

# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

## **SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN AGRICULTURE ANIMAL HUSBANDRY AND DAIRY SCIENCE FOR COLLEGE EDUCATION DEPARTMENT**

### **PAPER – II**

#### **Unit 1: Animal Husbandry and Management of farm animals -**

Role of livestock in Indian Economy with special reference to Rajasthan. Animal Husbandry in India- present and future, Cattle, buffalo, sheep, goat, camel production trends and factors affecting them. Identification, castration, dehorning, ageing, handling and restraining of farm animals, milk and its composition, clean milk production, hormonal regulation of lactation. Care of the cow and calf during and after parturition. Management strategies for reducing mortality in farm animals. Management to improve productive and reproductive efficiency in livestock.

#### **Unit 2: Production and Management of Poultry -**

Brooding of chicks. Management of growing, laying and breeding flocks. Shelter management. Biosecurity and environmental considerations. Cage layer management and well being of poultry. Light management in poultry sheds. Hatchery business management. Management during stress. Chick sexing. Maintenance of poultry farm records. Health and sanitation problems. Prevention and disease control. Poultry shows. Handling care of table eggs and processing of birds for meat. Moulting in Poultry and effect of lighting on Production.

#### **Unit 3: Animal Nutrition and Conservation-**

Composition and classification feed stuffs, roughages. Nutritive value of feeds and fodders, conservation and preservation of feeds and fodders, annual and perennial fodder crops, pasture development and management. The digestive organs, digestive process of Ruminants. Desirable characteristics of a ration, computation of ration for cattle and buffaloes, balanced ration. Strategies for round the year fodder production.

#### **Unit 4: Breeding Management -**

Basic principles of inheritance. Concept of heritability, repeatability and selection. Important methods of selection and systems of breeding in farm animals and poultry. Importance of maintaining breeding records and their scientific interpretation.

## **Unit 5: Economics and Marketing of Livestock and Poultry and their products –**

Economic principles as applied to livestock and poultry production. Production functions. Farm size, resources and product combinations. Cost concepts. Effect criteria in use of resources in livestock production. Maintenance of evaluation of different production records. Insurance and financing of livestock enterprises. Project formulation for setting up livestock and poultry farms. Different approaches to marketing of livestock and poultry products. Present status of cattle fairs and methods of selling livestock in India and Rajasthan. Market news and information. Determination of prices of livestock and poultry products. Vertical integration in livestock products industries.

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### **Note: - Pattern of Question Paper**

1. Objective type paper
2. Maximum Marks: 75
3. Number of Questions: 150
4. Duration of Paper: Three Hours
5. All Questions carry equal marks.
6. Medium of Competitive Exam: Bilingual in English & Hindi
7. There will be Negative Marking.