



Syllabus for Hydrologists exam

Hydrologic Cycle, Precipitation causes and types, computation of average precipitation, Methods of determination of evaporation and evapotranspiration, runoff cycle and factors affecting rainfall.

Elementary theory of groundwater flow; Darcy's law and its range of validity, Steady and unsteady flows, Types of aquifers, Porosity and Hydraulic conductivity, Hydraulic Gradient, Ground Water flow calculation, Water level fluctuation, Cone of depression, Specific capacity/yield, Ground water exploration methods, Well Development Procedures, Assessment of water quality and contamination, Well hydraulics: Determination of aquifer characteristics from pumping tests, Groundwater development: Water well drilling, design and construction.

Fresh and salt water relationship in coastal areas; Ghyben-Herzberg principle and its modification, prevention and control of sea water intrusion, Hydro geological categorization.

Water balance studies, Groundwater recharge: artificial and natural, Groundwater provinces of India. Geomorphological and geological setup of Gujarat, ground water & surface water scenario in Gujarat.

Role of geology in planning, location, design, construction and performance of major civil engineering structures, Rock mass classification (BGD), Influence of geological factors on engineering properties of rocks.

Written exam will be held at Vadodara as per the schedule given below.

Exam Detail : Written Exam will be consisting of TWO Papers, Paper I 200 Marks – (Multiple Choice Objective Type) and Paper II (100 Marks -Objective). Candidate has to give answers in OMR sheet by selecting answer from the given option A, B, C or D.

Papers - I : This paper would be of 200 marks and all the Questions would be from the syllabus attached herewith. Questions would be either one mark/ two mark/ three marks/ four marks each.

Papers - II : This paper would be of 100 marks and all the Questions will be Multiple Choice Questions of One mark each. Questions would be from Basic Statistics, Basic Mathematics, Science, geography, Gujarati and English Grammar up to 10th standard (Gujarat Board) level as well as General Knowledge, Logical reasoning, Quantitative technics.

Exam Date : Monday, June 27, 2016

Exam Time : 14.30 noon onwards

- Reporting and Verification
- 15.00 Commencement of Paper I (2 Hours)
- 17.10 Commencement of Paper II (1 Hours)

Language : Medium of Exam would be English except questions related to Gujarati language.

Marking : There will be negative marking 0.25 per wrong answer. No negative marking for questions left unanswered.

**Exam Center : BBA Building
Donors' Plaza
Opp. M. S. University Office, Fatehgunj
Vadodara**

Candidate is supposed to carry Driving License, Passport, Adhar Card and Election Card.