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S-2647

M. Sc. (Sem. I) (Aquatic Biology) Examination

March / April – 2011

AQB - 102 : Instrumentation & Research Methodology

Time : **3** Hours] [Total Marks : **70**

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ **M. Sc. (Sem. 1) (Aquatic Biology)**

Name of the Subject :

☛ **AQB - 102 : Instrumentation & Research Methodology**

☛Subject Code No. : **2 6 4 7** ☛Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

(2) Attempt any **five** questions.

1 What is spectrophotometry ? Describe with labelled diagram the working of single beam and double beam spectrophotometers. **14**

2 What is the principle and application of SEM ? Draw labelled diagram and give its brief deceptions. **14**

3 Draw a labelled diagram and describe the principle and application of electrophoresis. Explain the methodology of protein electrophoresis. **14**

4 What is density gradient centrifugation ? describe in detail of different types of centrifuges. **14**

5 Give an account on principles and applications of following: **14**

(a) Conductivity meter

(b) Colorimeter

(c) Turbidometer

(d) Do meter.

6 What is the NMR and Mass specrometery ? describe its principle and application. **14**

7 Detail description with labelled diagrma and working method of following: **14**

(i) Stereoscopic microscope

(ii) Interference microscope.
