

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B.Tech. Summer 2018-19 Examination

Semester: 6**Subject Code: 03110354****Subject Name: Drying and Storage Engineering****Date: 04/05/2019****Time: 10:30am To 01:00pm****Total Marks: 60****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions - (Fill in the blanks, one word answer, MCQ-not more than Five in case of MCQ) (All are compulsory) (Each of one mark) (15)

- 1.Constant drying conditions include?
 - (a)Temperature constant
 - (b) Humidity constant
 - (c)Velocity constant
 - (d)All of above
- 2.Find the weight of the wet solid if dry solid is 2 kg and the moisture is 0.5 kg?
 - (a)2.0
 - (b) 2.5
 - (c)3.0
 - (d)3.5
- 3.Which of the following are important parameters for seed storage?
 - (a)Temperate
 - (b) Relative humidity
 - (c)Moister content
 - (d)All of above
4. In deep bed drying the height of grains _____ cm.
 - (a)=15
 - (b) <15
 - (c)>15
 - (d)None of above
5. Drying of grain is normally a processes of
 - (a) Heat transfer
 - (b) Heat and mass transfer
 - (c) Only mass transfer
 - (d) None of the above
- 6.What is CAP storage?
- 7.Write types of dryers?
- 8.Which dryer is suitable for rice?
- 9.Cabinet/ Tray driers are direct driers?(True/False)
- 10.Kothar type grain storage structure is made up of mainly.....
11. Define EMC?
- 12.Unit of moisture content?
- 13.Which storage structure is used for short duration temporary storage of grain.....
- 14.Bukhari type grain storage structure, used in the rural India, is made from.....
- 15.Psychrometer is used for.....

- Q.2** Answer the following questions. (Attempt any three) **(15)**
- A) Explain equilibrium moisture content (EMC).
 - B) Write short note on advantage of drying.
 - C) Write short note on advantage of storage structures.
 - D) State the difference between brick and cement bin storage structures?
- Q.3** A) Write short note on tray dryer. **(07)**
B) Write short note on LSU dryer. **(08)**
- OR**
- B) Write short note on continuous flow dryer (mixing and non mixing). **(08)**
- Q.4** A) Write short note on flat bed dryer. **(07)**
- OR**
- A) Write type of traditional storage structures of rural areas. Explain any one in brief? **(07)**
B) Write short note on pusa bin (with diagram). **(08)**