FOOD ENGINEERING OPERATIONS-I

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks
for the questions.

Answer any *five* questions.

1. (a) Name the properties of solids affecting the size reduction operation.

    (b) Give four examples of course crusher.

    $7×2=14$

2. (a) What is the function of idlers in belt conveyors ?

    (b) Discuss the application of a belt conveyor related to food processing industry.

    $7×2=14$

3. (a) What are different types of filtration process ? Explain them briefly.

[Turn over

(b) What are the various applications of filtration in food processing ? $7 \times 2 = 14$

4. Describe a batch crystallizer with a neat labelled diagram explaining its application in food processing industries. $7+7=14$

5. (a) What are the various laws of grinding ?

(b) Write a note on constant rate filtration.
$7 \times 2 = 14$

6. Differentiate the following : $7 \times 2 = 14$

(a) Spiral separator and disc separator

(b) Jaw crusher and gyratory crusher.

7. Write short notes on : $3.5 \times 4 = 14$

(a) Homozenization

(b) Drying

(c) Idlers

(d) Agitation.