



## FACULTY COUNCIL OF SCIENCE JADAVPUR UNIVERSITY

### NOTICE

In the existing syllabus of the Ph.D. course work under the Dept. of Geological Scs. one more elective unit has been included. The approved syllabus of the unit 18 is as follows:-

#### **UNIT 18: Ground Water Quality, Management and Environmental Impact : (Prof. S.K.Nag)**

<b>TOPICS</b>	<b>DETAILED SYLLABUS</b>
Introduction	General principles of Hydrogeology, Hydrological Cycle, Aquifer System, Natural recharge of groundwater, Aquifer properties
Hydrogeochemistry	Chemical quality of water, Standards of drinking, irrigation and industrial uses; Chemical quality surveillance of groundwater and its health aspects.
Groundwater Pollution	General principles, Groundwater pollution scenario in West Bengal and India; Remedial action for control of pollution, Arsenic & Fluoride contamination of groundwater of West Bengal.
Groundwater Provinces	Groundwater provinces and resources of West Bengal and India
Environmental Impact Analysis	Environmental impact of groundwater development.
Artificial Recharge, Monitoring and Assessment	Groundwater monitoring and assessment; Development and management of coastal aquifer, Rain water harvesting, Artificial recharge to groundwater system
Ground Water Management	Principle of management & management techniques; Human resource management in water supply projects; Legal aspects of groundwater development – role of CGWA and Groundwater Laws and Acts
Rural Water Supply	Rural water supply scenario – problem & prospects

Sd/-  
(Atiskumar Chattopadhyay)  
Secretary, Faculty of Science