

Assignment – Module 8

1. The annual discharge (in cumec) data at a site for a particular day is given for 14 years.

Obtain the missing value.

Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Discharge	1362	2242	1136	2002	1240	1202	1706	1767	?	1407	809	866	1862	1035	935

2. Out of 8 years of data for a particular day, April 5th, data for one year is missing and needs to be filled up. Number of non-zero flows on Apr. 5th (leaving out the year in which the data is being filled) is 3 with an average flow of 3.25 units. Fill the single missing value for this date.
3. The annual rainfall (in mm) given below is for two stations. Obtain the double mass curve and check the consistency in the data.

Year	Station-1	Station-2	Year	Station-1	Station-2
1964-65	4189.9	4932	1984-85	3650.9	5925
1965-66	4260.5	5172	1985-86	3195.8	5003
1966-67	3840.8	1506	1986-87	3556.6	4025
1967-68	4079.7	2264	1987-88	3541	4228
1968-69	4228.3	1897	1988-89	5104	5972
1969-70	4540.2	2153	1989-90	4023	5237
1970-71	4759.9	2287	1990-91	4501	6396
1971-72	3842	1801	1991-92	3602	5552
1972-73	3232	1692	1992-93	3984	6035
1973-74	3998	2027	1993-94	6573	6753
1974-75	4398.5	2251	1994-95	7467	8263
1975-76	4872.5	1854	1995-96	4735	3972
1976-77	3744	5782	1996-97	3815	4229
1977-78	4358	5432	1997-98	5045.95	6722
1978-79	5088	7173	1998-99	4311.27	5994
1979-80	3679.7	5496	1999-2000	4757.3	6927
1980-81	4549.7	7909	2000-01	4111.8	5588
1981-82	4669.1	7460	2001-02	3133.9	4548
1982-83	4809.6	6908	2002-03	3454	4691
1983-84	3956.7	6581	2003-04	3818	4683