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**Reg. No. :**

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**Question Paper Code: 97A02**

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

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. Tertiary food processing is the commercial production of what is commonly called CO1- U  
(a) Primary (b) Secondary (c) Processed food (d) None of the above
3. The crop which are grown in rainy season are called CO2- U  
(a) rabi crop (b) seasonal crop (c) monsoon crop (d) kharif crop
4. Growing different crops alternatly on the same land is technically called CO2- U  
(a) crop alternation (b) crop rotation (c) crop revolution (d) crop change
5. In the harvested crop the grain seed in separated from the chaff this process it called CO3-U  
(a) threshing (b) seeding (c) poulying (d) weeding
6. Process of adding vitamins to milk is known as\_\_\_\_\_ CO3-U  
(a) flavouring (b) fortification (c) fermentation (d) sterilization
7. Which of the following is a performance parameter for the food industry? CO4- U  
(a) Hygiene (b) Labour Used  
(c) Hygiene & Labour Used (d) None of the above

8. Seed of Horse gram contains.....inhibitor CO4- U  
 (a) Trypsin (b) Polyphenols (c) aemagglutinins (d) All the above
9. The optimum seed rate of soybean for normal planting is CO5- U  
 (a) 50-60 kg/ha (b) 60-70kg/ha (c) 70-80kg/ha (d) 80-90kg/ha
10. Which of the following is a fermented beverage...? CO5 -U  
 (a) Tari and Perry (b) Cider and Wine (c) Vinegar and Malt (d) All of the above

PART – B (5 x 2= 10Marks)

11. Explain the rittingers law CO1- U
12. What is mean by size reduction machines? CO2- U
13. Define theory of mixing? CO3- U
14. Explain the distillation process. CO4- U
15. What is mean by theory of separation? CO5- U

PART – C (5 x 16= 80Marks)

16. (a) Explain in detail about parboiling of paddy processing. CO1- U (16)  
 Or  
 (b) Explain in detail about principles and methods of food Processing. CO1- U (16)
17. (a) Explain in detail about fluid energy mill with neat sketch and briefly explain advantages and disadvantages of it. CO2 -U (16)  
 Or  
 (b) Explain in detail about ball mill with neat sketch and briefly explain advantage and disadvantage of it.. CO2 -U (16)
18. (a) Explain in detail about the methods of milling pulses CO3- U (16)  
 Or  
 (b) Explain in detail about the processing of oil seeds? CO3- U (16)
19. (a) Explain in detail about the method of separation and briefly explain its advantages and disadvantages. CO4 -U (16)  
 Or  
 (b) Illustate about the pneumatic separation conveyor with neat sketch, and briefly explain its advantage and disadvantage. CO4 -U (16)

20. (a) Explain the details about the belt conveyor and chain conveyor with neat sketch, advantage and disadvantage. CO5- U (16)

Or

(b) Explain the details about the screw conveyor with neat sketch, advantage and disadvantage. CO5- U (16)

