

**Department of Forestry**  
**Programme: B.Sc. (Honours) Forestry (4 Year Programme)**

Year I			Semester - I			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	CS 21101	Information and Communication Technology	2	0	2	3
2.	CY 21151	Plant Biochemistry	1	0	2	2
3.	HS 21101	Communication Skills and Personality Development	2	0	2	3
4.	MA 21102	Basic Mathematics	2	0	0	2
5.	FR 21101	Introduction to Forestry	2	0	0	2
6.	FR 21102	Dendrology	2	0	2	3
7.	FR 21103	Introduction to Agronomy and Horticulture	2	0	2	3
8.	FR 21104	Wood Anatomy	2	0	2	3
9.	NP 21161	NCC-I/NSS-1	0	0	2	1*
10.	NP 21162	Physical Education-I	0	0	2	1*
		<b>TOTAL</b>				<b>21+2*</b>

Year I			Semester - II			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	MA 21202	Statistical Methods and Experimental Designs	2	0	2	3
2.	FR 21201	Plant Physiology	2	0	2	3
3.	FR 21202	Theory and Practice of Silviculture	2	0	2	3
4.	FR 21203	Geology and Soils	2	0	2	3
5.	FR 21204	Wildlife Biology	2	0	2	3
6.	FR 21205	Forest Protection	2	0	2	3
7.	FR 21251	Plant Cytology and Genetics	1	0	2	2
8.	NP 21261	NCC-II/NSS-II	0	0	2	1*
9.	NP 21262	Physical Education-II	0	0	2	1*
		<b>TOTAL</b>				<b>20+2*</b>

Year II			Semester - III			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	CE 22121	Forest Survey and Engineering	2	0	2	3
2.	FR 22101	Environmental Studies and Disaster Management	2	0	2	3
3.	FR 22102	Ornithology and Herpetology	2	0	2	3
4.	FR 22103	Ethnobotany, Medicinal and Aromatic plants	2	0	2	3
5.	FR 22104	Tree Improvement	2	0	2	3
6.	FR 22105	Principles of Agroforestry	2	0	2	3
7.	FR 22106	Forest Mensuration	2	0	2	3
8.	NP 22161	NCC-III/NSS-III	0	0	2	1*
9.	NP 22162	Physical Education-III	0	0	2	1*
		<b>TOTAL</b>				<b>21+2*</b>

Year II			Semester - IV			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	FR 22201	Forest Management	2	0	2	3
2.	FR 22202	Silviculture of Indian Trees	2	0	2	3
3.	FR 22203	Wood Products and Utilization	2	0	2	3
4.	FR 22204	Forest Ecology and Biodiversity	2	0	2	3
5.	FR 22205	Soil Biology and Fertility	2	0	2	3
6.	FR 22206	Seed Technology and Nursery Management	2	0	2	3
7.	FR 22207	Forest Tribology and Anthropology	2	0	0	2
8.	FR 22251	Rangeland and Livestock Management	1	0	2	2
9.	FR 22266	Study Tour of State Forest	-	-	-	1*
		<b>TOTAL</b>				<b>22+1*</b>

Year III			Semester - V			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	AE 23121	Forest Hydrology and Watershed Management	2	0	2	3
2.	HS 23101	Principles of Economics	3	0	0	3
3.	FR 23101	Climate Science	2	0	2	3
4.	FR 23102	Plantation Forestry	2	0	2	3
5.	FR 23103	Forest Extension and Community Forestry	2	0	2	3

6.	FR 23151	Logging and Ergonomics	1	0	2	2
7.	FR 23152	Geomatics	1	0	4	3
8.	FR-23153	Experiential Learning	0	0	10	5
		<b>TOTAL</b>				<b>25</b>

Year III			Semester - VI			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	HS-23201	Organizational Behaviour	3	0	0	3
2.	HS-23202	Forest Economics and Marketing	3	0	0	3
3.	FR-23201	Wood Science and Technology	2	0	2	3
4.	FR-23202	Forest Laws, Legislation and Policies	2	0	0	2
5.	FR-23203	Certification of Forest Products	2	0	0	2
6.	FR-23251	Recreation and Urban Forestry	1	0	2	2
7.	FR-23252	Wildlife Management	1	0	2	2
8.	FR-23253	Experiential Learning	0	0	10	5
9.	FR-23266	All India Study Tour	-	-	-	3*
		<b>TOTAL</b>				<b>22+3*</b>

Year IV			Semester - VII			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	FR 24179	Forestry Work Experience**	0	0	40	20
		<b>TOTAL</b>				<b>20</b>

Year IV			Semester - VIII			
Sl. No.	Course Code	Course Title	L	T	P	C
1.	FR 24201	Agricultural Informatics	2	0	2	3
2.	FR 24202	Forest Biotechnology	2	0	2	3
3.	FR 24203	Agroforestry Systems and Management	2	0	2	3
4.	FR 24251	Forest Inventory and Yield Prediction	1	0	2	2
5.	FR 24252	Restoration Ecology	1	0	2	2
6.	FR 24299	Project Work and Dissertation	0	0	20	10
		<b>TOTAL</b>				<b>23</b>

#### FR 21101 | Introduction to Forestry: 2 Credits (2-0-0)

##### Theory

<b>Unit I</b>	Forests: Definition, role, benefits; History of Forestry. Classification of forests: High forests, coppice forests, virgin forest and secondary forests; pure and mixed forests; even and uneven aged stands.	5 Lectures
<b>Unit II</b>	Forest types of India; Agroforestry, Farm forestry, Social forestry, Joint Forest Management; Important acts and policies related to Indian forests.	5 Lectures
<b>Unit III</b>	Climate Change: forestry options for mitigation and adaptation; Carbon sequestration; Important events/dates related to forests and environment. Introduction to world forests: geographical distribution and their classification; factors influencing global forests distribution; productivity and increment of world forests.	6 Lectures
<b>Unit IV</b>	Forest resources and forestry practices in different regions of the world: Western Europe, North America, Central Africa, Australia, Central America, Russia, Japan, China and India. General problems of forest development and economy.	6 Lectures
<b>Unit V</b>	Forest-based industries in the developed and developing countries. Trade patterns of forest based raw materials. Recent trends in forestry development in the world. National and international organizations in Forestry.	6 Lectures

##### Suggested Readings

- Beazley, M. (1981). The International Book of Forest. Simon and Schuster, Inc., New York, USA.
- Champion, H.G. and Seth, S.K. (1968). A Revised Survey of the Forest Types of India. Manager of Publications, Government of India, New Delhi. India.
- Dwivedi, A.P. (1989). Text Book of Silviculture. International Book Distributors Dehra Dun, India.
- Grebner, D.L., Bettinger, P. and Siry, J.P. (2013). Introduction to Forestry and Natural Resources. Academic Press, London, UK.
- Khanna, L.S. (2015). Principles and Practices of Silviculture. Khanna Bandhu, New Delhi, India.
- Mather, A.S. (1990). Global Forest Resources. Belhaven Press, London, UK.
- Mehta, T. (2008). Hand Book of Forest utilization. International Book Distributors Dehra Dun, India.
- Persson, R. (1992). World Forest Resources. Periodical Experts, New Delhi, India.
- Westoby, J. (1991). Introduction to World Forestry. John Wiley & Sons.