

6- कृषि AGRICULTURE (Arts and Science Group) (Ag.)

1. **Introduction** (i) Importance and scope of Agriculture in our National Economy and Development. (ii) Measures to be adopted for increasing the yield of crops.
2. **Meteorology** (i) Distribution of crop Zones depending upon the rainfall in M.P. (i.e.) Weather recording-Rainfall, Temperature, Humidity and atmospheric pressure.
3. **Soils** (i) Importance of Soil, Soil texture, soil structure, mineral matter, soil organic matter, soil and organism (ii) Different soil of M.P. and their Characteristics (iii) causes of infertility and ways to improve them.
4. **Tillage** (i) Definition of tillage, tillage operations such as ploughing, harrowing interculture etc. (ii) Tillage implements-Country plough, improved plough, harrows, cultivators, threshers, winnower and seed drills.
5. **Manures and Fertilizers** (i) Major and minor plant nutrients (ii) organic manures F.Y.M. compost, Green manures, Oil cakes (iii) Inorganic Fertilizers - Nitrogenous, phosphatic and Potash Fertilizers.
6. **Weeds and weed Control** (i) Definition of weeds, damage caused by weeds (ii) Weed control methods mechanical Biological and Chemical.
7. **Irrigation and Drainage** (i) Need Objects of irrigation and drainage (ii) Sources of irrigation and drainage.
8. **Cropping Schemes: Importance and principles of Crop-rotation, mixed cropping, multi cropping, Dry farming.**
9. **Crop Production** (i) Classification of crops (ii) Cultivation of following crops with reference to their land preparation, manuring, sowing, seed rate, irrigation, interculture, improved varieties, control of diseases and pests, yield per hectare, Major crops paddy, Wheat, Jowar, ground nut and cotton Minor Crops-Arhar, Moong, Soybean, Linseed and Mustard.
10. **Introduction** (i) meaning and scope of Horticulture (ii) Planting system, pruning, training and intercropping (iii) Elementary idea regarding ornamental plants, annuals, shrubs, trees hedges.
11. **Cultivation of fruit plants** (ii) propagation of plants-cutting, budding, layering gootee, grafting and inarching (iii) Elementary idea regarding ornamental plants, annuals, shrubs, trees hedges.
12. **Cultivation of vegetables** (i) classification of vegetable as per family seasons and uses (ii) cultivation of Potato, Cauliflower, Radish, Onion, Tomato, Brinjal, bhindi and Chillies.
13. **Fruit and vegetable preservation** (i) General principles and methods of fruit and vegetable preservation.
14. **Animal Husbandry** (i) Important breeds of cow and buffaloes (ii) care maintenance and housing of cattles (iii) Principles of feeding and balanced ration of cattles.
15. **Milk and milk testing** (i) composition of milk of cows and buffaloes (ii) Testing of milk by lactometer.
16. **Milk products and Dairy machines** (i) Preparation of Cream, ghee, Butter, Khoya and Dahi (ii) Construction of working of cream separator.
17. **Diseases of Cattles** (i) Signs of sick animal (ii) Common diseases of cattle, their prevention and control.
18. **Poultry Farming** (i) Important Poultry breeds and their characteristics (ii) Warehousing and feeding of Poultry breeds (iii) Hatching of egg by natural and artificial methods (iv) Grading and marketing of eggs (v) Common diseases of poultry, their prevention and control.