PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018

(Second Semester)

Branch - CHEMISTRY

INDUSTRIAL CHEMISTRY

Time : Three Hours

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

 $(10 \times 2 = 20)$

Maximum: 75 Marks

- Mention any four raw materials used in glass industry. 1
- 2 What is meant by Portland cement?
- Write the p^{H} value of the fertile soil. 3
- What is meant by Paris green? 4
- How is lithopone used as a pigment? 5
- Define emulsion paints. 6
- 7 How does defection occur in sugar industry?
- 8 What is the main raw material for pulp and paper industries?
- 9 Define soaps.
- What is surface active agents? Give an example. 10

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks $(5 \times 5 = 25)$

11 a Write any five chemical properties of glass.

OR

- Write the types of Portland cement. b
- Describe the role of nitrogen. phosphorous and potassium in the plant. 12 a OR
 - How are insecticides classified based on their mode of action? b
- Discuss the constitution of emulsion paints. 13 a

OR

- Briefly discuss any one protein adhesive. b
- 14 a How is the juice extracted from cane sugar?

OR

- Write the calendaring process in paper industry. b
- How is glycerine recovered from splent lye? 15 a

OR

Explain the role of fillers and additives in detergents. b

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks $(3 \times 10 = 30)$

- Write a note on coloured glass and also discuss the factors which affect 16 the quality of cement.
- 17 How are fertilizers classified?
- Discuss the constitution of paints and the setting of paints. 18
- How is soda pulp obtained from paper? 19
- Describe (i) Cleaning action of soaps (ii) Corrosion inhibitors. 20 END

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