

Q.30 Illustrate the constructional details of a vertical cone rice whitener with labeled diagram.

Q.31 Explain the uses and working of a bucket elevator.

Q.32 Describe the CFTRI method of parboiling.

SECTION-D

Note: Long answer type questions. Attempt any three questions out of four questions. 3x10=30

Q.33 What is the difference between a cleaner and grader? Explain constructional details and the working principle of an air screen cleaner cum grader.

Q.34 What are the principles of seed processing? Draw the layout and plan of a seed processing plant, also draw the flow diagram showing various steps in seed processing.

Q.35 What are the different unit operations of pulse milling? Explain the commercial level process of pulse milling

Q.36 What is flour mill? List various steps/operations of a flour mill. Draw flow diagram and list the names of different machines used in flour mill.

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5th / Agriculture Engineering

Subject : AGRO PROCESS ENGINEERING

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note: Objective type questions. All questions are compulsory (10x1=10)

Q.1 Define Grading.

Q.2 What is meant by delinting?

Q.3 Spiral separator separates material on the basis of shape. (True or False)

Q.4 Filtration is the removal of solid particles from liquid. (True or False)

Q.5 What is pre milling?

Q.6 What is whitening of rice?

Q.7 LSU dryer was developed in India. (True or False)

Q.8 Define Dehusking

Q.9 Define pelleting.

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Q.10 What is aspirator?

SECTION-B

Note:Very short answer type questions. Attempt any ten questions out of twelve questions. (10x2=20)

Q.11 Describe the principle of operation of spiral separator.

Q.12 What are the principles of parboiling?

Q.13 Suggest four steps/measures which are required for minimizing the breakage of rice.

Q.14 List two byproducts of rice industry along with their utilization.

Q.15 What is the solvent extraction of oil seeds?

Q.16 List the machine parameters that affect pulse milling out turn.

Q.17 What is the principle of hydraulic press used for oil expression?

Q.18 List at least four factors that affect the performance of wheat mill.

Q.19 Differentiate between single boiling and double boiling method of paddy parboiling.

Q.20 What is the principle of inclined draper?

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Q.21 What is the difference between magnetic separator and electrostatic separator?

Q.22 What is the principle of a grinding machine?

SECTION-C

Note:Short answer type questions. Attempt any eight questions out of ten questions. 8x5=40

Q.23 What is rubber roller Sheller? Explain its working.

Q.24 Explain the working of a horizontal abrasive whitener in brief.

Q.25 Describe the principle and working of indented cylinders.

Q.26 Describe the sodium chromate method of parboiling

Q.27 Draw the flow diagram showing various steps/unit operations in animal feed processing plant.

Q.28 Explain the working of a screw press used for oil extraction.

Q.29 Explain the working of Under Runner Disc Sheller.

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