

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019
(Second Semester)

Branch -CHEMISTRY

INDUSTRIAL CHEMISTRY

Time: Three Hours

Maximum: 75 Marks

SECTION-A go Marks)

Answer ALL questions

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

Which one is correct and about glass?

- (i) Soft (ii) Opaque
(iii) Conductor (iv) No definite meeting point

Identify the correct heat required for dry grinding.

- (i) 430 kcal/kg (ii) 1500 kcal/kg
(iii) 800 kcal/kg (iv) 4000 kcal/kg

What is the position urea occupies in the world's solid nitrogen us fertilizers?

- (i) One (ii) Two
(iii) Third (iv) Fourth

Find out the fumigants in it.

- (i) Aldrin (ii) Nicotine
(iii) Paris green (iv) Rotenone

Identify the drying oil mostly used in paints.

- (i) Tung oil (ii) Linseed oil
(iii) Caster oil (iv) Tall oil

Which one is a protein adhesive?

- (i) Dextrin (ii) Casein
(iii) Animal glue (iv) Cellulose

Which country manufacture alcohol from molasses?

- (i) Europe (ii) Africa
(iii) India (iv) Australia

Which pulp is used for making light papers?

- (i) Sulphate (ii) Sulphite
(iii) Rag (iv) Soda

9 Which one is correct for toilet soap?

- (i) Hard (ii) Smooth
(iii) Sterile acid present (iv) Glycerine as skin conditioner

10 Which one is Anionic detergents?

- (i) RCOONO (ii) RNH₃cl
(iii) RNHCH₂ coona (iv) R₄ Ncl

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks (5 x 7 = 35)

- 11 a Compare pot furnace & Tank furnace.
OR
b Write about different the types of Portland cement.
- 12 a Discuss about fertility & PH value of soil.
OR
b Differentiate natural & plant insecticides.
- 13 a Explain the manufacture of paint?
OR
b Write about lithopone .
- 14 a Describe the manufacture of spirit.
OR
b Examine the sulphite pulp.
- 15 a Explain the cleaning action of soaps.
OR
b Write about anionic detergents.

SECTION - C 130 Marks)

Answer any **THREE** Questions

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

- 16 (i) Describe the annealing process in glass manufacturing.
(ii) Discuss the chemistry of setting of cement.
- 17 (i) Point out the role of super phosphate as fertilizers.
(ii) Analyze how paris green act as insecticides.
- 18 (i) Highlight the role of driers, thinners in paint industry.
(ii) Outline the importance of synthetic resin adhesive.
- 19 (i) Discuss about carbonation in sugar industry.
(ii) Write about calendaring process.
- 20 (i) Sketch how glycerine is recovered from spent lye.
(ii) Out line the classification of surface active agents.

Z-Z-Z

END