

15. Preservation of Fruits and Vegetables (i) General principles and methods of fruit and vegetable preservation (ii) Processing by heat, preservation by antiseptic drying, preservation by fermentation dehydration and packing (iii) Preparation of jelly, Lime squash and Tomato sauce.
16. Rural Finance (i) Cultivator's Finance needs for farmers (ii) Source of credit (iii) Organisation of Rural Cooperative credit and marketing societies.

5.(ब) पशुपालन एवं कुक्कुट पालन के तत्व

5. (B) ELEMENTS OF ANIMAL HUSBANDRY AND POULTRY FARMING] (Ag.-3)

- (A). 1. **Introduction :-** (i) Importance of Live stock in Indian Economy, (ii) Body parts of cow and buffalo and description of important systems, respiratory, digestive, reproductive, secretion of milk.
2. **Improved Cattle Breeds :-** (i) Cow (ii) Buffalo (iii) Goat and (iv) Sheep.
3. **Care and management of Cattle :-** (i) Animal Hygiene (ii) Cattle housing sheds for bullocks, bull, milch cattle etc. (iii) Special attention for rearing of calves, pregnant and milch cattle, working bullocks and bull.
4. **Breeding of Cattle :-** (i) Breeding Line breeding and cross breeding, Mendel's laws of breeding (ii) Artificial insemination in cattle with examples.
- (B) 5. **Dairy Farming:** (i) General idea regarding dairy farming as a business in village and town conditions requirement of land, labour, capital; management techniques.
6. **Milk Production :-** (i) Different methods of milking, (ii) Principles of clean milk production, (iii) Factors affecting quality and quantity of milk.
7. **Composition of milk :** (i) Definition of milk (ii) Milk constituents (iii) Composition of Milk: Factors affecting composition of milk.
8. **Physical properties of milk :** (i) Temperature (ii) Boiling Freezing point (iii) pH (iv) Density (v) Specific gravity use of Lactometer (vi) Gerber's method for fat test.
- (C) 9. **Feed and Feeding :** (i) Principles of Feeding of dairy cattle (ii) Different types of feeds and fodders and their nutritive values - Kharif and Rabi Fodders: Hay and silage crops (iii) Preservation of fodders making of silage, hay silopits hay silopits. (iv) Computation of balanced ration of cows, buffaloes, bullocks, bulls goats and sheep.
10. **Judging of Cattle :** (i) Importance of Judging, (ii) Judging method, Score card method and on the basis of body parts, (iii) Judging the age of cattle by rings on the horn and by the teeth development.
11. **Dairy appliances :** (i) Construction of appliances and their cleanliness (ii) working of cream separator and its parts. Butter churner, Butter worker.
12. **Milk Products :** (i) Preparations of cheese. Cream, Ravri, Dahi, Butter, Ghee, condensed milk. Milk powder and their composition.
13. **Common diseases of Cattle :** (i) Symptoms of sick Animals, (ii) Symptoms of different diseases. Rinderpest Foot and Mouth disease. Blackquater, Haemorrhagic Septicaemia, Anthrax and piroplasmiasis: (iii) their prevention and control measures.
14. **Poultry Farming :** (i) Introductory, (ii) Scope and limitation of Poultry Farming, (iii) important breeds of poultry for eggs, meat (iv) Hatching of eggs and uses of incubator.
15. **Housing and ration for poultry birds :** (i) Poultry sheds, layout model sheds (ii) Ration of poultry bird-chicken, Growers, layers and Broilers.
16. **Diseases of Poultry :** (i) preventive control measures, (ii) Bacillary White diarrhoea, Ranikhet Coccidiosis, Fowl, Pox, Fowl cholera, Ecto and endoparasit