

2016-2017

SEM-III Reg CBGS
P' Engineering
Second Half - 2016

Q.P. Code : 527202

(3 Hours)

[Total Marks : 70

- N.B. :** (1) All question are compulsory.
(2) Draw neat and labelled diagrams wherever necessary.

1. (a) Classify manometers and explain simple manometer. 3
(b) Discuss the concept of mass transfer occurring at the boundary of two phases. 3
(c) Explain relative humidity with respect to caking of crystals. 2
(d) Enlist factors affecting rate of evaporation. 2
(e) Differentiate between simple distillation and equilibrium distillation. 2
(f) Classify plastics and explain any one in detail. 3
2. (a) Name positive displacement pumps & elaborate on rotary pump. 4
(b) Describe in detail the diagram and working of circulatory magma crystallizer. 4
- OR**
- Explain the principle, construction and working of OSLO crystallizer. 4
(c) Elaborate construction and working of any one molecular distillation still. 3
3. (a) Give an account of devices to measure flow of fluids and explain rotameter in detail. 4
- OR**
- Discuss in detail orifice meter. 4
(b) Classify condensers and explain any one in detail. 3
(c) What are the factors to be controlled to improve efficiency of refrigeration. 4
4. (a) Explain Bernoulli's theorem with one example. 4
(b) Write a note on Plate Heat Exchanger. 4
- OR**
- Bimetallic thermometer. 4
(c) Draw the graphical representation of Mier's theory of supersaturation and give its limitation. 3

TURN OVER