Padhuka's

Practical Learning Series

FINANCIAL MANAGEMENT & STRATEGIC MANAGEMENT

For CA Inter New Syllabus 2023

Applicable for May 2024 Examination and onwards

Highlights of this Book

- Easy Format and structure for better understanding.
- Explanation and Presentation of concepts for easy remembrance.
- Chapter Overview to aid effective learning.
- Around 425+ Solved illustrations.
- Use of Diagrams and Tables for quick learning.
- Fast Track Referencer for Quick Revision of all topics.

including 1000+ MCQs with Answers

Covering Topic wise MCQ's with Answers

CA B. Saravana Prasath

1st EDITION August 2023

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(An Institution providing Classes for CA Foundation,

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Sadaashiva Samaarambhaam Sankaracharya Madhyamaam

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Many Salutations To

The Great Lineage of Teachers

Originating from the Ever–Blissful Lord Shiva,

The Sankaracharya,

And

To My Own Teachers.

PREFACE

This First Edition of **"Padhuka's Practical Learning Series – Financial Management and Strategic Management"** for **CA Intermediate New Syllabus** comes to you as a complete guide in a handy book, with the following Key Features –

- **Easy Format and Structure:** All principles / procedures / techniques / concepts and ideas have been arranged neatly in easy–to–read format, and numbered into Topics / Sub–Topics, so that the Student can understand the subject easily.
- **Explanation and Presentation:** The presentation in each Topic has been explained better, to help the Student remember the ideas / concepts / points more easily.
- **Chapter Overview:** The Chapter overview at the beginning of every Chapter will help the student to navigate through each Chapter–Topic–Sub–Topic, in an organized and phase manner.
- **Solved Illustrations:** Around 405+ Fully Solved Illustrations have been provided, with step–wise presentation, organized into separate headings, in order to cover every possible question type in each topic.
- **Chapter–wise MCQs:** Around 1,000+ MCQs for exam preparation
- **Diagrams and Tables:** Diagrams, Charts, Graphs and Comparative Analysis Tables have been added to enable the Student to assimilate the subject better.
- **Fast Track Referencer:** Fast Track Formula Referencer has been given for quick revision of the various formulae and procedures in the Topics.

At the Intermediate level, the Student is expected to be conversant with the concepts for preparation and the presentation in Exams. The Book has been drafted with the primary motive to help the students recapitulate the concepts and principles in an easy manner.

This Book has been possible only due to the constant motivation and support provided by **Shri G Sekar, FCA**, and also the timely and quality–oriented assistance provided by an excellent team of Students, Academicians and Professionals.

My sincere thanks to the **Institute of Chartered Accountants of India** for their permission to use questions from previous examinations and Revision Test Papers (RTP).

Many thanks to the Users of the Padhuka's Publications, for their positive feedback, which reflects the benefits they have reaped from this Book, and also their keen interest to reciprocate with constructive suggestions.

I also thank the efforts and co–operation of the various Service Providers in bringing out this Edition and in quickly getting this Book in the current form.

Constructive Suggestions and Feedback from Users would be highly appreciated, gratefully acknowledged and suitably incorporated.

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With Best Wishes,

B Saravana Prasath, FCA
July 2023

Subject Index

Table A - Future Value Factor (FVF) = (R,n) = $(1+R)^n$ - Compounding Factor of a Single Cash Flow - [n- Period; R - Rate]

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.3689	1.3924
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.6016	1.6430
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	1.8739	1.9388
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.1924	2.2878
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.5652	2.6996
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.0012	3.1855
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.3045	2.4760	2.6584	2.8526	3.0590	3.2784	3.5115	3.7589
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5179	3.8030	4.1084	4.4355
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	2.8394	3.1058	3.3946	3.7072	4.0456	4.4114	4.8068	5.2338
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.1518	3.4785	3.8359	4.2262	4.6524	5.1173	5.6240	6.1759
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	6.5801	7.2876
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	3.8833	4.3635	4.8980	5.4924	6.1528	6.8858	7.6987	8.5994
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	9.0075	10.1472
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2655	10.5387	11.9737
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.7480	12.3303	14.1290
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9861	9.2765	10.7613	12.4677	14.4265	16.6722
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	6.5436	7.6900	9.0243	10.5752	12.3755	14.4625	16.8790	19.6733
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	7.2633	8.6128	10.1974	12.0557	14.2318	16.7765	19.7484	23.2144
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	8.0623	9.6463	11.5231	13.7435	16.3665	19.4608	23.1056	27.3930
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	8.9492	10.8038	13.0211	15.6676	18.8215	22.5745	27.0336	32.3238
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	9.9336	12.1003	14.7138	17.8610	21.6447	26.1864	31.6293	38.1421
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.0263	13.5523	16.6266	20.3616	24.8915	30.3762	37.0062	45.0076
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	12.2392	15.1786	18.7881	23.2122	28.6252	35.2364	43.2973	53.1090
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.8347	13.5855	17.0001	21.2305	26.4619	32.9190	40.8742	50.6578	62.6686
26	1.2953	1.6734	2.1566	2.7725	3.5557	4.5494	5.8074	7.3964	9.3992	11.9182	15.0799	19.0401	23.9905	30.1666	37.8568	47.4141	59.2697	73.9490
27	1.3082	1.7069	2.2213	2.8834	3.7335	4.8223	6.2139	7.9881	10.2451	13.1100	16.7386	21.3249	27.1093	34.3899	43.5353	55.0004	69.3455	87.2598
28	1.3213	1.7410	2.2879	2.9987	3.9201	5.1117	6.6488	8.6271	11.1671	14.4210	18.5799	23.8839	30.6335	39.2045	50.0656	63.8004	81.1342	102.9666
29	1.3345	1.7758	2.3566	3.1187	4.1161	5.4184	7.1143	9.3173	12.1722	15.8631	20.6237	26.7499	34.6158	44.6931	57.5755	74.0085	94.9271	121.5005
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.0627	13.2677	17.4494	22.8923	29.9599	39.1159	50.9502	66.2118	85.8499	111.0647	143.3706

Table A - Future Value Factor (FVF) = (R,n) = $(1+R)^n$ - Compounding Factor of a Single Cash Flow - [n- Period; R - Rate]

Period	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
0	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1	1.1900	1.2000	1.2100	1.2200	1.2300	1.2400	1.2500	1.2600	1.2700	1.2800	1.2900	1.3000
2	1.4161	1.4400	1.4641	1.4884	1.5129	1.5376	1.5625	1.5876	1.6129	1.6384	1.6641	1.6900
3	1.6852	1.7280	1.7716	1.8158	1.8609	1.9066	1.9531	2.0004	2.0484	2.0972	2.1467	2.1970
4	2.0053	2.0736	2.1436	2.2153	2.2889	2.3642	2.4414	2.5205	2.6014	2.6844	2.7692	2.8561
5	2.3864	2.4883	2.5937	2.7027	2.8153	2.9316	3.0518	3.1758	3.3038	3.4360	3.5723	3.7129
6	2.8398	2.9860	3.1384	3.2973	3.4628	3.6352	3.8147	4.0015	4.1959	4.3980	4.6083	4.8268
7	3.3793	3.5832	3.7975	4.0227	4.2593	4.5077	4.7684	5.0419	5.3288	5.6295	5.9447	6.2749
8	4.0214	4.2998	4.5950	4.9077	5.2389	5.5895	5.9605	6.3528	6.7675	7.2058	7.6686	8.1573
9	4.7854	5.1598	5.5599	5.9874	6.4439	6.9310	7.4506	8.0045	8.5948	9.2234	9.8925	10.6045
10	5.6947	6.1917	6.7275	7.3046	7.9259	8.5944	9.3132	10.0857	10.9153	11.8059	12.7614	13.7858
11	6.7767	7.4301	8.1403	8.9117	9.7489	10.6571	11.6415	12.7080	13.8625	15.1116	16.4622	17.9216
12	8.0642	8.9161	9.8497	10.8722	11.9912	13.2148	14.5519	16.0120	17.6053	19.3428	21.2362	23.2981
13	9.5964	10.6993	11.9182	13.2641	14.7491	16.3863	18.1899	20.1752	22.3588	24.7588	27.3947	30.2875
14	11.4198	12.8392	14.4210	16.1822	18.1414	20.3191	22.7374	25.4207	28.3957	31.6913	35.3391	39.3738
15	13.5895	15.4070	17.4494	19.7423	22.3140	25.1956	28.4217	32.0301	36.0625	40.5648	45.5875	51.1859
16	16.1715	18.4884	21.1138	24.0856	27.4462	31.2426	35.5271	40.3579	45.7994	51.9230	58.8079	66.5417
17	19.2441	22.1861	25.5477	29.3844	33.7588	38.7408	44.4089	50.8510	58.1652	66.4614	75.8621	86.5042
18	22.9005	26.6233	30.9127	35.8490	41.5233	48.0386	55.5112	64.0722	73.8698	85.0706	97.8622	112.4554
19	27.2516	31.9480	37.4043	43.7358	51.0737	59.5679	69.3889	80.7310	93.8147	108.8904	126.2422	146.1920
20	32.4294	38.3376	45.2593	53.3576	62.8206	73.8641	86.7362	101.7211	119.1446	139.3797	162.8524	190.0496
21	38.5910	46.0051	54.7637	65.0963	77.2694	91.5915	108.4202	128.1685	151.3137	178.4060	210.0796	247.0645
22	45.9233	55.2061	66.2641	79.4175	95.0413	113.5735	135.5253	161.4924	192.1683	228.3596	271.0027	321.1839
23	54.6487	66.2474	80.1795	96.8894	116.9008	140.8312	169.4066	203.4804	244.0538	292.3003	349.5935	417.5391
24	65.0320	79.4968	97.0172	118.2050	143.7880	174.6306	211.7582	256.3853	309.9483	374.1444	450.9756	542.8008
25	77.3881	95.3962	117.3909	144.2101	176.8593	216.5420	264.6978	323.0454	393.6344	478.9049	581.7585	705.6410
26	92.0918	114.4755	142.0429	175.9364	217.5369	268.5121	330.8722	407.0373	499.9157	612.9982	750.4685	917.3333
27	109.5893	137.3706	171.8719	214.6424	267.5704	332.9550	413.5903	512.8670	634.8929	784.6377	968.1044	1,192.5333
28	130.4112	164.8447	207.9651	261.8637	329.1115	412.8642	516.9879	646.2124	806.3140	1,004.3363	1,248.8546	1,550.2933
29	155.1893	197.8136	251.6377	319.4737	404.8072	511.9516	646.2349	814.2276	1,024.0187	1,285.5504	1,611.0225	2,015.3813
30	184.6753	237.3763	304.4816	389.7579	497.9129	634.8199	807.7936	1,025.9267	1,300.5038	1,645.5046	2,078.2190	2,619.9956

Table B - Future Value of an Annuity (FVA) = (R,n) = [{(1+R)^n - 1} ÷ R] - Compounding Factor of an Annuity - [n- Period; R - Rate]

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.1700
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4069	3.4396	3.4725	3.5056	3.5389
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7097	4.7793	4.8498	4.9211	4.9934	5.0665	5.1405
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.2278	6.3528	6.4803	6.6101	6.7424	6.8771	7.0144
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	7.9129	8.1152	8.3227	8.5355	8.7537	8.9775	9.2068
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.0890	10.4047	10.7305	11.0668	11.4139	11.7720
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.2598	10.6366	11.0285	11.4359	11.8594	12.2997	12.7573	13.2328	13.7268	14.2401	14.7733
9	9.3685	9.7546	10.1591	10.5828	11.0266	11.4913	11.9780	12.4876	13.0210	13.5795	14.1640	14.7757	15.4157	16.0853	16.7858	17.5185	18.2847
10	10.4622	10.9497	11.4639	12.0061	12.5779	13.1808	13.8164	14.4866	15.1929	15.9374	16.7220	17.5487	18.4197	19.3373	20.3037	21.3215	22.3931
11	11.5668	12.1687	12.8078	13.4864	14.2068	14.9716	15.7836	16.6455	17.5603	18.5312	19.5614	20.6546	21.8143	23.0445	24.3493	25.7329	27.1999
12	12.6825	13.4121	14.1920	15.0258	15.9171	16.8699	17.8885	18.9771	20.1407	21.3843	22.7132	24.1331	25.6502	27.2707	29.0017	30.8502	32.8239
13	13.8093	14.6803	15.6178	16.6268	17.7130	18.8821	20.1406	21.4953	22.9534	24.5227	26.2116	28.0291	29.9847	32.0887	34.3519	36.7862	39.4040
14	14.9474	15.9739	17.0863	18.2919	19.5986	21.0151	22.5505	24.2149	26.0192	27.9750	30.0949	32.3926	34.8827	37.5811	40.5047	43.6720	47.1027
15	16.0969	17.2934	18.5989	20.0236	21.5786	23.2760	25.1290	27.1521	29.3609	31.7725	34.4054	37.2797	40.4175	43.8424	47.5804	51.6595	56.1101
16	17.2579	18.6393	20.1569	21.8245	23.6575	25.6725	27.8881	30.3243	33.0034	35.9497	39.1899	42.7533	46.6717	50.9804	55.7175	60.9250	66.6488
17	18.4304	20.0121	21.7616	23.6975	25.8404	28.2129	30.8402	33.7502	36.9737	40.5447	44.5008	48.8837	53.7391	59.1176	65.0751	71.6730	78.9792
18	19.6147	21.4123	23.4144	25.6454	28.1324	30.9057	33.9990	37.4502	41.3013	45.5992	50.3959	55.7497	61.7251	68.3941	75.8364	84.1407	93.4056
19	20.8109	22.8406	25.1169	27.6712	30.5390	33.7600	37.3790	41.4463	46.0185	51.1591	56.9395	63.4397	70.7494	78.9692	88.2118	98.6032	110.2846
20	22.0190	24.2974	26.8704	29.7781	33.0660	36.7856	40.9955	45.7620	51.1601	57.2750	64.2028	72.0524	80.9468	91.0249	102.4436	115.3797	130.0329
21	23.2392	25.7833	28.6765	31.9692	35.7193	39.9927	44.8652	50.4229	56.7645	64.0025	72.2651	81.6987	92.4699	104.7684	118.8101	134.8405	153.1385
22	24.4716	27.2990	30.5368	34.2480	38.5052	43.3923	49.0057	55.4568	62.8733	71.4027	81.2143	92.5026	105.4910	120.4360	137.6316	157.4150	180.1721
23	25.7163	28.8450	32.4529	36.6179	41.4305	46.9958	53.4361	60.8933	69.5319	79.5430	91.1479	104.6029	120.2048	138.2970	159.2764	183.6014	211.8013
24	26.9735	30.4219	34.4265	39.0826	44.5020	50.8156	58.1767	66.7648	76.7898	88.4973	102.1742	118.1552	136.8315	158.6586	184.1678	213.9776	248.8076
25	28.2432	32.0303	36.4593	41.6459	47.7271	54.8645	63.2490	73.1059	84.7009	98.3471	114.4133	133.3339	155.6196	181.8708	212.7930	249.2140	292.1049
26	29.5256	33.6709	38.5530	44.3117	51.1135	59.1564	68.6765	79.9544	93.3240	109.1818	127.9988	150.3339	176.8501	208.3327	245.7120	290.0883	342.7627
27	30.8209	35.3443	40.7096	47.0842	54.6691	63.7058	74.4838	87.3508	102.7231	121.0999	143.0786	169.3740	200.8406	238.4993	283.5688	337.5024	402.0323
28	32.1291	37.0512	42.9309	49.9676	58.4026	68.5281	80.6977	95.3388	112.9682	134.2099	159.8173	190.6989	227.9499	272.8892	327.1041	392.5028	471.3778
29	33.4504	38.7922	45.2189	52.9663	62.3227	73.6398	87.3465	103.9659	124.1354	148.6309	178.3972	214.5828	258.5834	312.0937	377.1697	456.3032	552.5121
30	34.7849	40.5681	47.5754	56.0849	66.4388	79.0582	94.4608	113.2832	136.3075	164.4940	199.0209	241.3327	293.1992	356.7868	434.7451	530.3117	647.4391

Table B - Future Value of an Annuity (FVA) = (R,n) = [{(1+R)^n - 1} ÷ R] - Compounding Factor of an Annuity - [n- Period; R - Rate]

Period	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.1800	2.1900	2.2000	2.2100	2.2200	2.2300	2.2400	2.2500	2.2600	2.2700	2.2800	2.2900	2.3000
3	3.5724	3.6061	3.6400	3.6741	3.7084	3.7429	3.7776	3.8125	3.8476	3.8829	3.9184	3.9541	3.9900
4	5.2154	5.2913	5.3680	5.4457	5.5242	5.6038	5.6842	5.7656	5.8480	5.9313	6.0156	6.1008	6.1870
5	7.1542	7.2966	7.4416	7.5892	7.7396	7.8926	8.0484	8.2070	8.3684	8.5327	8.6999	8.8700	9.0431
6	9.4420	9.6830	9.9299	10.1830	10.4423	10.7079	10.9801	11.2588	11.5442	11.8366	12.1359	12.4423	12.7560
7	12.1415	12.5227	12.9159	13.3214	13.7396	14.1708	14.6153	15.0735	15.5458	16.0324	16.5339	17.0506	17.5828
8	15.3270	15.9020	16.4991	17.1189	17.7623	18.4300	19.1229	19.8419	20.5876	21.3612	22.1634	22.9953	23.8577
9	19.0859	19.9234	20.7989	21.7139	22.6700	23.6690	24.7125	25.8023	26.9404	28.1287	29.3692	30.6639	32.0150
10	23.5213	24.7089	25.9587	27.2738	28.6574	30.1128	31.6434	33.2529	34.9449	36.7235	38.5926	40.5564	42.6195
11	28.7551	30.4035	32.1504	34.0013	35.9620	38.0388	40.2379	42.5661	45.0306	47.6388	50.3985	53.3178	56.4053
12	34.9311	37.1802	39.5805	42.1416	44.8737	47.7877	50.8950	54.2077	57.7386	61.5013	65.5100	69.7800	74.3270
13	42.2187	45.2445	48.4966	51.9913	55.7459	59.7788	64.1097	68.7596	73.7506	79.1066	84.8529	91.0161	97.6250
14	50.8180	54.8409	59.1959	63.9095	69.0100	74.5280	80.4961	86.9495	93.9258	101.4654	109.6117	118.4108	127.9125
15	60.9653	66.2607	72.0351	78.3305	85.1922	92.6694	100.8151	109.6868	119.3465	129.8611	141.3029	153.7500	167.2863
16	72.9390	79.8502	87.4421	95.7799	104.9345	114.9834	126.0108	138.1085	151.3766	165.9236	181.8677	199.3374	218.4722
17	87.0680	96.0218	105.9306	116.8937	129.0201	142.4295	157.2534	173.6357	191.7345	211.7230	233.7907	258.1453	285.0139
18	103.7403	115.2659	128.1167	142.4413	158.4045	176.1883	195.9942	218.0446	242.5855	269.8882	300.2521	334.0074	371.5180
19	123.4135	138.1664	154.7400	173.3540	194.2535	217.7116	244.0328	273.5558	306.6577	343.7580	385.3227	431.8696	483.9734
20	146.6280	165.4180	186.6880	210.7584	237.9893	268.7853	303.6006	342.9447	387.3887	437.5726	494.2131	558.1118	630.1655
21	174.0210	197.8474	225.0256	256.0176	291.3469	331.6059	377.4648	429.6809	489.1098	556.7173	633.5927	720.9642	820.2151
22	206.3448	236.4385	271.0307	310.7813	356.4432	408.8753	469.0563	538.1011	617.2783	708.0309	811.9987	931.0438	1,067.2796
23	244.4868	282.3618	326.2369	377.0454	435.8607	503.9166	582.6298	673.6264	778.7707	900.1993	1,040.3583	1,202.0465	1,388.4635
24	289.4945	337.0105	392.4842	457.2249	532.7501	620.8174	723.4610	843.0329	982.2511	1,144.2531	1,332.6586	1,551.6400	1,806.0026
25	342.6035	402.0425	471.9811	554.2422	650.9551	764.6054	898.0916	1,054.7912	1,238.6363	1,454.2014	1,706.8031	2,002.6156	2,348.8033
26	405.2721	479.4306	567.3773	671.6330	795.1653	941.4647	1,114.6336	1,319.4890	1,561.6818	1,847.8358	2,185.7079	2,584.3741	3,054.4443
27	479.2211	571.5224	681.8528	813.6759	971.1016	1,159.0016	1,383.1457	1,650.3612	1,968.7191	2,347.7515	2,798.7061	3,334.8426	3,971.7776
28	566.4809	681.1116	819.2233	985.5479	1,185.7440	1,426.5719	1,716.1007	2,063.9515	2,481.5860	2,982.6443	3,583.3438	4,302.9470	5,164.3109
29	669.4475	811.5228	984.0680	1,193.5129	1,447.6077	1,755.6835	2,128.9648	2,580.9394	3,127.7984	3,788.9583	4,587.6801	5,551.8016	6,714.6042
30	790.9480	966.7122	1,181.8816	1,445.1507	1,767.0813	2,160.4907	2,640.9164	3,227.1743	3,942.0260	4,812.9771	5,873.2306	7,162.8241	8,729.9855

Table C - Present Value Factor (PVF) = (R,n) = 1 ÷ (1+R)^n - Discounting Factor of a Single Cash Flow

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1528	0.1300	0.1108	0.0946	0.0808
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304
26	0.7720	0.5976	0.4637	0.3607	0.2812	0.2198	0.1722	0.1352	0.1064	0.0839	0.0663	0.0525	0.0417	0.0331	0.0264
27	0.7644	0.5859	0.4502	0.3468	0.2678	0.2074	0.1609	0.1252	0.0976	0.0763	0.0597	0.0469	0.0369	0.0291	0.0230
28	0.7568	0.5744	0.4371	0.3335	0.2551	0.1956	0.1504	0.1159	0.0895	0.0693	0.0538	0.0419	0.0326	0.0255	0.0200
29	0.7493	0.5631	0.4243	0.3207	0.2429	0.1846	0.1406	0.1073	0.0822	0.0630	0.0485	0.0374	0.0289	0.0224	0.0174
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151

Table C - Present Value Factor (PVF) = (R,n) = 1 ÷(1+R)ⁿ - Discounting Factor of a Single Cash Flow															
Period	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
1	0.8621	0.8547	0.8475	0.8403	0.8333	0.8264	0.8197	0.8130	0.8065	0.8000	0.7937	0.7874	0.7813	0.7752	0.7692
2	0.7432	0.7305	0.7182	0.7062	0.6944	0.6830	0.6719	0.6610	0.6504	0.6400	0.6299	0.6200	0.6104	0.6009	0.5917
3	0.6407	0.6244	0.6086	0.5934	0.5787	0.5645	0.5507	0.5374	0.5245	0.5120	0.4999	0.4882	0.4768	0.4658	0.4552
4	0.5523	0.5337	0.5158	0.4987	0.4823	0.4665	0.4514	0.4369	0.4230	0.4096	0.3968	0.3844	0.3725	0.3611	0.3501
5	0.4761	0.4561	0.4371	0.4190	0.4019	0.3855	0.3700	0.3552	0.3411	0.3277	0.3149	0.3027	0.2910	0.2799	0.2693
6	0.4104	0.3898	0.3704	0.3521	0.3349	0.3186	0.3033	0.2888	0.2751	0.2621	0.2499	0.2383	0.2274	0.2170	0.2072
7	0.3538	0.3332	0.3139	0.2959	0.2791	0.2633	0.2486	0.2348	0.2218	0.2097	0.1983	0.1877	0.1776	0.1682	0.1594
8	0.3050	0.2848	0.2660	0.2487	0.2326	0.2176	0.2038	0.1909	0.1789	0.1678	0.1574	0.1478	0.1388	0.1304	0.1226
9	0.2630	0.2434	0.2255	0.2090	0.1938	0.1799	0.1670	0.1552	0.1443	0.1342	0.1249	0.1164	0.1084	0.1011	0.0943
10	0.2267	0.2080	0.1911	0.1756	0.1615	0.1486	0.1369	0.1262	0.1164	0.1074	0.0992	0.0916	0.0847	0.0784	0.0725
11	0.1954	0.1778	0.1619	0.1476	0.1346	0.1228	0.1122	0.1026	0.0938	0.0859	0.0787	0.0721	0.0662	0.0607	0.0558
12	0.1685	0.1520	0.1372	0.1240	0.1122	0.1015	0.0920	0.0834	0.0757	0.0687	0.0625	0.0568	0.0517	0.0471	0.0429
13	0.1452	0.1299	0.1163	0.1042	0.0935	0.0839	0.0754	0.0678	0.0610	0.0550	0.0496	0.0447	0.0404	0.0365	0.0330
14	0.1252	0.1110	0.0985	0.0876	0.0779	0.0693	0.0618	0.0551	0.0492	0.0440	0.0393	0.0352	0.0316	0.0283	0.0254
15	0.1079	0.0949	0.0835	0.0736	0.0649	0.0573	0.0507	0.0448	0.0397	0.0352	0.0312	0.0277	0.0247	0.0219	0.0195
16	0.0930	0.0811	0.0708	0.0618	0.0541	0.0474	0.0415	0.0364	0.0320	0.0281	0.0248	0.0218	0.0193	0.0170	0.0150
17	0.0802	0.0693	0.0600	0.0520	0.0451	0.0391	0.0340	0.0296	0.0258	0.0225	0.0197	0.0172	0.0150	0.0132	0.0116
18	0.0691	0.0592	0.0508	0.0437	0.0376	0.0323	0.0279	0.0241	0.0208	0.0180	0.0156	0.0135	0.0118	0.0102	0.0089
19	0.0596	0.0506	0.0431	0.0367	0.0313	0.0267	0.0229	0.0196	0.0168	0.0144	0.0124	0.0107	0.0092	0.0079	0.0068
20	0.0514	0.0433	0.0365	0.0308	0.0261	0.0221	0.0187	0.0159	0.0135	0.0115	0.0098	0.0084	0.0072	0.0061	0.0053
21	0.0443	0.0370	0.0309	0.0259	0.0217	0.0183	0.0154	0.0129	0.0109	0.0092	0.0078	0.0066	0.0056	0.0048	0.0040
22	0.0382	0.0316	0.0262	0.0218	0.0181	0.0151	0.0126	0.0105	0.0088	0.0074	0.0062	0.0052	0.0044	0.0037	0.0031
23	0.0329	0.0270	0.0222	0.0183	0.0151	0.0125	0.0103	0.0086	0.0071	0.0059	0.0049	0.0041	0.0034	0.0029	0.0024
24	0.0284	0.0231	0.0188	0.0154	0.0126	0.0103	0.0085	0.0070	0.0057	0.0047	0.0039	0.0032	0.0027	0.0022	0.0018
25	0.0245	0.0197	0.0160	0.0129	0.0105	0.0085	0.0069	0.0057	0.0046	0.0038	0.0031	0.0025	0.0021	0.0017	0.0014
26	0.0211	0.0169	0.0135	0.0109	0.0087	0.0070	0.0057	0.0046	0.0037	0.0030	0.0025	0.0020	0.0016	0.0013	0.0011
27	0.0182	0.0144	0.0115	0.0091	0.0073	0.0058	0.0047	0.0037	0.0030	0.0024	0.0019	0.0016	0.0013	0.0010	0.0008
28	0.0157	0.0123	0.0097	0.0077	0.0061	0.0048	0.0038	0.0030	0.0024	0.0019	0.0015	0.0012	0.0010	0.0008	0.0006
29	0.0135	0.0105	0.0082	0.0064	0.0051	0.0040	0.0031	0.0025	0.0020	0.0015	0.0012	0.0010	0.0008	0.0006	0.0005
30	0.0116	0.0090	0.0070	0.0054	0.0042	0.0033	0.0026	0.0020	0.0016	0.0012	0.0010	0.0008	0.0006	0.0005	0.0004

Table D - Present Value of an Annuity (PVA) (R,n) = [1- {1÷(1+R)^n}] ÷ R - Discounting Factor of an Annuity - [n- Period; R - Rate]

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206
13	12.1337	11.3484	10.6350	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593
21	18.8570	17.0112	15.4150	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125
22	19.6604	17.6580	15.9369	14.4511	13.1630	12.0416	11.0612	10.2007	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587
23	20.4558	18.2922	16.4436	14.8568	13.4886	12.3034	11.2722	10.3711	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988
24	21.2434	18.9139	16.9355	15.2470	13.7986	12.5504	11.4693	10.5288	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641
26	22.7952	20.1210	17.8768	15.9828	14.3752	13.0032	11.8258	10.8100	9.9290	9.1609	8.4881	7.8957	7.3717	6.9061	6.4906
27	23.5596	20.7069	18.3270	16.3296	14.6430	13.2105	11.9867	10.9352	10.0266	9.2372	8.5478	7.9426	7.4086	6.9352	6.5135
28	24.3164	21.2813	18.7641	16.6631	14.8981	13.4062	12.1371	11.0511	10.1161	9.3066	8.6016	7.9844	7.4412	6.9607	6.5335
29	25.0658	21.8444	19.1885	16.9837	15.1411	13.5907	12.2777	11.1584	10.1983	9.3696	8.6501	8.0218	7.4701	6.9830	6.5509
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660

Table D - Present Value of an Annuity (PVA) (R,n) = [1- {1÷(1+R)^n}] ÷ R - Discounting Factor of an Annuity - [n- Period; R - Rate]

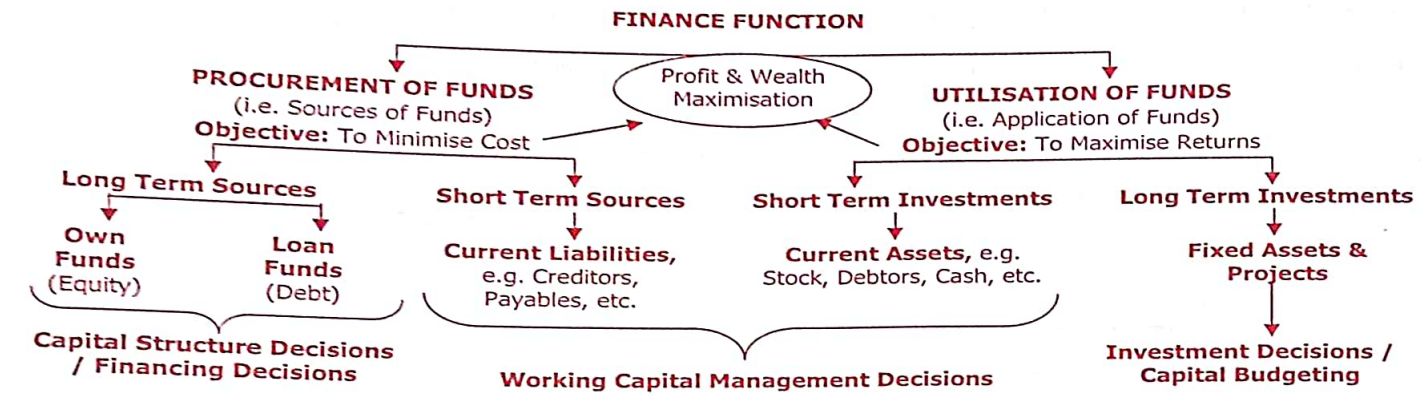
Period	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
1	0.8621	0.8547	0.8475	0.8403	0.8333	0.8264	0.8197	0.8130	0.8065	0.8000	0.7937	0.7874	0.7813	0.7752	0.7692
2	1.6052	1.5852	1.5656	1.5465	1.5278	1.5095	1.4915	1.4740	1.4568	1.4400	1.4235	1.4074	1.3916	1.3761	1.3609
3	2.2459	2.2096	2.1743	2.1399	2.1065	2.0739	2.0422	2.0114	1.9813	1.9520	1.9234	1.8956	1.8684	1.8420	1.8161
4	2.7982	2.7432	2.6901	2.6386	2.5887	2.5404	2.4936	2.4483	2.4043	2.3616	2.3202	2.2800	2.2410	2.2031	2.1662
5	3.2743	3.1993	3.1272	3.0576	2.9906	2.9260	2.8636	2.8035	2.7454	2.6893	2.6351	2.5827	2.5320	2.4830	2.4356
6	3.6847	3.5892	3.4976	3.4098	3.3255	3.2446	3.1669	3.0923	3.0205	2.9514	2.8850	2.8210	2.7594	2.7000	2.6427
7	4.0386	3.9224	3.8115	3.7057	3.6046	3.5079	3.4155	3.3270	3.2423	3.1611	3.0833	3.0087	2.9370	2.8682	2.8021
8	4.3436	4.2072	4.0776	3.9544	3.8372	3.7256	3.6193	3.5179	3.4212	3.3289	3.2407	3.1564	3.0758	2.9986	2.9247
9	4.6065	4.4506	4.3030	4.1633	4.0310	3.9054	3.7863	3.6731	3.5655	3.4631	3.3657	3.2728	3.1842	3.0997	3.0190
10	4.8332	4.6586	4.4941	4.3389	4.1925	4.0541	3.9232	3.7993	3.6819	3.5705	3.4648	3.3644	3.2689	3.1781	3.0915
11	5.0286	4.8364	4.6560	4.4865	4.3271	4.1769	4.0354	3.9018	3.7757	3.6564	3.5435	3.4365	3.3351	3.2388	3.1473
12	5.1971	4.9884	4.7932	4.6105	4.4392	4.2784	4.1274	3.9852	3.8514	3.7251	3.6059	3.4933	3.3868	3.2859	3.1903
13	5.3423	5.1183	4.9095	4.7147	4.5327	4.3624	4.2028	4.0530	3.9124	3.7801	3.6555	3.5381	3.4272	3.3224	3.2233
14	5.4675	5.2293	5.0081	4.8023	4.6106	4.4317	4.2646	4.1082	3.9616	3.8241	3.6949	3.5733	3.4587	3.3507	3.2487
15	5.5755	5.3242	5.0916	4.8759	4.6755	4.4890	4.3152	4.1530	4.0013	3.8593	3.7261	3.6010	3.4834	3.3726	3.2682
16	5.6685	5.4053	5.1624	4.9377	4.7296	4.5364	4.3567	4.1894	4.0333	3.8874	3.7509	3.6228	3.5026	3.3896	3.2832
17	5.7487	5.4746	5.2223	4.9897	4.7746	4.5755	4.3908	4.2190	4.0591	3.9099	3.7705	3.6400	3.5177	3.4028	3.2948
18	5.8178	5.5339	5.2732	5.0333	4.8122	4.6079	4.4187	4.2431	4.0799	3.9279	3.7861	3.6536	3.5294	3.4130	3.3037
19	5.8775	5.5845	5.3162	5.0700	4.8435	4.6346	4.4415	4.2627	4.0967	3.9424	3.7985	3.6642	3.5386	3.4210	3.3105
20	5.9288	5.6278	5.3527	5.1009	4.8696	4.6567	4.4603	4.2786	4.1103	3.9539	3.8083	3.6726	3.5458	3.4271	3.3158
21	5.9731	5.6648	5.3837	5.1268	4.8913	4.6750	4.4756	4.2916	4.1212	3.9631	3.8161	3.6792	3.5514	3.4319	3.3198
22	6.0113	5.6964	5.4099	5.1486	4.9094	4.6900	4.4882	4.3021	4.1300	3.9705	3.8223	3.6844	3.5558	3.4356	3.3230
23	6.0442	5.7234	5.4321	5.1668	4.9245	4.7025	4.4985	4.3106	4.1371	3.9764	3.8273	3.6885	3.5592	3.4384	3.3254
24	6.0726	5.7465	5.4509	5.1822	4.9371	4.7128	4.5070	4.3176	4.1428	3.9811	3.8312	3.6918	3.5619	3.4406	3.3272
25	6.0971	5.7662	5.4669	5.1951	4.9476	4.7213	4.5139	4.3232	4.1474	3.9849	3.8342	3.6943	3.5640	3.4423	3.3286
26	6.1182	5.7831	5.4804	5.2060	4.9563	4.7284	4.5196	4.3278	4.1511	3.9879	3.8367	3.6963	3.5656	3.4437	3.3297
27	6.1364	5.7975	5.4919	5.2151	4.9636	4.7342	4.5243	4.3316	4.1542	3.9903	3.8387	3.6979	3.5669	3.4447	3.3305
28	6.1520	5.8099	5.5016	5.2228	4.9697	4.7390	4.5281	4.3346	4.1566	3.9923	3.8402	3.6991	3.5679	3.4455	3.3312
29	6.1656	5.8204	5.5098	5.2292	4.9747	4.7430	4.5312	4.3371	4.1585	3.9938	3.8414	3.7001	3.5687	3.4461	3.3317
30	6.1772	5.8294	5.5168	5.2347	4.9789	4.7463	4.5338	4.3391	4.1601	3.9950	3.8424	3.7009	3.5693	3.4466	3.3321

Fast Track Referencer – Important Formula & Hints to Remember

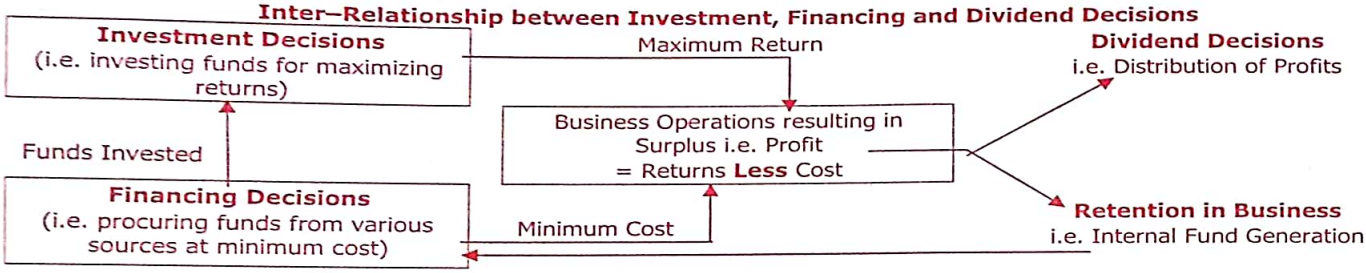
Chapter 1 Basics of Financial Management

Concept	Description	
Aspects of Financial Management	1. Procurement of Funds 2. Effective Utilisation of Funds	
Objectives of Financial Management	**1. Primary Obj.** (a) Profit Maximisation. (b) Value or Wealth Maximisation.	**2. Other Objectives** (a) Customer Satisfaction, i.e. value for money, quality goods, etc. (b) Employee Welfare, i.e. good standard of living, giving fair wages, etc. (c) Maintaining and improving Market Share. (d) Market Leadership in terms of products, services, technology, management techniques, etc. (e) Good Corporate Citizenship in terms of tax remittance, maintaining ecological balance, etc.
Functions of Finance Manager	1. Fund Requirement Estimation 2. Capital Structure / Financing Decisions 3. Cash Management Decisions 4. Capital Budgeting / Investment Decisions	5. Financial Analysis / Performance Evaluation 6. Dividend Decisions 7. Financial Negotiations / Liaison with Lenders 8. Market Impact Analysis

OVERVIEW OF FINANCIAL MANAGEMENT – ASPECTS, OBJECTIVES AND FUNCTIONS



Inter–Relationship between Investment, Financing and Dividend Decisions



Chapter 2 Financial Ratio Analysis

Refer Chapter 2, Page 2.4 to 2.8 for all Ratios Formulae.

Chapter 3 Working Capital Management

1. CLASSIFICATION OF WORKING CAPITAL

- **Based on Concept**
  - **Gross Working Capital** (i.e. Current Assets only)
  - **Net Working Capital** (i.e. Current Assets **Less** Current Liabilities)
- **Based on Time Factor**
  - **Permanent Working Capital**
  - **Temporary Working Capital**

2. OPERATING CYCLE [or] Cash Cycle [or] Working Capital Cycle (expressed in days) = RM Storage Period + WIP holding Period + Finished Goods Storage Period + Debtors Collection Period (–) Creditors Payment Period.

3. WORKING CAPITAL ESTIMATION APPROACHES: Rates of Valuation of various items –

Component	Total Approach	Cash Cost Approach
Raw Materials	Purchase Price net of discounts.	Purchase Price net of discounts.
Work–in–Progress	Raw Materials + 50% of [Direct Labour + Direct Expenses + All Production OH]	Raw Materials + 50% of [Direct Labour + Direct Expenses + Production OH excluding Depreciation]
Finished Goods	Cost of Production.	Cost of Production **Less** Depreciation.
Sundry Debtors	Selling Price.	Selling Price **Less** Profit Margin **Less** Depreciation.
Sundry Creditors	Purchase Price net of discounts.	Purchase Price net of discounts.

Note: For WIP valuation, it is assumed that Materials are fully issued and Conversion (i.e. Labour and POH) is 50% complete.

4. BAUMOL MODEL: Optimum Investment Size = $\sqrt{\frac{2AT}{I}}$

A = Annual Cash Requirement.
T = Transaction Cost per purchase / sale of investment.
I = Interest Rate per rupee per annum.

Note: Average Cash Balance = ½ of Optimum Investment Size (as computed above).
Associated Costs of Optimum Investment Size = Transaction Costs p.a. + Interest Costs p.a.
= [(No. of Transaction × Cost per Transaction) + (Average Cash balance × Interest Rate p.a.)]
At the Optimum Investment Size level, Transaction Costs p.a. = Interest Costs p.a. = ½ of Associated Costs p.a.

5. FLOAT MANAGEMENT CONCEPTS:

Event	Float	Techniques of reducing Float
Despatch of Finished Goods to Customer		
↓	Billing Float	(a) Preparation of Invoice, on the date of despatch of goods, (b) Faster communication of despatch and billing information within the Firm, (c) No–despatch–without–bill policy.
Preparation of Bill or Invoice		
↓	Mailing Float	(a) Use of faster modes of mailing, like e–mail, (b) Sending the invoice by fax first, followed by normal mail.
Receipt of invoice by customer		
↓	Credit Period	Policy Decision *(see Debtors Management)*
Payment of amount due under the Invoice		
↓	Mailing Float	(a) Traditional Techniques [Concentration Banking and Lock–Box System] (b) IT–enabled Banking Techniques, Virtual Banking or Anytime Banking, etc.
Receipt of Cheque (by the Seller)		
↓	Cheque Processing Float	
Deposit of Cheque into Bank		
↓	Banking Processing Float	
Credit of Cheque by Bank		

6. DEBTORS DECISION MAKING: The following Cost–Benefit Analysis Procedure should be adopted –

(a) Compute **Gross Benefit** = Contribution (or) Profit. [Compute Profit if Total Fixed Costs are specifically given in the Question, otherwise Contribution may be used.

(b) Compute **Costs** relating to Debtors = Interest on Average Debtors + Bad Debts + Discount Allowed + Specific Costs.

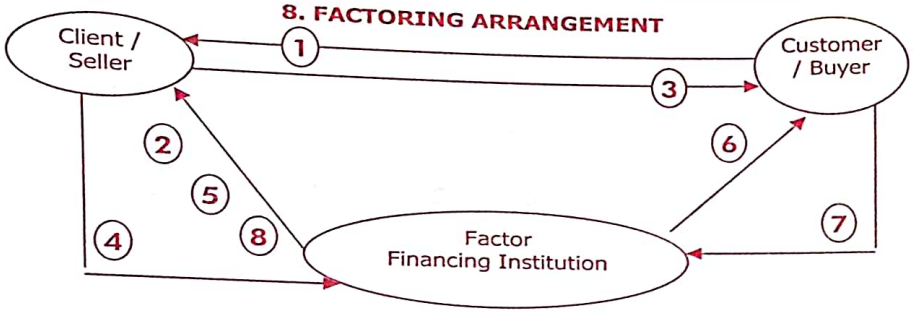
- **Interest** = Cost of Debtors p.a. (either based on Sales Value or Costs) $\times \frac{\text{Collection Period}}{360} \times$ Interest Rate.
- **Bad Debts** = Sales × Bad Debts percentage, if any.
- **Discount Allowed** = Sales × Percentage of Debtors availing discount × Percentage of Discount if any.
- **Specific Collection Costs** should be considered only if given in the Question, e.g. Collection Costs, etc.

(c) Compute **Net Benefit** = Gross Benefit **Less** Cost of Debtors = Step 1 **Less** Step 2. The Credit Policy with the maximum Net Benefit should be selected by the Firm.

7. WORKING CAPITAL FUNDING APPROACHES

Approach	Matching Approach	Conservative Approach	Aggressive Approach
Long Term Funds used in	Fixed Assets & Permanent Working Capital.	Fixed Assets, Permanent Working Capital & part of Temporary Working Capital.	Fixed Assets and part of Permanent Working Capital.
Short Term Funds used in	Temporary Working Capital.	Balance part of Temporary Working Capital.	Balance part of Permanent Working Capital and entire Temporary Working Capital.
Effect on Liquidity	Well–balanced.	High Liquidity.	Low Liquidity.
Effect on Profitability	Comparatively well–balanced.	Low Profitability & Return on assets.	High return on assets but risky.

8. FACTORING ARRANGEMENT



Key to transactions / events

1. Places Purchase Order.
2. Fixes customer limit.
3. Supplies goods and invoice, invoice carries instruction to send payment to Factor directly.
4. Sends Invoice Copy.
5. Gives advance.
6. Follows up for Debt Collection.
7. Pays amount due.
8. Pays / settles balance upon realization of dues.

Chapter 4 Risk and Leverage Analysis

1. LEVERAGE SUMMARY

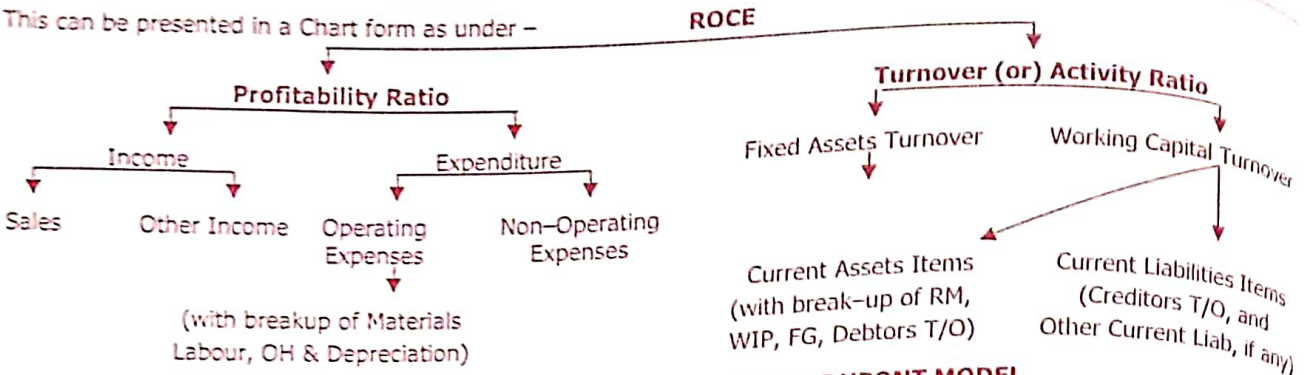
Leverage	Operating Leverage	Financial Leverage	Combined Leverage
Measures impact of	Fixed Operating Costs	Interest Expenses	Fixed Costs and Interest.
Formula	$DOL = \frac{\text{Contribution}}{\text{EBIT}}$	$DFL = \frac{\text{EBIT}}{\text{EBT}}$	$DCL = \frac{\text{Contribution}}{\text{EBT}}$ [or] DOL × DFL
Links / relates	Sales and EBIT.	EBIT and EPS.	Sales and EPS.
Relationship	% Change in EBIT = % Change in Sales× DOL	% Change in EPS = % Change in EBIT × DFL	% Change in EPS = % Change in Sales× DCL
Preferable Nature	Low DOL is preferable.	High DFL is preferable only when ROCE > Rate of Interest on Debt.	A combination of Low DOL and High DFL is preferable.

2. RETURN ON CAPITAL EMPLOYED (ROCE) USING DUPONT MODEL

Under Dupont Model, **Return on Capital Employed (ROCE) = Net Profit Margin × Capital Turnover,** where

$$\text{Net Profit Margin} = \frac{\text{Net Profit}}{\text{Turnover}} = \frac{\text{EBIT}}{\text{Turnover}} \quad \text{and} \quad \text{Capital Turnover} = \frac{\text{Turnover}}{\text{Capital Employed}}$$

This can be presented in a Chart form as under –



3. RETURN ON EQUITY (ROE) USING DUPONT MODEL

Under Dupont Model, **Return on Equity (ROE) = Net Profit Margin × Capital Turnover × Equity Multiplier.**

Net Profit Margin = $\frac{\text{Net Profit}}{\text{Turnover}}$ Capital Turnover = $\frac{\text{Turnover}}{\text{Capital Employed}}$ Equity Multiplier = $\frac{\text{Capital Employed}}{\text{Equity Shareholders Funds}}$

Note:

- Capital Turnover = **Assets Turnover**, where Assets = Total Funds = Fixed Assets + Net Wkg Cap = (i.e. Equity+Debt).
- Equity Multiplier is also referred as **B/s based Financial Leverage**, i.e. % of Equity Funds to Total Capital Employed.

4. IMPACT OF FINANCIAL LEVERAGE ON SHAREHOLDERS WEALTH BY USING ROCE – ROE ANALYSIS

[Here, the terms **ROCE, ROI and ROA** are used inter–changeably. So, here **ROCE = ROI = ROA**]

Relationship between ROCE and ROE, in terms of Financial Leverage (i.e. use of Debt Funds) is given as under –

(a) **ROE (pre–tax)** (i.e. without tax) = ROCE + $\frac{\text{Debt}}{\text{Equity}}$ × (ROCE – Interest Rate)

(b) **ROE (post–tax)** (i.e. with tax) = ROCE (100%–Tax%) + $\frac{\text{Debt}}{\text{Equity}}$ × [ROCE × (100%–Tax%) – Interest × (100%–Tax%)]

Chapter 5 Cost of Capital & Cap. Structure

1. Cost of Debt (K_d)

Cost of Irredeemable Debt	Cost of Redeemable Debt
$K_d = \frac{\text{Interest} \times (100\% - \text{Tax Rate})}{\text{Net Proceeds of Issue}}$	$K_d = \frac{\text{Interest} \times (100\% - \text{Tax Rate}) + \text{Average Premium on Redemption}}{\text{Average Liability}}$

Net Proceeds of Issue = Gross Proceeds (adjusting for Premium / Discount, if any) less Flotation Costs.

Avg Premium on Redemption = $\frac{\text{Redemption Value} - \text{Net Proceeds}}{\text{Number of years}}$ Avg Liability = $\frac{\text{Redemption Value} + \text{Net Proceeds}}{2}$

Note: If Premium on Redemption is also assumed as Tax–Deductible Expense, (100% – Tax Rate) is applicable for that also.

2. Cost of Preference Share Capital (K_p)

Cost of Irredeemable PSC	Cost of Redeemable PSC
$K_p = \frac{\text{Preference Dividend}}{\text{Net Proceeds of Issue}}$	$K_p = \frac{\text{Preference Dividend} + \text{Average Premium on Redemption}}{\text{Average Liability}}$

Avg Premium on Redemption = $\frac{\text{Redemption Value} - \text{Net Proceeds}}{\text{Number of years}}$ Avg Liability = $\frac{\text{Redemption Value} + \text{Net Proceeds}}{2}$

3. Cost of Equity Share Capital (K_e)

Approach	Formula K_e =
1. **Dividend Price Approach**	$K_e = \frac{DPS}{MPS}$, where DPS = DPS_1 (Next Year Dividend) & MPS = MPS_0 (Current MPS)
2. **Earnings Price Approach**	$K_e = \frac{EPS}{MPS}$, where EPS = EPS_1 (Next Year EPS) & MPS = MPS_0 (Current MPS)

Approach	Formula K_e =
3. **Dividend Price + Growth Approach**	$K_e = \frac{DPS}{MPS} + g$, where **g** = expected future growth rate in Dividends.
4. **Earnings Price + Growth Approach**	$K_e = \frac{EPS}{MPS} + g$, where **g** = expected future growth rate in EPS.
5. **Realised Yield Approach**	$K_e = \frac{DPS_1 + (MPS_1 - MPS_0)}{MPS_1}$
6. **Capital Asset Pricing Model (CAPM) Approach**	$K_e = R_f + \beta(R_m - R_f)$ where R_f= Risk Free Return, R_m= Overall Market Return, β = Beta Co-efficient, i.e. a measure of non-diversifiable risk

Note 1: In Items 1 to 4, in case of **Floatation Costs**, the Denominator will be [MPS_0 (–) Floatation Cost per Share].

Note 2: g = Growth Rate = Retention Ratio (b) × Return on Invt (r), i.e. **g = br** (or) $\mathbf{g} = \sqrt[n]{\frac{D_0}{D_p}}$ **(–) 1**

4. Overall Cost of Capital = WACC = K_o = $(K_d \times W_d) + (K_p \times W_p) + (K_e \times W_e)$

5. EBIT–EPS Indifference Point =Level of EBIT that results in equal EPS for two different financing options. Indifference Point is computed by solving the following equation for EBIT.

$$\underbrace{\frac{(EBIT - Interest) \times (100 - Tax\ Rate)}{Number\ of\ Equity\ Shares}}_{\textbf{Alternative 1, say, with Debt}} \quad \underbrace{=}_{\textbf{EPS of 2 options}} \text{Equal EPS under both options} \quad \underbrace{=}_{\textbf{Alternative 2, say, No Debt}} \frac{EBIT \times (100 - Tax\ Rate)}{Number\ of\ Equity\ Shares}$$

Interpretation based on EBIT–EPS Indifference Point

Firm's EBIT	Preferable Financing	Reason
< Indiff.Point	Option with **lower Debt** and lower Interest burden.	If ROCE and EBIT are low, a high DOL should be properly managed with low DFL, lower borrowings and interest burden.
= Indiff.Point	**Any method** of financing.	Same EPS under both alternatives.
> Indiff.Point	Option with **higher Debt** and higher Interest burden.	If ROCE & EBIT are high, use of Debt funds is justified (Leverage).

6. Financial BEP = Level of EBIT sufficient to cover Interest, Tax and Preference Dividend. **(No Residual Earnings)**

Formula: Financial Break Even Point is given by the formula: **EBIT** = Interest Charges + $\frac{Preference\ Dividend}{(100\% - Tax\ Rate)}$

7. Value of Debt, Equity and Firm under Capital Structure Theories

(a) **Value of Debt = D** = $\frac{Interest}{Cost\ of\ Debt} = \frac{Interest}{K_d}$ (b) **Value of Equity = E** = $\frac{Residual\ Earnings}{Cost\ of\ Equity} = \frac{EBT}{K_e}$

(c) **Value of Firm = V** = $\frac{Total\ Net\ Operating\ Income}{Overall\ Cost\ of\ Capital,\ i.e.\ WACC} = \frac{EBIT}{K_o}$ **[or]** Value of Debt + Value of Equity = **D + E**

8. Net Income Approach

Step	Procedure
1	Determine EBIT (Net Operating Income) and EBT (Net Income). EBT = EBIT **less** Interest on Debt Funds.
2,3	2.Market Value of Equity (E)= $\frac{EBT}{Cost\ of\ Equity} = \frac{EBT}{K_e}$ 3.Market Value of Debt (D)= $\frac{Interest}{Cost\ of\ Debt} = \frac{Interest}{K_d}$
4	Compute Market Value of Firm (V) = E + D = Market Value of Equity + Market Value of Debt.
5	Compute Overall Cost of Capital (K_o) = $\frac{EBIT}{Value\ of\ Firm}$

9. Net Operating Income Approach

Step	Procedure
1	Determine EBIT (Net Operating Income) and EBT (Net Income). EBT = EBIT **less** Interest on Debt Funds.
2,3	2.Market Value of Firm (V)= $\frac{EBIT}{WACC} = \frac{EBIT}{K_o}$ 3.Market Value of Debt (D) = $\frac{Interest}{Cost\ of\ Debt} = \frac{Interest}{K_d}$
4	Compute Market Value of Equity (E) = V – D = Market Value of Firm (**Less**) Market Value of Debt.
5	Compute Cost of Equity Capital (K_e) = $\frac{EBT}{Value\ of\ Equity} = \frac{EBT}{E}$

10. M&M Approach: (1) WACC is constant. (2) $K_e = K_o$ + Risk Premium. So, $K_e = K_o + \frac{Debt}{Equity}(K_o - K_d)$

Effect of Tax Saving: When Corporate Taxation is included – (a) Firm Value will **increase**, and (b) K_o will **decrease**. The effect of Tax Saving can be identified from the following relationships –

(a) Total Earnings in Levered Firm = Total Earnings in Unlevered Firm + (Interest on Debt × Tax Rate).

(b) Market Value of Levered Firm = Market Value of Unlevered Firm + (Debt × Tax Rate).

(c) $K_e = K_o + \frac{D}{E}(1 - T_C)(K_o - K_d)$, where –

K_e	= Required Rate of Return to Equity Shareholders	D	= Portion of Debt in Capital Structure
K_o	= Required Rate of Return for an all-Equity Firm	E	= Portion of Equity in Capital Structure
K_d	= Required Rate of Return to Lenders	T_C	= Corporate Tax Rate

(d) K_o of Levered Firm = K_e of Unlevered Firm × $[100\% - (T_C \times \frac{D}{D+E})]$ where D = Portion of Debt in Capital Structure, E = Portion of Equity in Capital Structure, T_C = Corporate Tax Rate

Chapter 6 Sources of Finance

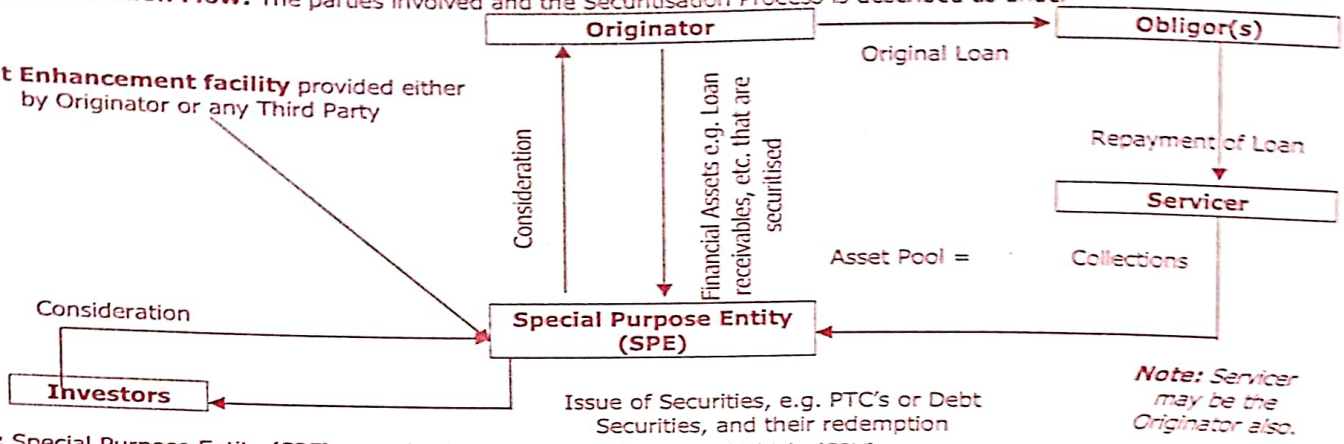
Concept	Points to Remember
Equity Capital	1. **Features:** (a) **Risk** is least from Company view, since repayment is only on winding up, (b) **Cost** is highest, (c) **Control** over the management of the Company is available. 2. **Merits:** (a) security (Equity Base) to other suppliers of funds, (b) permanent source of finance, (c) no committed payments as to Dividends, (d) Rights Issue entails no loss of control. 3. **Demerits:** (a) High Cost of Dividends & Floatation, (b) Dividends not tax-deductible, (c) uncertainty of dividends and capital gains, (d) low EPS due to additional issue, (e) loss of control due to new issue.
Preference Capital	1. **Features:** (a) issuable with Cumulative Option, (b) Redeemability & Convertibility, (c) Dividend Rate is lower that of Equity Capital, (d) Hybrid Form of financing. 2. **Merits:** (a) no dilution of EPS, (b) leveraging / gearing, (c) no risk of takeover, (d) redeemable, (e) not entitled to surplus profits. 3. **Demerits:** (a) not tax-deductible, (b) Arrears of Fixed Cumulative Dividend creates Burden.
Retained Earnings	1. **Concept:** (a) Accumulated Profits, (b) belong to the Equity Shareholders, (c) increase the Net Worth. 2. **Purpose:** (a) expansion plans, and (b) legal requirements. 3. Constitutes **Internal Fund Generation** of the Company. [called **Ploughing Back of Profits**.]
Promoters' Contribution	1. **Forms:** (a) Subscription to Equity or Preference Share Capital, (b) Rights Issue, (c) FCDs issued as "rights" to existing Shareholders, (d) Unsecured Loans, (e) Seed Capital Assistance, (f) Venture Capital Assistance, or (g) Internal Cash Accruals. 2. **Features:** (a) Compulsory for any project, (b) Margin Contribution before Debt is granted by Banks.
Subsidy / Capital Incentives	1. **Purposes:** (a) to promote balanced regional & economic development, (b) energy conservation, etc. 2. **Forms:** (a) lumpsum subsidy, or (b) deferment of taxes, etc. 3. **Conditions:** Requirements may be– (a) Initial Effective Steps, and (b) Final Effective Steps. 4. Bridge Finance may be availed against the Capital Incentives.
Debentures	1. **Features:** (a) Borrowings under a Debenture Trust Deed, (b) governed by Companies Act, SEBI Regulations, etc. (c) secured, (d) Rate of Interest is lower than Dividend, (e) issued with new inventive schemes like warrants, options, convertibility, etc. 2. **Types:** (a) Fully Convertible, Partly Convertible, Non-Convertible, (b) Redeemable, Irredeeemable, (c) Secured, Unsecured, etc. 3. **Terms:** Face Value, (b) Coupon/Interest Rate, (c) Maturity, (d) Redemption Value, (e) Market Value.
Bonds	1. **Meaning:** Bond is a Fixed Income Security created to raise funds. [See Types of Bonds below.] 2. A **Callable Bond** has a **Call Option** which gives the Issuer the right to redeem the Bond before maturity at a pre-determined price known as the Call Price (i.e. generally at a Premium). 3. **Puttable Bonds** give the Investor a **Put Option** (i.e. the right to sell the Bond) back to the Company before maturity at a pre-determined date and price. 4. **Indian Bonds:** (a) Government Bonds or Treasury Bonds, (b) Municipal Bonds, (c) Masala Bond. 5. **Foreign Bonds:**(a) Plain Vanilla Bond, (b) Foreign Currency Convertible Bond (FCCB), (c) Convertible Floating Rate Notes (FRN), (d) Drop Lock Bond, (e) Variable Rate Demand Obligation (VRDO) Bonds or VRDOs,(f) Yield Curve Note (YCN), (g) Euro Bonds (Yankee Bond, Samurai Bonds, Bulldogs, etc.)

Concept	Points to Remember
	6. **Types of Bonds based on Features:** (a) Deep Discount Bonds (DDB's), (b) Zero Interest Fully Convertible Bonds, (c) Zero Coupon Bonds, (d) Secured Premium Notes (SPN's), (e) Double Option Bonds, (f) Option Bonds, (g) Inflation Bonds, (h) Floating Rate Bonds.
Long Term Loans from Banks / FIs	1. Applicant has to satisfy the lending institution as regards feasibility of the project in the aspects of – (a) Technical, (b) Commercial, (c) Economic, (d) Financial and (e) Managerial. 2. The rates of interest charged by the institutions differ under various schemes. These Secured Loans are to be repaid according to a given repayment schedule. 3. **Example:** TUFS (Technology Upgradation Fund Scheme) for Textile and Jute Industry, offered through IDBI, IFCI, SIDBI, the Loan being given primarily for expansion / modernization.
Unsecured Loans (Long Term)	1. Unsecured Loans are used to fill the gap if the Bank/FI does not sanction the required funds in full. 2. Unsecured Loans provided by promoters to meet the Promoters' Contribution norm, are considered as part of the **equity** for calculating debt-equity ratio. 3. These Loans are **subordinate** to Bank/FI Loans in terms of repayment, rate of interest, payment, etc.
Venture Capital Financing	1. **Concept:** Financier (called Venture Capitalist) invests in the Equity or Debt of an Enterpreneur (Promoter / Venture Capital Undertaking) who has a potentially successful business idea, but does not have the desired track record or financial backing. 2. **Associated** with – (a) heavy initial investment businesses, e.g. energy conservation, quality upgradation, or (b) sunrise sectors like information technology. 3. **Methods:** (a) Equity Financing, (b) Conditional Loan, (c) Income Note, (d) Participating Debentures. 4. **Factors considered by Financier:** (a) Expertise of Company's Management, (b) Expertise in production, (c) Nature of new product / service, (d) Future Prospects, (e) Competition, (f) Risk borne by Entrepreneur, (g) Exit Route, (h) Board Membership.
Angel Financing	1. **Angel Investor** (Business Angel or Angel or Informal Investor) is an affluent / wealthy individual who provides capital for a business start-up, in exchange for Convertible Debt or Ownership Equity. 2. Angels typically invest their own funds, whereas Venture Capitalists manage the pooled money of others in a professionally-managed fund.
Bridge Finance	1. **Meaning:** Loans taken by a Company usually from Commercial Banks, for a short period, pending disbursement of loans sanctioned by Financial Institutions. 2. Promoter starts his activities after receiving "**in-principle**" approval from the term lending FI. 3. **Terms:** (a) higher rate of interest, (b) adjusted out of the term loans when disbursed, (c) secured by hypothecating movable assets, personal guarantees & promissory notes.
Securitisation	**See Separate Chart below for Debt Securitisation.**
Short Term Finance	1. **Trade Finance:** (a) Trade Credit, (b) Accrued Exps & Deferred Income, (c) Advances from Customers, 2. **Bank Credit:** (a) Loans, (b) Overdraft, (c) Clean Overdraft, (d) Cash Credit, (e) Advances against Goods, (f) Bills Purchased / Discounted, (g) Advance against Documents of Title to goods, (h) Loans. 3. **Export Credit:** • **Pre-Shipment Credit:** (a) Clean Packing Credit (PC), (b) PC against hypothecation of goods, (c) PC against pledge of goods. • **Post-Shipment Credit:** (a) Purchase/ Discounting of Documentary Export Bills, (b) Advance against Export Bills sent for collection, (c) Advance against Duty Drawback, Cash Subsidy, etc. • **Other Support:** (a) Letters of Credit (LCs), (b) Guarantees, (c) Deferred Payment, (d) Credit Reports, (e) General Information.
ICD/ PD	1. **Inter Corporate Deposits** (ICD's): Deposits made by one Company in another are called Inter-Corporate Deposits (ICD's). These are subject to the provisions of the Companies Act. 2. A Company can accept **Public Deposits** from Public and Shareholders, subject to RBI Regulations.
Certificate of Deposit (CD)	1. CD is a negotiable money market instrument and issued in demat form or as a Usance Promissory Note, for funds deposited at a Bank or other eligible Financial Institution for a specified time period. 2. CDs can be issued by – (a) Scheduled Commercial Banks excluding RRBs and LABs, and (b) select All-India Financial Institutions that have been permitted by RBI to raise short-term resources within the umbrella limit fixed by RBI. 3. CDs can be issued to Individuals, Corporations, Companies, Trusts, Funds, Associations, etc. Non-Resident Indians (NRIs) may subscribe to CDs, but only on non-repatriable basis. 4. Minimum Amount: ₹ 1 Lakh or multiples thereof. 5. **Maturity:** CD's issued by **Banks**: ≥ **15 days**, and ≤ **1 year** from the date of issue. CD's issued by **FI's**: ≥ **1 year** and ≤ **3 years** from the date of issue. 6. CDs may be issued at a discount on Face Value. Banks/FIs can issue CDs on floating rate basis.

Concept	Points to Remember
Commercial Paper (CP)	1. CP is a short-term, unsecured, usance Pro-Note issued by a Company, negotiable by endorsement and delivery, issued at a discount on face value, and redeemable at its face value. The difference between the initial investment and the maturity value, constitutes the income of the investor. 2. **Eligible Issuers:** (a) Corporates, (b) Primary Dealers (PDs), and (c) All India Financial Institutions (FIs) that have been permitted to raise short term resources under the umbrella limit fixed by RBI. 3. **Investors for CP:** (a) Individuals, (b) Banking Companies, (c) Other Corporate Bodies registered or incorporated in India, (d) Unincorporated Bodies, (e) NRIs, & (f) Foreign Institutional Investors. 4. **Maturity:** minimum of **7 days** and a maximum up to **one year** from the date of issue. 5. CP can be issued in denominations of ₹ 5 Lakh or multiples thereof. 6. A Corporate would be eligible to issue CP if – (a) Tangible Net Worth ≥ ₹ 4 Crores, (b) WC limit sanctioned by Bank / FI, (c) Borrowal Account classified as "Standard Asset". 7. Amount of CP proposed to be issued should be raised within **two weeks** from the date on which the issue is open for subscription. Every CP issue shall be reported to the RBI, within **3 days**. 8. Only a Scheduled Bank can act as an IPA (Issuing and Paying Agent) for issuance of CP. Every Issuer must appoint an IPA for issuance of CP.
Seed Capital Assistance	1. Scheme designed by IDBI for professionally or technically qualified entrepreneurs and / or persons possessing relevant experience, skills and entrepreneurial traits. 2. Project Cost should be ≤ ₹ 2 Crores. Maximum Assistance = (a) 50% of the required Promoter's Contribution, or (b) ₹ 15 Lakhs, whichever is lower. 3. Initially interest-free, but Service Charge of 1% p.a. for first 5 years and at increasing rate thereafter. 4. Repayment Schedule is as per repaying capacity of the unit. Initial Moratorium = Upto five years. 5. If Project Cost > ₹ 2 Crores, Seed Capital may be obtained from Risk Capital and Technology Corpn Ltd. For projects upto ₹ 5 Lakhs, assistance under the National Equity Fund of SIDBI may be availed.
Deferred Payment Guarantee	1. Suppliers of Machinery may provide Deferred Credit Facility under which payment for the purchase of machinery can be made over a period of time. 2. Sometimes, an initial down payment is made and the balance paid in suitable instalments. In some other cases, the entire cost of the machinery is financed and the Company is not required to contribute any amount initially towards acquisition of the machinery.
Sources of Foreign Currency Funds	The major sources of Foreign Currency funds are – 1. Commercial Banks, 2. Development Banks, e.g. EXIM Bank, 3. International Agencies, e.g. International Finance Corpn (IFC), International Bank for Reconstruction & Development (IBRD), Asian Development Bank (ADB), International Monetary Fund (IMF), etc. 4. International Capital Markets in Tokyo, London, Luxembourg, New York, etc. In the International Market, the availability of foreign currency is ensured through – (a) Euro-Currency Market, (b) Export Credit Facilities, (c) Bonds Issues and (d) Financial Instruments.
External Commercial Borrowings	1. Instruments (e.g. Floating Rate Notes or Fixed Rate Bonds), availed from **Non-Resident Lenders**, with minimum average maturity of 3 years. 2. Borrowers can raise ECBs through internationally recognised sources like – (a) International Banks, (b) International Capital Markets, (c) Multilateral Financial Institutions e.g. ADB, (d) Export Credit Agencies, (e) Suppliers of Equipment, (f) Foreign Collaborators, and (g) Foreign Equity Holders. 3. ECB's can be accessed through – (a) Automatic Route (for Companies registered under the Companies Act, and NGOs engaged in micro-finance activities), or (b) Approval Route (i.e. after obtaining RBI / Government Approval).
Fin. Instruments in International Market	1. Euro Bonds 2. Foreign Bonds 3. Fully Hedged Bonds 4. Medium Term Notes (MTN) 5. Floating Rate Notes 6. Euro Commercial Papers 7. Foreign Currency Options 8. Foreign Currency Futures
GDRs	1. A Depository Receipt (DR) is a Negotiable Certificate, denominated in US Dollars that represents a non-US Company's publicly traded local currency (say, Indian Rupee) Equity Shares. 2. DR's are created when the local currency shares of an Indian Company are delivered to the Depository's Local Custodian Bank, against which the Depository Bank issues DR's in US Dollars. 3. These DR's may be freely traded in the overseas markets like any other dollar denominated security through either a foreign Stock Exchange or through Over The Counter (OTC) market or among a restricted group like Qualified Institutional Buyers (QIB's).

Concept	Points to Remember
ADRs	1. Depository Receipts issued by a Company in the USA are known as ADR's. These are Securities offered by non-US Companies who want to list on any of the Stock Exchanges in US. 2. ADRs have to be issued as per the conditions stipulated by the Securities Exchange Commission (SEC) of the USA, which is a regulatory body like the SEBI in India. 3. ADRs allow US Investors to buy Shares of Non-US Companies, without incurring the costs of directly investing in a Foreign Stock Exchange.
Types of International Issues	1. Foreign Euro Bonds 2. Euro Convertible Bonds 3. Plain Euro Bonds 4. Euro Convertible Zero Bonds 5. Euro Bonds with Equity Warrants
Indian Depository Receipts (IDRs)	1. The concept of **Depository Receipt** Mechanism, which is used to raise funds in foreign currency has been applied in the Indian Capital Market through the issue of IDR's. 2. Foreign Companies can issue IDRs, to raise funds from the Indian Capital Market, in the same way as Indian Companies uses ADRs / GDRs to raise foreign capital. 3. IDR's are listed and traded in India, in the same manner as other Indian Securities.

Debt Securitisation Flow: The parties involved and the Securitisation Process is described as under –



Note: Special Purpose Entity (SPE) may also be called Special Purpose Vehicle (SPV).

Chapter 7 Time Value of Money

1. **Compounding vs Discounting:**

Present Date	Compounding →	Future Date
Present Cash Flows or Present Money	← Discounting	Future Cash Flows or Future Money

2. **Simple Interest:**

Simple Interest = P × N × R, where P = Principal Amount. N = Number of years. R = Interest Rate per annum.	**Amount = Principal + Interest** Hence, A = P + (P × N × R), **A = P [1 + (N × R)]**

3. **Compound Interest:**

Amount under Compound Interest = $P(1 + R)^{NK}$	Where P = Principal Amount. N = Number of years. K = Number of times compounding is done per year, e.g. Monthly (12), Quarterly (4), etc. R = Interest Rate per payment period = $\frac{\text{Interest Rate p.a.}}{\text{Number of payment periods p.a.}} = \frac{I}{K}$

4. **Effective Rate of Interest:**

$$E = \left(1 + \frac{i}{k}\right)^k - 1$$

Where E = Effective Rate of Interest,
k = Number of times interest is paid in a year, and
i = Rate of Interest per annum.

5. **Compounding and Future Value Formulae:**

(a) Future Value of a Single Cash Flow = Amount $(1 + R)^n$ [Amount relates to Time 0]

(b) Future Value of an Annuity = Amount $\times \frac{[(1+R)^n - 1]}{R}$ [Amount relates to n years]

Where n = number of years for which the money is invested, R = rate of return on the investment.

6. **Maturity Value of Annuity:**

Maturity Value of an Annuity = Annuity Amount $\times \frac{[(1 + R)^n - 1]}{R}$ [Amount relates to n years]

Where n = number of years for which the money is invested, R = rate of return on the investment.

Note: Size of the Sinking Fund Deposit is also derived from the formula given above, by calculating the Annuity Amou the balancing figure.

7. **Discounting and Present Value Formulae:**

(a) Present Value of a Single Cash Flow = Amount $\times \frac{1}{(1+R)^n}$ (Amount relates to a future point of time)

(b) Present Value of an Annuity = Amount $\times \frac{[(1+R)^n - 1]}{R\,(1+R)^n}$ (Amount relates to n years)

Where n = number of years for which the money is invested, R = rate of return on the investment.

8. **Perpetuity Formulae:**

PV of a **Constant** Perpetuity $= \frac{C}{R}$

Where **C** = Cash Flow i.e. Interest, Dividend, etc. per period.
R = Interest Rate per payment period.

PV of a **Growing** Perpetuity $= \frac{C}{R - G}$

Where **C** = Cash Flow i.e. Interest, Dividend, etc. for the first period
R = Interest Rate per payment period.
G = Rate of growth in Cash Flows.

Note: A stream of Cash Flows at a constant rate forever is known as Growing Perpetuity.

Chapter 8 Capital Budgeting

Concept	Formula / Description
Simple Payback Period	• **In case of Uniform CFAT p.a.:** Simple Payback Period $= \frac{\text{Initial Investment}}{\text{CFAT p.a.}}$ • **In case of Differential CFAT for various years:** (a) Compute cumulative CFAT at the end of every year. (b) Determine the year in which Cumulative CFAT > Initial Investment. (c) Compute Simple Payback Period = Time at which Cumulative CFAT = Initial Investment (calculated on time proportion basis).
Discounted Payback Period	(a) Compute Cumulative DCFAT at the end of every year. (b) Determine the year in which Cumulative DCFAT > Initial Investment. (c) Compute Discounted Payback Period = Time at which Cumulative DCFAT = Initial Investment (calculated on time proportion basis).
Payback Reciprocal	$\frac{\text{Average Annual Cash Inflows (i.e. CFAT p.a.)}}{\text{Initial Investment}}$
Average Rate of Return	**ARR** $= \frac{\text{Average PAT p.a.}}{\text{Initial Investment}}$, where **Average PAT p.a.** $= \frac{\text{Total PAT during Project Life}}{\text{No. of years of Project Life}}$ In the above formula, Denominator can either be – (a) **Initial Investment** (or) (b) **Average Investment**