

M.Sc. Examination, 2017

Semester-III

Animal Science (Poultry)

Course: PSC-515

(Poultry Wastes Management, integrated fish farming with poultry production Bio-technological intervention and Environment)

Time: Three Hours

Full Marks: 50

Questions are of value as indicated in the margin.

Answer any five questions

1. How poultry Waste affects environment. Name the different poultry-wastes produced in poultry industry, slaughter house and processing unit. 10
2. State the slaughter house by-product of poultry. How they can be preserved/ utilized in fish production. Name the fishes, can be cultured through poultry refusals. 10
3. How poultry-litter can be utilized in vermicompost productions. State the process of good quality vermicompost production from poultry litter. 10
4. Enumerate your idea in bio-gas production from poultry litters. Reflect its proper utilization to save energy. 10
5. Write short notes (any four): 2.5×4=10
 - a) Eradication
 - b) Manure Pellets
 - c) Litter re-use
 - d) Bio-Fuel, a source of industry
 - e) Anaerobic digestion of poultry wastes
6. How poultry manure can be utilized as animal feed? State the process utilized with precautions. 10
7. State in brief the idea of electric generation device with an idea 'Litter is fuel' vis-à-vis minimizes the environmental pollution. 10
8. Define Zoonosis. State the principle to prevent and control epidemic diseases of poultry with a special reference to 'Bird-Flu'. 10

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1. Describe the effect of light in growth, reproduction and performance of layer birds with special reference to the mechanism of light-effects. 10
2. State the effect of temperature & climate in Poultry production. Give the different types ventilation with advantages & disadvantages. 10
3. Write down by-products of poultry and its utilization in fish production. Name the fishes, can be cultured through poultry refusals. 10
4. Describe the hygienic methods of poultry-dropping management from battery-cage & deep litter system. 10
5. Write an essay on hatchery by-products management to avoid losses economically as well as to prevent contaminations. 10
6. Enumerate your idea in bio-gas production through anaerobic digestion from poultry litters. Reflect its proper utilization to save energy. 10
7. Write short notes (any four): 2.5×4=10
 - I. Feather meal
 - II. Poultry litter, a source of electricity generation
 - III. Litter management
 - IV. Zoonosis and 'bird flu'
 - V. Scientific Poultry-house
8. Discuss solid-waste management in Poultry Industry and its utilization with a special care on environment. 10

M.Sc. Examination, 2019

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Answer any five questions

1. Describe different hygienic methods practiced in poultry house with illustrations. 10
2. Discuss solid-waste management in poultry industry and its utilization with a special care on environment. 10
3. What do you mean by 'bio-security'? What are the different bio-secorial measures followed in poultry farm? 10
4. What are the different bio-technical operations followed to protect the environment? Discuss. 10
5. How ventilation affects on poultry production? What are the different methods of ventilation in poultry house? 10
6. What do you mean by 'litter management'? How it affects on production? 10
7. Write short note on (any four): 2.5×4=10
 - a) Bird flu
 - b) Zoonosis
 - c) Battery cage
 - d) Green house effect
 - e) Hatchery Bi-products
 - f) Anaerobic digestion

M.Sc. Examination, 2020

Semester-III

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Answer any five questions

1. Name some Hatchery wastes. Write down different uses of poultry feathers & offals. What is 'Mixed Poultry By-products Meal' (MPBM)? 2+3+3+2=10
2. What are BOD and COD? Write down the principles of Effluent Treatment Plant. Briefly describe wet rendering and dry rendering. 2+4+2+2=10
3. Recommend an ideal mixed farming protocol considering your local agricultural land pattern, farming interest and climate condition with proper justifications. What is 'Integrated slaughterhouse' and why it is more organized? Discuss. 4+3+3=10
4. 'No body part of poultry carcass in an absolute waste' – discuss. Describe in brief about eco-friendly waste management of a poultry abattoir. State the principles of 'Bio-gas' production. 3+4+3=10
5. Write down the steps involved in production of livestock feeds from poultry manure. What will be your recommendation for a commercial poultry house regarding housing, management, ventilation and control of disease outbreak? 3+2+5=10
6. Prepare a SOP with flow diagram to prescribe operational guidelines to a commercial layer cum hatchery unit. 10
7. Write short notes on (any four): 2.5×4=10
 - a) Poultry manure as a fertilizer
 - b) Bio-security measures
 - c) Meat cum Bone Meal
 - d) Use of Blood as By-product
 - e) Important diseases and their lesions in Post-mortem Examination of poultry
 - f) Conversion of collagen to gelatin

M.Sc. Examination, 2021

Semester-III

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Full Marks: 50

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Answer any five questions

1. Write briefly on poultry-farm wastes and their utility. 5+5=10
2. What is poultry slaughter house by products? Write uses and importances of any two such products. 4+6=10
3. What is the importance of Bio-technology in enhancing the productivity in a poultry farm? Write some specific examples on this aspect. 6+4=10
4. How does the poultry farming affect the environment? Give some remedial measures to control such problem. 5+5=10
5. Give an outline of processing of poultry offals for the utilization of such item as fish feed. 10
6. What is the meaning of 'bio-security'? How this can be used for litter poultry farming with maximum benefit for the poultry industry? 4+6=10
7. Write short notes on (any four): 2.5×4=10
 - a) Poultry waste management
 - b) Integrated fish farm with poultry farming
 - c) N:P:K ratio and poultry manure & droppings.
 - d) BOD/ COD
 - e) Rendering of poultry waste materials from a processing unit

M.Sc. Examination, 2022

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Time: Three Hours

Full Marks: 50

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Answer any five questions

1. State by-products of poultry and its utilization in fish production. Name the fishes, can be cultured through poultry refusals. 5+5=10
2. Write down different methods of ventilations used in poultry farm for optimum production. 10
3. Describe different hygienic methods practiced in poultry house with illustrations. 10
4. What do you mean by 'bio-security'? What are the different bio-secutorial measures followed in poultry farm? 2+8=10
5. How Poultry Waste affects environment? Name the different poultry waste produced in poultry industry, slaughter house and processing unit. 3+7=10
6. Enumerate your idea in bi-gas production from poultry litters. Reflect its proper utilization to save energy. 6+4=10
7. Write short notes (any four): 2.5×4=10
 - a) Litter re-use
 - b) Bio-Fuel, a source from poultry industry.
 - c) Battery cage
 - d) Green house effect
 - e) Zoonosis and 'bird flu'