Roll No.

Total No. of Questions : 08

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B.Sc. (Agriculture)/ Honours (Agriculture) (Sem.–6) CROP RESIDUE MANAGEMENT Subject Code : BSAG-601 M.Code : 74344 Date of Examination : 16-06-21

Time : 2 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE question(s), each question carries 12 marks.

- Q1) a) Write down importance of crop residue management in context to carbon credit points.
 - b) Define immobilization. Discuss the role of microbes in rice residues decomposition.
 - c) Discuss the problems of rice residue burning.
- Q2) a) Discuss the off-site crop residue management and their benefits.
 - b) The rice residues can be used as mulch. The PAU, Ludhiana has worked on the use of rice residues as mulch. Discuss the crops in which rice residues can be used as mulch. Discuss conservation agriculture under rainfed / dry land farming.
- Q3) a) Discuss the procedure for mushroom production using rice residues.
 - b) Discuss the use of residues as energy source and compost making, separately.
 - c) Describe the role of NGT.
- Q4) a) Define Crop Residue Management. Discuss crop residue in relation to agricultural ecosystem and conservation agriculture.
 - b) Discuss various challenges for diversified use of crop residues in high intensity areas like Punjab.
 - c) Discuss significance of crop residue management.
- Q5) a) Discuss the alternate methods of sickle cut rice residue management.
 - b) Discuss the role of Bio-methanation and Gasification for human welfare.
 - c) Discuss contribution of Jethrotull.

- Q6) a) Discuss the procedure for mushroom production using rice residues.
 - b) Define residue management.
 - c) Discuss different methods of Residue Management. What is conservation agriculture and discuss its principles?
- Q7) a) Explain different methods of sowing wheat after combined harvested rice.
 - b) Discuss constraints of using crop residues with conservation agriculture.
 - c) Differentiate Green manuring and Green energy.
- Q8) a) Discuss the policy options for efficient residue management in Punjab.
 - b) Write down the amount of gases produced from one tonne of rice residue burning.
 - c) Comment on statement that carbon-di-oxide is produced from rice residue burning and rice residue decomposition.
 - d) Explain rodent control in wheat sown with happy seeder after combine harvested rice.
 - e) Define Biochar.

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