

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2019
(Second Semester) /

Branch-CHEMISTRY

INDUSTRIAL CHEMISTRY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks!)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 What is the major raw material used in the manufacture of glass?
(i) Boric acid (ii) Sand
(iii) Magnesia (iv) Cullet
- 2 Which type of process of manufacturing of cement is followed in India?
(i) Dry (ii) Wet
(iii) Hot (iv) Cold
What is the p^H value of the soil?
(i) 10 (ii) 3
(iii) 7 (iv) 12
Find out the contact insecticides?
(i) Paris green (ii) ethylene oxide
(iii) lead arsenate (iv) pyrethrins
- 5 Which types of rays cannot be penetrated by paints?
(i) visible (ii) UV
(iii) X-rays (iv) Gamma rays
- 6 Identify the type of adhesive used for laminating paper board?
(i) starch (ii) synthetic resin
(iii) rubber based (iv) cellulose & silicate
- 7 Which country manufacture alcohol from molasses?
(i) Europe (ii) Africa
(iii) India (iv) Australia
- 8 Mention the name of the pulp where Tall oil was obtained as a by product?
(i) Soda (ii) Sulphate
(iii) Sulphite (iv) Rag
- 9 Definition of soaps is _____.
(i) esters of glycerol (ii) esters of polyhydric alcohols
(iii) potassium salts of higher fatty acids (iv) sodium salts of lauric acid
- 10 Identify the anionic detergents?
(i) $RCOONa$ (ii) $RNH@C1$
(iii) $R0(CH_2CH_2O) n^1$ (iv) $RNHCH_2COONa$

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

11 a Write about annealing process in the manufacturing of glass.

12 a How urea act as a fertilizers?

OR

b Describe the classification of Insecticides & based on their mode of action?

13 a Highlight any five advantage of emulsion paint.

OR

b How animal glue act as adhesive?

14 a Describe the crystallization method of sugar followed in India.

OR

b How calendaring process done in paper industry?

15 a Examine the cleaning action of soaps.

OR

b Sketch the flow chart of Alfol process.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

16 a Outline any four special types of glass.

OR

b Discuss the chemistry of setting of cement.

17 a Discuss about the phosphate fertilizers.

OR

b Examine the role of any one inorganic insecticides.

18 a Describe the role of anti skinning agent in paint?

OR

b Point out the importance of Ultramarine blue as blue pigments.

19 a Discuss about the manufacture of sugar from beetroot.

OR

b Compare Sulphate and Sulphite pulps through any four points.

20 a Discuss any four types of soaps and its importance.

OR

b Point out the role of additives in detergent.

Z-Z-Z

END