

Vidya Prasarak Mandal's
ADVANCED STUDY CENTRE
C/o. B.N.Bandodkar College of Science, Thane.

POST GRADUATE DIPLOMA IN APPLIED ANALYTICAL CHEMISTRY
(Final Examination 2006-2007)

Date: 18.04.2007

PAPER- III

Marks: 50

Notice – Write each Section in different Answersheet.

Section – I (25 marks)

- Q.1 Discuss methods of determination of: 10
i) Dissolved Oxygen
ii) Chemical Oxygen Demand
iii) Biological Oxygen Demand
- OR**
- Q.1 Discuss the significance of following water quality parameters: 10
i) Hardness ii) Chloride iii) Ammonia
iv) Heavy Metals v) COD vi) Phosphates
- Q.2 Discuss various sources of water pollution. Describe operations of effluent-treatment plant. 05
- Q.3 a) What are limit tests? 02
b) Write notes on general methods for the limit tests of: 06
 i) Chlorides
 ii) Sulphates by I.P.
c) Write a note on Ash values and residue on ignition. 02

Section – II (25 marks)

- Q.1 Write short notes on (any Four) of the following: 16
a) What is safety and why do we need it?
b) Which are the main elements of Emergency Management Plan?
c) Explain the need of legislation for Industries. Explain any two statutory requirements pertaining to Safety.
d) Safety in laboratory
e) MSDS
f) Explain the different types of fire with examples.
- Q.2 Define following (any 6): 06
a) Accident b) Flash point c) Hazards
d) Risk e) LD50 f) Vapour density
g) Auto ignition temperature

Q.3 Explain any suitable portable fire extinguisher for laboratory. 03

OR

Q.3 Explain what is PPE & give examples of non-respiratory type of PPEs. 03

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