



**VISVA-BHARATI
PALLI SIKSHA BHAVANA
(INSTITUTE OF AGRICULTURE)
DEPARTMENT OF ANIMAL SCIENCE**

**Final Examination – Theory 2016 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 3 Hours

Max Marks: 50

Explain the following (any five) (10×5= 50)

1. Write in brief regarding the Origin, distribution and production potential of different classes of breed of fowl reared in India. 10
2. What are the different selection methods used to develop poultry in India? 10
3. What are the different qualitative and quantitative traits commonly considered for poultry breeding? 10
4. Describe the different system of mating in poultry with illustration. 10
5. What is 'hybrid'? How is it developed? Mention the production of broiler chicks. 2+4+4=10
6. Describe in brief regarding the artificial insemination in poultry. What are the advantages of it? 7+3=10
7. Write short notes on (any five): 5×2 = 10
 - a. Mendel's law of inheritance
 - b. Lethal gene(s)
 - c. Heritability
 - d. Phenotype and Genotype
 - e. Parent stock
 - f. Pure lines
 - g. Additive gene effect



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**Final Examination – Theory 2017 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 3 Hours

Max Marks: 50

Explain the following (any five)

(10×5= 50)

1. What is 'Poultry'? Classify poultry birds with suitable examples. 2+8=10
2. What are the different breeding programme for developing egg-type and broiler-type of birds? 10
3. Enumerate the selection of methods for poultry. 10
4. Discuss about phenotype, genotype and environmental interactions with examples. 10
5. What are points to be consider for sexing of birds? 10
6. What is 'inbreeding depression'? What is the consequences of inbreeding in general? 2+8=10
7. Write short notes on (any four): 2.5 ×4 = 10
 - a. Qualitative and Quantitative traits
 - b. Broilers Vs layers
 - c. Lethal genes
 - d. Additive gene action
 - e. Moulting
 - f. Depigmentation
 - g. Breeding record



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**Final Examination – Theory 2018 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 3 Hours

Max Marks: 50

Explain the following (any five)

(10×5= 50)

- 1) Define ‘broilers’ and ‘layers’. Which domestic birds come under ‘poultry’? Mention one breed for each category. 4+2+4=10
- 2) How can you differentiate between bad and good layer externally? Mention the average egg production of a good layer. Which is the best method of selection for egg production in bird? 6+2+2=10
- 3) What do you mean by ‘Hereditary’? How is it related to the production performance in birds? How is the hereditary transmission calculated? 2+4+4=10
- 4) Co-relate pigmentation, moulting and laying in laying birds with illustration. 10
- 5) Enumerate different methods of breeding in poultry. 10
- 6) Mention different breeding methods in poultry. 10
- 7) Write short notes on (any four): 2.5 ×4 = 10
 - a) Incubation
 - b) Heterozygosity and Homozygosity
 - c) Recessive gene & dominant gene
 - d) Mandel’s law of inheritance
 - e) Hardy-Winberg law



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**Final Examination – Theory 2019 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 3 Hours

Max Marks: 50

Explain the following (any five)

(10×5= 50)

1. Describe different breeding methods with suitable illustrations. 10
2. What are different hereditary characters found in laying birds and how much of these characters transmitted? 10
3. What is moulting? Describe different moulters with advantages and disadvantages. 10
4. What are the different points to be considered for good layers? Explain. 10
5. What do you mean by 'poultry'? Mention different breeds of fowl, duck, quail with characters including average egg production per year. 10
6. Explain Mandel's Law of segregation. What do you mean by qualitative and quantitative traits? 10
7. Write short notes on (any four): 4×2.5=10
 - a) Mutation
 - b) Allele
 - c) Dominant and recessive gene
 - d) Pleiotrophy
 - e) Linkage
 - f) Variation
 - g) Sex Chromosome



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**Final Examination – Theory 2020 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 3 Hours

Max Marks: 50

Explain the following (any five)

(10×5= 50)

1. What is moulting? Describe different moulters with advantages and disadvantages. 10
2. What do you mean by ‘poultry’? Mention different breeds of fowl, duck, quail with characters including average egg production per year. 10
3. What are the different breeding programme for developing egg-type and broiler type of birds? 10
4. Enumerated the selection methods for poultry. 10
5. What are points to be considered for sexing birds? 10
6. What is ‘inbreeding depression’? What are the consequences of inbreeding in general? 2+8=10
7. Write short notes on (any four): 4×2.5=10
 - h) Broilers Vs layers
 - i) Lethal genes
 - j) Additive gene action
 - k) Depigmentation
 - l) Mutation
 - m) Allele



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**Final Examination – Theory 2023-24 (First Sem)
Course: PSC- 501
(Poultry Breeding & Genetics)**

Time: 2 Hours

Max Marks: 30

Explain the following (any three) (10×3= 30)

1. Describe auto sexing of chicks with appropriate example. What is random sample test? Explain marker-assisted selection. Enlist the applications of marker-assisted selection for improvement of poultry industry. What are quantitative trait loci? (2+2+2+2+2)
2. Describe different methods of mating in poultry. Explain artificial insemination along with advantages and disadvantages. Which methods of mating are followed in your institutional farm? (5+4+1)
3. Explain different methods of selection used in poultry breeding. Explain Recurrent (RS) and Reciprocal Recurrent Selection (RRS) in detail. Differentiate between them. (5+3+2)
4. Describe combined selection. Explain Osborne index and Abplanalp index with their applications. Define inbred with appropriate example. (3+3+3+1)
5. Describe the breeding programme followed in your state for developing egg-type and Broiler type of birds. (10)