A **Reg. No. :** | | | | | | | | | | |

Question Paper Code: 97A02

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2023

Seventh Semester

Agricultural Engineering

19UAG702- CROP PROCESS ENGINEERING

(Regulations 2019)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. Which of the following is an advantage of food processing? CO1-U

   (a) Availability of food (b) Removal of toxins

   (c) Add extra nutrients (d) All of the above

2. Food processing is the transformation of agricultural products into….? CO1- U

   (a) Grains (b) Food (c) Both (a) and (b) (d) Flour

3. Rabi crops are grown in _____ season CO1- U

   (a) summer (b) spring (c) winter (d) rainy

4. Growing different crops alternatly on the same land is technically called CO1- U

   (a) Crop alternation (b) crop rotation (c) crop revolution (d) crop change

5. The removal of moisture from the food materials for preservation is called as….. CO1- U

   (a) dehydration (b) freezing (c) heat processing (d) pasteurization

6. Seed of Horse gram contains…..inhibitor CO1 -U

   (a) Trypsin (b) Polyphenols (c) emagglutinins (d) All the above

7. The optimum seed rate of soybean for normal planting is CO1-U

   (a)50-60 kg/ha (b) 0-70kg/ha (c) 70-80kg/ha (d) 80-90kg/ha

8. For spring soybean, seed should be……than that of kharif planting CO1- U

(a) More (b) Less (c) Similar (d) Double

9. The Crop which is good for diabetic patient CO1 U

(a) Green gram (b) Ground nut (c) soyabean (d) Cowpea

10. In the harvested crop the grain seed in separated from the chaff this process it called CO1- U

(a) threshing (b) seeding (c) poulying (d) weeding

PART – B (5 x 2= 10Marks)

11. List out the name of 10 agricultural products, and give two examples of unit operation of agricultural products. CO1- U

12. Explain the rittingers law. CO1-U

13. Mechanisum of size reduction (a) Impact (b) Attrition CO1-U

14. What is the difference between of hardness and toughness? CO1- U

15. What are the types of traditional Storage Structures? CO1- U

PART – C (5 x 16= 80Marks)

16. (a) Explain the detail about parboiling of paddy processing. CO1-U (16)

Or

(b) Explain the detail about fluid energy mill with neat sketch and explain advantages and disadvantages of it. CO1-U (16)

17. (a) Illustrate the principles and methods of food Processing. CO2-App (16)

Or

(b) Illustrate the Rice milling process CO2-App (16)

18. (a) Explain the detail about the methods of milling pulses? CO2-App (16)

Or

(b) Illustate the detail about the types of flat belt drives and V-belt drives. CO2-App (16)

19. (a) Illustate the detail about rotary cutter mill with neat sketch. Advantage and disadvantage. CO1-U (16)

Or

(b) Explain the details about bucket elevator with neat sketch, advantage and disadvantage. CO1-U (16)

20.	(a)	Explain the details about the Inclined belt separator with neat sketch, advantage and disadvantage	CO1-U	(16)
		Or		
	(b)	Explain the details about groundnut decorticator with neat sketch, advantage and disadvantage.	CO1-U	(16)