

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 20JTJ
(Third Semester)

Branch - **FOOD PROCESSING TECHNOLOGY**

FOOD ENGINEERING

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Define dehydration.
- 2 What are heat exchangers?
- 3 Define vapour recompression.
- 4 List the mechanisms of rizereduction.
- 5 Define crystal.
- 6 What is cryogenic grinding? ,
- 7 Define distillation.
- 8 What is Stoke's law?
- 9 List the types of filter media.
- 10 What is distribution co efficient of extraction?

SECTION - B (25 Marks!)

* Answer **ALL** Questions '

ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Write a note on vapour compression system.
OR
b What is jouling of heat exchanger? Discuss the effects of fouling on the performance of a plate heat exchanger.
- 12 a Enlist the factors affecting the rate of crystal growth.
OR
b Write a note on circulation evaporators.
- 13 a Give a brief account on crushers.
OR
b Explain the brief about the construction and operation of rotting compression mills?
- 14 a Write a note on basket extractor.
OR
b Explain vacuum distillation with its merits and demerits.
- 15 a Describe cake filtration and its properties?"
OR
b Explain about centrifugal separation.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Give the principle, working and application of microwave drying and tunnel drying.
- 17 Write a detailed note on Swenson - walker vacuum crystallizers, give its construction and operation.
- 18 Explain in detail about the operation and construction of rod mills, ball mills and tube mills? .
- 19 Describe about steam and flash distillation.
- 20 Define filtration. Write a detailed note rotary vacuum filtration.