# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

# BSc DEGREE EXAMINATION MAY 2017 (Fourth Semester)

. Branch- PHYSICS

#### **CHEMISTRY - II**

Time: Three Hours \* Maximum: 75 Marks

### SECTION-A (20 Marks)

Answer ALL questions \*\*\*-

ALL questions carry EQUAL marks  $(10 \times 2 = 20)$ 

- 1 Define standard deviation.
- 2 \_ What is precision?
- Write any one method of preparation of thiophene.
- 4 Distinguish soap and detergent.
- 5 Define p<sup>H</sup>.
- 6 What is meant by corrosion?
- 7 Define isothermal process.
- 8 What is meant by reversible process?
- 9 Define thermal pollution.
- Define noise pollution. .

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SECTION - B (25 Marks) Answer ALL Questions

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

11 a Classify error and how will you minimize error?

OR

- b Define mean and median.
- 12 a Write down preparation and any three chemical properties of pyridine.

OR

- b How are amino acids classified? Give any two properties of aminoacids.
- 13 a Explain Faraday's law of electrolysis.

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- b Write down the importance of pH and buffer in living system. •
- 14 a Derive an expression for the relation between Cp and Cv.

OR

- b Explain the instrumentation of IR.
- 15 a Give account on\* the source and effect of noise pollution.

OR

b Classify pollutants.

#### SECTION - C (30 Marks)

Answer any THREE Questions

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

- Write note on simple first aid procedure for accidents in laboratory.
- Define soap . Explain its types . How is it manufactured?
- Give a brief account on the different types of conductometric titrations with graphs.
- Explain the principle of Raman spectroscopy with instrumentation diagram. and its applications.
- Discuss the sources of thermal pollutants and how will you control them.