

**DISTRIBUTION AND CREDIT WEIGHTAGE OF DIFFERENT COURSES OF
WATER MANAGEMENT IN BACHELOR OF SCIENCE (GENERAL)
UNDER CHOICE BASED CREDIT SYSTEM SCHEME**

PROGRAMME: BACHELOR OF SCIENCE (B.SC. GENERAL) SUBJECT: WATER MANAGEMENT

Semester	Course Code	Type of Course	Title of Course	Credits	
				Theory	Practical
I	WM120C	DSC-1 (6 Credits)	Water and Society	4	2
II	WM220C	DSC-2 (6 Credits)	Water Resources and Hydrology	4	2
III	WM320C	DSC-3 (6 Credits)	Water Quality	4	2
IV	WM420C	DSC-4 (6 Credits)	Water Pollution and Control	4	2
VA OR	WM520DA	DSE-1 (6 Credits)	Water and Waste Water Engineering	4	2
VB	WM520DB	DSE-2 (6 Credits)	Water Resource Management	4	2
VIA OR	WM620DA	DSE- 3 (6 Credits)	Aquatic Ecology	4	2
VIB	WM620DB	DSE-4 (6 Credits)	Water Economics and Public Health	4	2

**1st SEMESTER
WATER MANAGEMENT
DISCIPLINE SPECIFIC COURSE-1 (CORE-1)**

WM120C: WATER MANAGEMENT: WATER AND SOCIETY

**CREDITS - THEORY-4, PRACTICAL-2
MAXIMUM MARKS: 60 MINIMUM MARKS: 24**

Objectives/Expected Learning Outcomes: The course introduces students to the importance of water. The course discusses societal implications of water usage as well as current issues in water resource distribution and consumption.

THEORY (4 CREDITS: 60 HOURS)

UNIT-I: Introduction to water

15 Hours

1. Origin of water
2. Importance of water
3. Properties of water
4. Concept of potable water
5. Water and hygiene

UNIT-II: Water and human civilization

15 Hours

1. Indus valley civilization
2. Mesopotamian civilization
3. Medieval water infrastructure and tools
4. Water in beliefs and religious practices
5. Water and modern world

UNIT-III: Water demands

15 Hours

1. Domestic water use
2. Industrial water use
3. Agricultural water use
4. Water Stress and scarcity
5. Water foot print

UNIT-IV: Water security

15 Hours

1. Water and food security
2. Water and energy security
3. Water and national security
4. International conflicts on water sharing between India and its neighbours
5. Institutional frameworks for water dispute resolution

PRACTICAL (2 CREDITS - 60 HOURS) MAXIMUM MARKS: 30 MINIMUM MARKS: 12

1. Determination of odor of water sample
2. Determination of colour of water sample
3. Determination of transparency of water body
4. Evaluation of per capita domestic water consumption pattern
5. Calculation of personal water footprint
6. Visit to an archeological site for demonstration of water infrastructure

