## **18PGDIS05/15PGDIS05**

### PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

## **PG DIPLOMA EXAMINATION MAY 2019**

(Second Semester)

#### **Branch - INDUSTRIAL SAFETY**

# INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH

Time: Three Hours Maximum: 60 Marks

## **SECTION-A**

Answer ALL questions

ALL questions carry EQUAL marks

 $(5 \times 5 = 25)$ 

1 a Explain the steps in combining sound pressure levels of many sources.

OR

- b Distinguish between ionizing radiation ad non-ionizing radiation with examples.
- 2 a State the reasons for conducting industrial hygiene sampling.

OR

- b Describe the adverse effects of exposure to carbon monoxide.
- a What is kyphosis? How is it caused? Explain briefly.

OR

- b What are the occupations and workplaces in which workers are exposed to biological hazards?
- 4 a Write a note on pre-employment medical examinations.

OR

- b What is Health? What is its spectrum? Describe briefly.
- 5 a How will you determine work capacity of a worker? Explain.

OF

b Distinguish between static anthropometry and dynamic anthropometry.

### **SECTION - B**

Answer **ALL** Questions

ALL questions carry EQUAL marks

 $(5 \times 7 = 35)$ 

6 a What are octave bands of sound? How are they analyzed? What is the purpose of its analysis? Explain.

OR

- b How will you control heat stress in industries by engineering measures? Explain.
- 7 a Describe the various air sampling strategies.

 $\cap R$ 

- b Explain how the chemical hazards can be controlled in industries.
- 8 a Explain the illness and disease caused by various biohazardous agents.

 $\cap R$ 

- b How can the buildings be designed to minimize ergonomical hazards? Explain.
- 9 a Explain the acute and chronic effects of chromium.

OR

- b Explain the importance of vital function tests and how they are carried out?
- 10 a Explain in detail the First-Aid treatments for different injuries in an