

Total No. of Questions :6]

SEAT No. :

[Total No. of Pages : 2

P1925

[5323]-1004

M.Sc.-I

CHEMISTRY

CHA-190 : Safety in Chemical Laboratory and Good Laboratory Practices

(2013 Pattern) (Semester-I) (Old 5 Credit)

Time : 3 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) Answer to the two sections should be written in seperate answer books.*
- 2) All questions are compulsory.*
- 3) Neat diagram must be drawn wherever necessary.*

SECTION-I

Q1) Attempt the following :

[10]

- a) Define allergen and give its two examples.
- b) Give the importance of material safety data sheet.
- c) What is the first aid for contact of chemicals on skin and eyes.
- d) Mention the objective of fire drill.
- e) What is the role of eye wash unit and safety shoes.

Q2) Answer any two of the following :

[10]

- a) Explain in brief 'Good House Keeping'.
- b) Write a note on globally harmonized system for safety data sheet.
- c) Give an brief account of safety in chemical laboratory.
- d) Write a note on personnel protective equipments.

Q3) Answer any one of the following :

[5]

- a) Enlist the various hazards and explain any one of it in detail.
- b) Write a note on different types of fire extinguisher.

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SECTION-II

Q4) Attempt the following : **[10]**

- a) What are the safety measures for mercury spillage.
- b) Define fire and give its types.
- c) What is stock register for chemicals?
- d) Comment on losses in accidents.
- e) Define Hazardous and non hazardous waste.

Q5) Answer any two of the following : **[10]**

- a) Write a short note on inventory management.
- b) Explain ISO and NABL accreditation.
- c) Define the laboratory standards and explain the identification of Hazards.
- d) Explain Instrument validation and reagent certification.

Q6) Answer any one of the following : **[5]**

- a) What is mixed waste? Explain the method for its disposal.
- b) What is SOP? Explain its implementation in chemical laboratory.

