereals,pulses,oilseeds,tuber crops,fibre crops,sugar crops narcotic crops and forage crops)and examples of different types of field crops,area,production and yield of field crops	4
	Production technology of <i>kharif</i> cereals (rice): Climatic requirement, soil type,seasons for cultivation (pre- <i>kharif</i> , <i>kharif</i> and <i>boro</i>),crop sequence,land preparation, varieties,sowing variables,nursery management for raising rice seedling and transplanting methods,nutrient management,common weeds and their management,water management,major insects and diseases - damage symptoms and their management,harvesting,threshing,winnowing, yield, storage, marketing,minimum support price,economics of cultivation and uses	11
3	Production technology of <i>kharif</i> pulses (pigeonpea,mungbean and urdbean): Introduction, climatic requirement, soil type, land preparation, varieties,sowing variables,nutrient management,common weeds and their management,water management,major insects and diseases, damage symptoms and their management,harvesting,threshing,winnowing, yield, storage, marketing,minimum support price,economics of cultivation,and uses	12
4	Production technology of fibre crops (jute): Introduction, climatic requirement, soil type, crop sequence, land preparation,varieties of jute (white and tossa),sowing variables and thinning,nutrient management,common weeds and their management,water management,major insects and diseases - damage symptoms and their management, harvesting,jak making, retting in water,extraction and drying of jute fibre, yield, quality parameters and grading of jute fibre, marketing,minimum support price ,economics of cultivation,and uses	10
5	Production technology of <i>kharif</i> forage crops (cowpea, ricebean, para grass and napier grass): Types of forage crops,introduction,climatic requirement, soil type, crop sequence, land preparation,varieties and sowing variables (seed rate, sowing time,method of sowing,spacing, etc.) nutrient and other crop management practices, harvesting/cutting,yield, making of hay and silage	8
	Total	45

Field Crops Producer (FCPR)
CLASS XII

SEMESTER IV

THEORY

FULL MARKS: 30

[SAQ (2 Marks) and LAQ Type (4 Marks) Question]

UNIT	Topic	No of periods assigned	Marks
1	Production technology of <i>rabi</i> cereal (maize,wheat)	12	6
2	Production technology of <i>rabi</i> pulses (chickpea,lentil,lathyrus)	18	8
3	Production technology of <i>rabi</i> oilseeds (rapeseed-mustard,groundnut,sesame and linseed)	17	8
4	Production technology of tuber crop (potato)	6	4
5	Production technology of narcotic crop (tobacco)	5	2
6	Production technology of sugar crop (sugarcane)	5	2
	Total	63	30

DETAILED SYLLABUS

UNIT	Topic / Sub Topic	No of periods assigned
1	Production technology of <i>rabi</i> cereal (maize,wheat): Climatic requirement, soil type,crop sequence, land preparation, varieties, sowing variables, nutrient management,common weeds and their management,water management, major insects and diseases, damage symptoms and their management,harvesting,threshing, winnowing,yield, storage, minimum support price, and uses	12
2	Production technology of <i>rabi</i> pulses (chickpea,lentil,lathyrus): Introduction, climatic requirement, soil type, land preparation, varieties, sowing variables,nutrient management,common weeds and their management,water management, major insects and diseases - damage symptoms and their management, harvesting,threshing, winnowing, yield, storage, economics of cultivation,minimum support price, and uses	18
3	Production technology of <i>rabi</i> oilseeds (rapeseed-mustard,groundnut,sesame and linseed): Introduction, climatic requirement, soil type, land preparation, varieties, sowing variables, nutrient management, common weeds and their management, water management, major insects and diseases - damage symptoms and their management, harvesting, threshing, winnowing, yield, storage, economics of cultivation, and uses	17
4.	Production technology of tuber crop (potato): Types of tuber crops, introduction, climatic requirement, soil type, crop sequence, land preparation,varieties, sowing variables, nutrient management,common weeds and their management,water management,major insects and diseases, damage symptoms and their management, dehauling, harvesting,yield, sorting, bagging, storage, economics of cultivation, and uses	6
5.	Production technology of narcotic crop (tobacco): Types of narcotic crops,introduction, climatic requirement, soil type, crop sequence, land preparation,varieties, nursery raising,planting variables,nutrient management,weed and their control measures,irrigation, insect-disease	5

	management, harvesting, yield, curing and uses	
6.	Production technology of sugar crop (sugarcane): Types of sugar crops,introduction, climatic requirement, soil type, crop sequence, land preparation, varieties, nursery,planting variables, nutrient management,weed and their control measures, irrigation management, insect-disease management, harvesting, yield, and uses	5
	Total	63

PRACTICAL AND PROJECT
CLASS XII

FULL MARKS: 40(Practical) + 10 (Project)

NO. OF PERIODS ASSIGNED: 144 (120 for Practical+24 for Project)

DETAIL SYLLABUS

Sl. No.	Topic	No of periods assigned
	SEMESTER III	
1	Study on morphological characteristics of important <i>kharif</i> field crops	3
2	Selection of seeds and study on germination and seedling vigour	2
3	Calculation of seed rate of important <i>kharif</i> field crops	2
4	Study on different seed treatment methods for <i>kharif</i> cereals and pulse crops	2
5	Observation on management of rice nursery bed (dry,wet,SRI and dapog)	2
6	Land preparation and seed bed preparation	2
7	Calculation of manures and fertilizers and top dressing of fertilizer in the fields and their application	4
8	Sowing of seeds of <i>kharif</i> cereals, pulses,jute,etc.	4
9	Identification of weeds ,their management practices under various <i>kharif</i> crops	4
10	Water management and intercultural operations of <i>kharif</i> crops	4
11	Identification of symptoms of major diseases ,pests and nutrient deficiency and their remedial measure for 2 to 3 major <i>rabi</i> crops	4
12	Calculation of herbicides , fungicides and insecticides	2
13	Cultivation of <i>kharif</i> forage crops	2
14	Estimation of grain / seed/ fibre yield of major <i>kharif</i> crops	2
15	Harvesting,threshing,winnowing and storage of major <i>kharif</i> crops	3
16	Retting and grading of jute	2
17	Calculation of cost of cultivation and B:C ratio of major <i>kharif</i> crops	2
18	Maintenance of individual plots	12
19	Visit to farmer's field for observing cultivation of major <i>kharif</i> crops	2

	Total	60
	SEMESTER IV	
19	Study on morphological characteristics of important <i>rabi</i> field crops	2
20	Selection of seeds and seed treatment (dry and wet) of important <i>rabi</i> field crops	2
21	Sowing of some major <i>rabi</i> crops like wheat, rapeseed-mustard, chickpea, etc.	4
22	Planting of potato, sugarcane, etc.	4
23	Calculation of manures and fertilizers, and top dressing of fertilizer in the fields and their application	4
24	Water management, intercultural operations including earthing up, weeding, weeding and propping, etc. of different <i>rabi</i> crops	4
25	Identification of weeds, their management practices under various <i>rabi</i> crops	4
26	Identification of symptoms of major diseases, pests and nutrient deficiency of major <i>rabi</i> crops and their remedial measures	4
27	Calculation and spraying of insecticide, fungicide, herbicide, etc.	2
28	Cultivation of sugarcane with intercropping / tobacco crops	2
29	Estimation of grain / seed / cane yield of major <i>rabi</i> crops	4
30	Harvesting, threshing and post-harvest processing of major <i>rabi</i> crops	4
31	Calculation of cost of cultivation and B:C ratio of major <i>rabi</i> crops	2
32	Maintenance of individual plot of any one <i>rabi</i> crops for studying life cycle	10
33	Visit to farmer's field for observing cultivation of major <i>rabi</i> crops	8
	Total	60
	PROJECT	24
	Total	84
	Class XII Total	144

PROJECT (10 marks: Two Projects, 05 marks each)

Sl. No.	Project	Details	Marks
1	Project I (12 periods)	Preparation of nursery bed for raising good quality seedlings of rice with the adoption of dry and wet seed bed, dapog/ tray nursery	5
2	Project II (12 periods)	Preparation of rice based cropping system with its package of practices and benefits	5
3	Project III (12 periods)	Preparation of field layout calendar of operations for sowing, nutrient management, intercultural operations, irrigation, harvesting, grading and storage	5
4	Project IV (12 periods)	Preparation of working plan for harvesting, threshing and drying for good quality pulse seed	5

Note: The school may develop other Projects as per their needs, choices or available resources.