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Reg No.:_____   Name:_____

PART A
Answer any two full questions, each carries 15 marks.
                                                                              Marks
1   a)   How various legume crops are cultivated and consumed across the globe?   (5)

    b)   Describe the importance of legumes.   (5)

    c)   How are popcorn formed?   (5)

2   a)   How are different extruded products made from cereals   (7.5)

    b)   Explain modern methods of dehusking of paddy   (7.5)

3   a)   What is 'Schule process' in parboiling?   6

    b)   How brown rice and paddy are separated in a rice milling process?   9

PART B
Answer any two full questions, each carries 15 marks.
4   a)   Explain unit operations in wheat milling with a process flow chart.   (10)

    b)   Describe different millets and their nutritional importance.   (5)

5   a)   Write about structure and working of disc separator used in wheat milling. 7

    b)   What happens when hydrolysis of corn starch is done?   3

    c)   What are different end products obtained after oats milling.   5

6   a)   Describe structure and working of a beall degerminator for corn with figure 6

    b)   Draw a block flow diagram of wet milling of corn.   9

PART C
Answer any two full questions, each carries 20 marks.
7   a)   Describe the process of preparation of pea protein concentrate by air   (10)

         classification with a flowchart.

b) What are anti-nutritional factors present in legumes what are their effects?   (5)

c) Describe wet treatment in pulse milling.   (5)

8   a) How cleaning and grading of pulses are done before milling?   (5)

b) Explain process of production of defatted soy flour?   5

c) Describe the physical methods of grain protection during storage.   6

d) Describe bagged storage of grains.   (4)

9   a) Calculate horizontal and vertical pressures at 3m height intervals in a circular silo   15
       of internal diameter 4.0 m and height 15.0 m to store paddy. The depth of the
       hopper part is 3.0 m. Unit weight and angle of internal friction of paddy are
       5.75kN/m^3 and 36° respectively. Also calculate the hoop tension.

b) Describe different silos flow patterns?   5

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