R13

Code No: **RT41355**

Set No. 1

IV B.Tech. I Semester Regular/Supplementary Examinations, Oct/Nov - 2018 SEED PROCESING AND STORAGE ENGINEERING

(Agriculture Engineering)

Time: 3 hours Max. Marks: 70

Question paper consists of Part-A and Part-B Answer ALL sub questions from Part-A Answer any THREE questions from Part-B *****

PART- A(22Marks)

b) Explain why convection drying is considered as the most popul method of grain drying. c) List out the segments of total refrigeration load. d) List out and briefly explain destructive agents of grains in storage. e) Explain bunker storage with any diagram. f) List out the limitations of pneumatic conveyer. PART –B(3 X 16=48Marks) 2 a) Give a detailed account on any two EMC models. If 1000 kg of pad seed at 25 % moisture content on wet basis is dried to 14 % moistic content for storage, calculate the amount of moisture removed in dryi on wet and dry basis. b) List out the usefulness of EMC and derive henderson's equation. 3 a) Give a detailed account on continuous flowing non mixing type of gradrier with a labeled diagram. b) Explain the construction and operation of rotary drier. 4 a) List out different types of spoilage that occur in storage grains. b) List out the important changes taking place in grain during storage. 5 a) Briefly explain various kinds of losses caused due to insect prinfestation on stored food grains. b) What are the different methods of estimation of damage available assess damage caused to food grains? 6 a) Give a detailed on the following bulk storage structures (i) Pusa bin (ii) Brick and cement bin (iii) Vertical style of Give a detailed account on traditional storage structures. 7 a) List out the principles to be considered before selecting a conveying system and give a detailed account on belt conveyers idlers.	[4]
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