

Registration No :

--	--	--	--	--	--	--	--	--	--

Total Number of Pages : 01

B.Pharm.
PH.4.3

4th Semester Back Examination 2017-18
BASIC ENGINEERING - II (UNIT OPERATIONS - II)
BRANCH : B.Pharma
Time : 3 Hours
Max Marks : 70
Q.CODE : C656

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.
Answer all parts of a question at a place.

- Q1 Answer the following questions: (2 x 10)**
- a) What is a crystallization and name crystal habit?
 - b) Define centrifugation and name two centrifugal sedimenters.
 - c) Define humidity and dew point.
 - d) What is fire extinguisher and name its component.
 - e) Brief your idea on Reynolds number and manometer.
 - f) Define the term Nucleation.
 - g) Define pump. Give two examples of pumps.
 - h) Define conveyer and give two examples.
 - i) Write advantages of steel as material of construction.
 - j) Define corrosion. Give example of corrosion inhibitors.
- Q2 a) Write principle, construction and working of Venturi meter for measurement of rate of flow of fluid. (5)**
b) Derive an equation for pressure difference for differential manometer. (5)
- Q3 a) Write a note on Psychrometric chart. (5)**
b) Write applications of humidity in Pharmacy. (5)
- Q4 a) Write the principle, construction and working applications of Screw conveyors. (5)**
b) Discuss on advantages and disadvantages of Screw conveyors. (5)
- Q5 a) Describe the Principle, construction and working of Krystal crystallizer. (5)**
b) Describe solubility curve of crystallization. (5)
- Q6 a) Briefly describe a note on various methods used for prevention and control of corrosion. (5)**
b) Write a short note on glass as a material of construction. (5)
- Q7 Write principle, construction, working, applications, advantages and disadvantages of perforated Basket centrifuge. (10)**
- Q8 Write short notes on any TWO : (5 x 2)**
- a) Industrial chemical hazards.
 - b) Diaphragm valve.
 - c) Industrial dermatitis.
 - d) Vacuum Crystallizer.