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Dr. Shantilal K. Somaiya School of Commerce and Business Studies

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QUESTION PAPERS

BRANCH: Bachelor of Commerce (Accounting & Finance) Hons.	SEM: I
	JAN-2023

Sr. No.	Subject	Available
1.	Financial Management	
2.	131U03C101 – Quantitative Method I (A)	
3.	131U03C101 - Quantitative Method I (B)	
4.	131U03C101 - Quantitative Method I (C) , (D)	
5.	131U03C102 – Cost & Management A/C I (A)	
6.	131U03C102 – Cost & Management A/C I (B)	
7.	131U03C103 – Business Environment	
8.	131U03C104 – Fundamentals of Economics I (A)	
9.	131U03C104 – Fundamentals of Economics I (B)	
10.	131U03C105 – Corporate Finance (A)	
11.	131U03C105 - Corporate Finance (B)	
12.	131U03C303 - Professional Communication skills	
13.		
14.		
15.		

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Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: **Programme:**	**Class:**	**Semester:**
Name of the Constituent College: S K Somaiya college	**Name of the Department :** Accounting and finance	
Course Code:	**Name of the Course: Financial Management**	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary		

Question No.		Max. Marks
Q.1 (A)	Following is the information of Shyam Co. Ltd. Rate of Return on Investment = 15% Cost of Capital (Ke) = 12% Earnings per share = Rs. 10. a) Determine optimum payout ratio and price of the share using Walters model. b) Price of the share if dividend of Rs. 5 is paid.	8
Q.1 (B)	Mr. Vihan wants you to compute the value of Bond if, (i) Bond matures at par after 5 years (ii) Bond matures at premium of 20% after 5 years. Other information: Face Value - 100 Interest rate - 8% p.a Expected Rate of Return - 10% p.a. OR	7
Q.1 (C)	PQR ltd. has paid dividends of Rs. 10 per share last year and required rate of return is 15%. Calculate the market price of share using dividend growth model if, a) Estimated growth of dividend is 15% b) Estimated growth of dividend is 20%	8
Q.1 (D)	Calculate the different possible prices of the company's share, using price to books value method, price to earning method and price to sales method. Sales = Rs. 10,00,000 Net profit = Rs. 4,00,000 No of equity shares = 1,00,000 Shares Book value = Rs. 30,00,000	7

	Ratios of similar companies in market
Price to book value ratio	2
Price to sales ratio	5.5
Price to earnings ratio	20

Q.2 (A)	XYZ Ltd. manufactured and sold 3000 machines in the year 2008 at 100% capacity. Following information is available for the same year.	15

Materials	Rs. 60,00,000
Labour	Rs. 20,00,000
Sales	Rs. 1,20,00,000
Gross Profit	25% on Sales

Due to slow down in economy the company has decided to reduce its production to 60% of its capacity during the year 2009.

It is estimated that:
(a) Price of Raw material will be reduced by 20% per unit.
(b) Wages will be reduced by 10% per unit.
(c) Overheads will be increased by 15% per unit.
(d) Selling price per unit to be estimated to maintain profit on sales at 20%.

Additional information's for the year 2009.

(1) Raw material will remain in stock for two months.
(2) Finished goods will remain in warehouse for 1 month.
(3) Customers will enjoy two-months credit.
(4) Suppliers will allow two-months credit.
(5) Time lag in payment of wages and overheads will be 1 month.
(6) Processing period two months.
(7) bank balance should be * 3,00,000

You are required to forecast working capital required / requirement for the year 2009

OR

Q.2 (B)	The credit management of XYZ Company had to decide on a proposal for liberal extension of credit which will result in an increase in the average collection period from two to three months. The company's product was sold for Rs. 30 per unit of which Rs. 20 represented variable cost. The current actual sales amounted to Rs.36 lakhs, represented entirely by credit sales. The average total cost per unit was Rs.25. The relaxation in credit policy was expected to result in a sale of Rs. 42 lakhs annually. The management aimed at a return of 25% on additional investment. You are required to make relevant calculations to help the credit manager in examining the financial implications of liberalizing the credit policy.	8
Q. 2 (C)	Compute for a new company Shoba Ltd. the duration of the net operating working capital cycle from the following figures of year 2004 assuming 360 days per year considering age of raw materials, finished goods, debtors and creditors only.	7

Particulars	Amt (Rs.)
Closing stock of	
- Raw materials	40,000

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- Work in progress	28,000	
- Finished goods	42,000	
Cost of goods produced	1,52,000	
Cost of goods sold	2,80,000	
Sales	3,20,000	
Closing debtors	64,000	
Closing creditors	32,000	

Q.3 (A) The following information related to the trading activities of the Hind Traders Limited for the year ended 31st March, 2014. 15

Particulars	Amt (Rs.)	Particulars	Amt (Rs)
Sales	10,00,000	Office Rent	30.000
Purchases	4,00,000	Taxation	60,000
Opening stock	1,00,000	Non-operating income	
Closing stock	50,000	- Profit on sale of share	15,000
wages	70,000	Non-operating Expense	
Advertising	20,000	- Loss on sale of Asset	10,000
Salary of Office staff	30,000		

Arrange the following in vertical format and calculate following ratios. And give your opinion.

1) Gross profit ratio, 2) net profit ratio, 3) operating expense ratio. 4) Stock turnover ratio, 5) creditors and debtors turnover ratio if creditors are Rs. 90,000 and Debtors are Rs. 4,00,000

OR

Q. 3 (B) 15

Particulars	**2018 (Rs.)**	**2019 (Rs)**
Equity shares capital (Face value Rs. 100/share)	8,00,000	9,00,000
Preference share capital	3,00,000	3,00,000
Profit and loss account	5,00,000	7,00,000
10% Debentures.	5,00,000	6,00,000
Capital Employed	**21,00,000**	**25,00,000**
Building	8,00,000	9,00,000
Machinery	7,00,000	8,00,000
Debtors	9,50,000	12,00,000
Stock	3,00,000	5,00,000
Cash	50,000	50,000
Creditors	(5,00,000)	(7,00,000)
Bank overdraft	(2,00,000)	(2,50,000)
Capital Employed	**21,00,000**	**25,00,000**

Additional information

	Amt (Rs.)	Amt (Rs.)
Net profit before interest and tax	5,00,000	8,00,000
Less interest and tax	(1,50,000)	2,50,000
Net profit	3,50,000	5,50,000

Company paid Dividend of Rs. 1 Per share in both the years.
Interpret and compare two years performance of the company with the help of following ratios.

1) Current ratio, 2) Net profit ration 3) Return on investment, 4) Earnings per share, 5) Capital gearing ratio.

Q.4 (A)	Choose the correct word from the alternative	8
1)	_____ is the internal rate of return of an investment in a bond if the investor holds the bond until maturity and if all payments are made as scheduled. a) Yield to maturity c) Interest rate b) Coupon rate d) Intrinsic value	
2)	_____ is the value stated on the face of the bond. c) Face value c) Intrinsic Value d) Market value d) Future Value	
3)	Current assets - current liabilities a) Gross working capital c) Permanent working capital b) Net working capital d) Current assets	
4)	Which of the following is not the item of current assets? a) Current assets c) Cash b) Bills receivables d) Machinery	
5)	Proprietary ratio is a) Balance sheet ratio c) Composite ration b) Revenue statement ratio d) None of the above	
6)	Current Assets / Current liabilities is formulae for a) Quick ratio c) Debtors turnover ratio b) Current ratio d) Creditors turnover ratio	
7)	(Net profit after tax/ Proprietor's fund) * 100 is formula for a) Return on investment c) Return on proprietor's fund b) Earnings per share d) Dividend per share	
8)	Proprietors fund + Borrowed fund = _____ a) Cap employed c) Total liabilities b) Total assets d) Fixed assets	
Q. 4 (B)	State whether the following statements are true or false,	7
1)	Equity shareholders enjoy fix rate of dividend.	
2)	Walters model support the argument that dividend is relevant for the value of the share.	
3)	According to Walters model when r > K(e), Full dividend must be paid.	
4)	If the required rate of return is less than coupon rate bond sells at Premium.	
5)	Fixed assets are not considered during working capital management.	
6)	Quick assets = Current Assets – (Stock + Prepaid Expenses).	
7)	Liquid ratio higher than 1 : 1 Shows Over investment.	

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Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: 02 for BAF and 03 for BAF Hons **Programme:** Bachelor of Commerce in Accounting and Finance and Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department**: Accounting and Finance	
Course Code: 131U02C101 and 131U03C101	**Name of the Course:** Quantitative Method-I	
Duration : 2 Hrs.	**Maximum Marks : 60**	

Instructions: 1)Draw neat diagrams
2)Assume suitable data if necessary
3)Non-programmable calculators are allowed

Question No.		Max. Marks
Q.1	**(A)** Calculate mean, median and mode for the following data :	(10)

Age	0-20	20-40	40-60	60-80	80-100
No. of patient	32	37	24	29	51

(B) Compute the compound amount of Rs. 8000 if invested at 7.2% for 3 years and the interest compounded quarterly yearly. (5)

OR

(A) Calculate coefficient of variation for the following data : (10)

Value (X)	15	18	20	22	24
frequency (f)	8	6	13	18	10

(B) A person deposits Rs. 10000 in a bank for 9 months. Find rate of interest under simple interest if his balance of amount is Rs. 10525? (5)

Q.2	**(A)** Find the principal and rate of interest if a certain principal amounts to Rs. 10700 in 1 year and to Rs. 11449 in 2 years.	(8)
	(B) Two ordinary six-sided dice are tossed. (a) What is the probability that both the dice show the different number? (b) What is the probability that the number noted on the first dice is larger than the number noted on the second dice. (c) Given that the sum of two numbers shown is 8. find the conditional probability that the number noted on the first dice is larger than the number noted on the second dice.	(7)
	OR	
	(A) Let X be a random variable with Uniform distribution (a) Compute E(X) and V(X). (b) Evaluate P($X < 5$) for n = 7. Also, mean and variance.	(8)
	(B) Pushpa wants to accumulate Rs. 10 lakh for buying the van at the end of 5 years from now. How much should he invest every year at the rate of interest of 15% p.a. compounded half yearly?	(7)
Q.3	**(A)** If COVID is detected in 80% of cases, and 5 people are selected at random. (a) Construct the appropriate random variable 'X' and what type of distribution X follows. (b) What is the probability of getting at least 3 persons with COVID? (c) What is the probability of getting exactly 2 COVID persons?	(8)
	(B) Three students carry 6 red pens, 4 black pens; 4 red pens, 6 black pens, and 5 red pens, 5 black pens respectively. One of the students is selected at random and a pen is taken from them. (a) Find the probability of black pen being taken from the first student. (b) If the pen taken is red, find the probability that it is taken from the first student.	(7)
	OR	
	(A) If a fruit box contains 4 apples, 5 bananas and 6 cherries, suppose three fruits are drawn without looking inside the box. If X represents the number of apples selected and Y represents the number of cherries selected, then construct a joint probability distribution table.	(8)
	(B) An electric fan of a certain company has an average life span of 15 years and standard deviation 3 years. What is the probability of: (a) finding a fan which stops working before 10 years. (b) finding a fan which lasts more than 20 years. (c) finding a fan between 12 to 19 years.	(7)

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Q.4

A. Multiple Choice Questions - (7)

1. Which one is not possible in probability?
   a. $P(x) = 1$
   b. $\sum x\, P(x) = 3$
   c. $P(x) = 0.5$
   d. $P(x) = -0.5$

2. If A and B are independent events such that $P(A) = \frac{2}{3}$ and $P(A \cap B) = \frac{1}{2}$, then $P(B) =$
   a. $\frac{3}{8}$
   b. $\frac{1}{3}$
   c. $\frac{3}{4}$
   d. $\frac{1}{4}$

3. If variance is 49 then Standard deviation is
   a. 4
   b. 6
   c. 7
   d. 9

4. If a dice is rolled, what is the probability of getting multiple of 3 ?
   a. $\frac{1}{6}$
   b. $\frac{1}{3}$
   c. $\frac{1}{2}$
   d. $\frac{2}{3}$

5. Which of the following is affected by extreme points?
   a. Mean
   b. Median
   c. Mode
   d. Quartile

6. Find the median for the following data set:
   75, 43, 91, 98, 101, 68, 45.
   a. 98
   b. 75
   c. 91
   d. 60

7. If X follows Binomial distribution with n=18 and probability of success $\frac{2}{3}$. Then variance is
   a. 12
   b. 6
   c. 4
   d. 2

B. True and False - (8)

1. The median of 5, 7, 3, 11, 9, 15 is 8.
2. Mean is affected by the extreme values.
3. Median is the same as the third quartile for any data.
4. Simple interest is always better than compound interest.
5. Effective annual rate is greater than the stated rate of interest.
6. Event A and B are independent if $P(A \cap B) = P(A) + P(B)$.
7. Variance of Bernoulli distribution is pq.
8. Probability for each value of random variable X is the same in Binomial distribution.

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STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
-3.9	.00005	.00005	.00004	.00004	.00004	.00004	.00004	.00004	.00003	.000
-3.8	.00007	.00007	.00007	.00006	.00006	.00006	.00006	.00005	.00005	.000
-3.7	.00011	.00010	.00010	.00010	.00009	.00009	.00008	.00008	.00008	.000
-3.6	.00016	.00015	.00015	.00014	.00014	.00013	.00013	.00012	.00012	.000
-3.5	.00023	.00022	.00022	.00021	.00020	.00019	.00019	.00018	.00017	.000
-3.4	.00034	.00032	.00031	.00030	.00029	.00028	.00027	.00026	.00025	.000
-3.3	.00048	.00047	.00045	.00043	.00042	.00040	.00039	.00038	.00036	.000
-3.2	.00069	.00066	.00064	.00062	.00060	.00058	.00056	.00054	.00052	.000
-3.1	.00097	.00094	.00090	.00087	.00084	.00082	.00079	.00076	.00074	.000
-3.0	.00135	.00131	.00126	.00122	.00118	.00114	.00111	.00107	.00104	.001
-2.9	.00187	.00181	.00175	.00169	.00164	.00159	.00154	.00149	.00144	.001
-2.8	.00256	.00248	.00240	.00233	.00226	.00219	.00212	.00205	.00199	.001
-2.7	.00347	.00336	.00326	.00317	.00307	.00298	.00289	.00280	.00272	.002
-2.6	.00466	.00453	.00440	.00427	.00415	.00402	.00391	.00379	.00368	.003
-2.5	.00621	.00604	.00587	.00570	.00554	.00539	.00523	.00508	.00494	.004
-2.4	.00820	.00798	.00776	.00755	.00734	.00714	.00695	.00676	.00657	.006
-2.3	.01072	.01044	.01017	.00990	.00964	.00939	.00914	.00889	.00866	.008
-2.2	.01390	.01355	.01321	.01287	.01255	.01222	.01191	.01160	.01130	.011
-2.1	.01786	.01743	.01700	.01659	.01618	.01578	.01539	.01500	.01463	.014
-2.0	.02275	.02222	.02169	.02118	.02068	.02018	.01970	.01923	.01876	.018
-1.9	.02872	.02807	.02743	.02680	.02619	.02559	.02500	.02442	.02385	.023
-1.8	.03593	.03515	.03438	.03362	.03288	.03216	.03144	.03074	.03005	.029
-1.7	.04457	.04363	.04272	.04182	.04093	.04006	.03920	.03836	.03754	.036
-1.6	.05480	.05370	.05262	.05155	.05050	.04947	.04846	.04746	.04648	.045
-1.5	.06681	.06552	.06426	.06301	.06178	.06057	.05938	.05821	.05705	.055
-1.4	.08076	.07927	.07780	.07636	.07493	.07353	.07215	.07078	.06944	.068
-1.3	.09680	.09510	.09342	.09176	.09012	.08851	.08691	.08534	.08379	.082
-1.2	.11507	.11314	.11123	.10935	.10749	.10565	.10383	.10204	.10027	.098
-1.1	.13567	.13350	.13136	.12924	.12714	.12507	.12302	.12100	.11900	.117
-1.0	.15866	.15625	.15386	.15151	.14917	.14686	.14457	.14231	.14007	.137
-0.9	.18406	.18141	.17879	.17619	.17361	.17106	.16853	.16602	.16354	.161
-0.8	.21186	.20897	.20611	.20327	.20045	.19766	.19489	.19215	.18943	.186
-0.7	.24196	.23885	.23576	.23270	.22965	.22663	.22363	.22065	.21770	.214
-0.6	.27425	.27093	.26763	.26435	.26109	.25785	.25463	.25143	.24825	.245
-0.5	.30854	.30503	.30153	.29806	.29460	.29116	.28774	.28434	.28096	.277
-0.4	.34458	.34090	.33724	.33360	.32997	.32636	.32276	.31918	.31561	.312
-0.3	.38209	.37828	.37448	.37070	.36693	.36317	.35942	.35569	.35197	.348
-0.2	.42074	.41683	.41294	.40905	.40517	.40129	.39743	.39358	.38974	.385
-0.1	.46017	.45620	.45224	.44828	.44433	.44038	.43644	.43251	.42858	.424
-0.0	.50000	.49601	.49202	.48803	.48405	.48006	.47608	.47210	.46812	.464

STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.50000	.50399	.50798	.51197	.51595	.51994	.52392	.52790	.53188	.535
0.1	.53983	.54380	.54776	.55172	.55567	.55962	.56356	.56749	.57142	.575
0.2	.57926	.58317	.58706	.59095	.59483	.59871	.60257	.60642	.61026	.614
0.3	.61791	.62172	.62552	.62930	.63307	.63683	.64058	.64431	.64803	.651
0.4	.65542	.65910	.66276	.66640	.67003	.67364	.67724	.68082	.68439	.687
0.5	.69146	.69497	.69847	.70194	.70540	.70884	.71226	.71566	.71904	.722
0.6	.72575	.72907	.73237	.73565	.73891	.74215	.74537	.74857	.75175	.754
0.7	.75804	.76115	.76424	.76730	.77035	.77337	.77637	.77935	.78230	.785
0.8	.78814	.79103	.79389	.79673	.79955	.80234	.80511	.80785	.81057	.813
0.9	.81594	.81859	.82121	.82381	.82639	.82894	.83147	.83398	.83646	.838
1.0	.84134	.84375	.84614	.84849	.85083	.85314	.85543	.85769	.85993	.862
1.1	.86433	.86650	.86864	.87076	.87286	.87493	.87698	.87900	.88100	.882
1.2	.88493	.88686	.88877	.89065	.89251	.89435	.89617	.89796	.89973	.901
1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91309	.91466	.91621	.917
1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.931
1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.944
1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.954
1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.963
1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.970
1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.976
2.0	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.981
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.985
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.988
2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.991
2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.993
2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.995
2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.996
2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.997
2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.998
2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.998
3.0	.99865	.99869	.99874	.99878	.99882	.99886	.99889	.99893	.99896	.999
3.1	.99903	.99906	.99910	.99913	.99916	.99918	.99921	.99924	.99926	.999
3.2	.99931	.99934	.99936	.99938	.99940	.99942	.99944	.99946	.99948	.999
3.3	.99952	.99953	.99955	.99957	.99958	.99960	.99961	.99962	.99964	.999
3.4	.99966	.99968	.99969	.99970	.99971	.99972	.99973	.99974	.99975	.999
3.5	.99977	.99978	.99978	.99979	.99980	.99981	.99981	.99982	.99983	.999
3.6	.99984	.99985	.99985	.99986	.99986	.99987	.99987	.99988	.99988	.999
3.7	.99989	.99990	.99990	.99990	.99991	.99991	.99992	.99992	.99992	.999
3.8	.99993	.99993	.99993	.99994	.99994	.99994	.99994	.99995	.99995	.999
3.9	.99995	.99995	.99996	.99996	.99996	.99996	.99996	.99996	.99997	.999

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 02 for BAF and 03 for BAF Hons **Programme:** Bachelor of Commerce in Accounting and Finance and Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department**: Accounting and Finance	
Course Code: 131U02C101 and 131U03C101	**Name of the Course:** Quantitative Method-I	
Duration : 2 Hrs.	**Maximum Marks : 60**	

Instructions: 1)Draw neat diagrams
2)Assume suitable data if necessary
3)Non-programmable calculators are allowed

Question No.		Max. Marks
Q.1	**(A)** Find mean, median and mode for the following data :	(10)

Class Interval	3	5	6	7	8	9
frequency	16	13	17	20	25	19

(B) Compute the compound amount of Rs. 2800 if invested at 6.8% for 4 years and the interest compounded half yearly. (5)

OR

(A) Calculate coefficient of variation for the following data : (10)

Value	3	5	6	7	8	9
frequency	16	13	17	20	25	19

(B) A person deposits Rs. 5000 in a bank which offers 7% p.a. Simple interest. After how many years will his balance of amount be Rs. 5262.5? (5)

Q.2	**(A)** Find the principal and rate of interest under compound interest if a certain principal amounts to Rs. 5300 in 1 year and to Rs. 5618 in 2 years.	(8)
	(B) A bag contains 30 balls. Twelve of which are red, seven are blue and eleven black. Three balls are drawn at random from the bag, that is every ball has an equal chance of being included in the three. What is the probability that (a) The three balls are of different colours. (b) Two balls are of the same colour. (c) The balls are all of the same colour?	(7)
	OR	
	(A) Let X be a random variable with Uniform distribution (a) Compute E(X) and V(X). (b) Evaluate P($X < 10$) for $n = 12$.	(8)
	(B) Rocky wants to accumulate Rs. 7 crore for buying the KGF factory at the end of 15 years from now. How much should he invest every year at the rate of interest of 12% p.a. compounded quarterly?	(7)
Q.3	**(A)** When a coin is tossed ten times. (a) Construct the appropriate random variable- 'X' and what type of distribution X follows. (b) What is the probability of obtaining less than three heads (c) What is the probability of obtaining more than five heads?	(8)
	(B) A society has 73% of families with only sons and 29% of families with sons and daughters. Additionally, 48% of the families have only daughters. What is (a) the probability of a randomly selected family having a son or daughter? (b) the conditional probability that a randomly selected family has a son given that they have a daughter ?	(7)
	OR	
	(A) If a student contains 2 math, 3 physics and 5 chemistry books in his bag, suppose the student draws three books without looking inside the bag. If X represents the number of math books selected and Y represents the number of chemistry books selected, then construct a joint probability distribution table.	(8)
	(B) Eggs laid by a particular chicken are known to have lengths normally distributed, with mean 6 cm and standard deviation 1.4 cm. What is the probability of: (a) finding an egg bigger than 8 cm in length. (b) finding an egg smaller than 5 cm in length. (c) finding an egg between 4 and 7 cm in length.	(7)

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Q.4

A. Multiple Choice Questions - (7)

1. The probability of getting exactly two heads in 6 tosses of a fair coin is
   a. 15/64
   b. 11/64
   c. 17/64
   d. 13/64

2. If A and B be two independent events with p(AUB)=0.7 and P(A)=0.5 then P(B) is
   a. 0.4
   b. 0.5
   c. 0.6
   d. 0.7

3. If Standard deviation is 4 then variance is
   a. 4
   b. 2
   c. 8
   d. 16

4. If a coin is tossed 3 times, what is the probability of getting at least 2 heads ?
   a. ⅛
   b. ¼
   c. ½
   d. ⅜

5. Which of the following is the best measure of dispersion?
   a. Range
   b. Coefficient of range
   c. Coefficient of Quartile deviation
   d. Coefficient of variance

6. Find the median for the following data set:
   57, 34, 99, 89, 101, 10, 54.
   a. 54
   b. 57
   c. 89
   d. 63.43

7. If X follows Binomial distribution with n=8 and probability of success ¼. Then mean is
   a. ½
   b. 1
   c. 2
   d. ¾

	B. True and False - 1. The mean of 5, 7, 3, 11, 9 is 7. 2. Median is affected by the extreme values. 3. Median is the same as the second quartile for any data. 4. Compound interest is always better than simple interest. 5. Effective annual rate is less than the stated rate of interest. 6. Probability can be greater than one. 7. Mean of Bernoulli distribution is pq. 8. Probability for each value of random variable X is the same in Uniform distribution.	(8)

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STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
-3.9	.00005	.00005	.00004	.00004	.00004	.00004	.00004	.00004	.00003	.000(
-3.8	.00007	.00007	.00007	.00006	.00006	.00006	.00006	.00005	.00005	.000(
-3.7	.00011	.00010	.00010	.00010	.00009	.00009	.00008	.00008	.00008	.000(
-3.6	.00016	.00015	.00015	.00014	.00014	.00013	.00013	.00012	.00012	.000
-3.5	.00023	.00022	.00022	.00021	.00020	.00019	.00019	.00018	.00017	.000
-3.4	.00034	.00032	.00031	.00030	.00029	.00028	.00027	.00026	.00025	.000
-3.3	.00048	.00047	.00045	.00043	.00042	.00040	.00039	.00038	.00036	.000
-3.2	.00069	.00066	.00064	.00062	.00060	.00058	.00056	.00054	.00052	.000
-3.1	.00097	.00094	.00090	.00087	.00084	.00082	.00079	.00076	.00074	.000
-3.0	.00135	.00131	.00126	.00122	.00118	.00114	.00111	.00107	.00104	.001(
-2.9	.00187	.00181	.00175	.00169	.00164	.00159	.00154	.00149	.00144	.001
-2.8	.00256	.00248	.00240	.00233	.00226	.00219	.00212	.00205	.00199	.001
-2.7	.00347	.00336	.00326	.00317	.00307	.00298	.00289	.00280	.00272	.002(
-2.6	.00466	.00453	.00440	.00427	.00415	.00402	.00391	.00379	.00368	.003
-2.5	.00621	.00604	.00587	.00570	.00554	.00539	.00523	.00508	.00494	.004
-2.4	.00820	.00798	.00776	.00755	.00734	.00714	.00695	.00676	.00657	.006
-2.3	.01072	.01044	.01017	.00990	.00964	.00939	.00914	.00889	.00866	.008
-2.2	.01390	.01355	.01321	.01287	.01255	.01222	.01191	.01160	.01130	.011(
-2.1	.01786	.01743	.01700	.01659	.01618	.01578	.01539	.01500	.01463	.014
-2.0	.02275	.02222	.02169	.02118	.02068	.02018	.01970	.01923	.01876	.018
-1.9	.02872	.02807	.02743	.02680	.02619	.02559	.02500	.02442	.02385	.023
-1.8	.03593	.03515	.03438	.03362	.03288	.03216	.03144	.03074	.03005	.029
-1.7	.04457	.04363	.04272	.04182	.04093	.04006	.03920	.03836	.03754	.036
-1.6	.05480	.05370	.05262	.05155	.05050	.04947	.04846	.04746	.04648	.045
-1.5	.06681	.06552	.06426	.06301	.06178	.06057	.05938	.05821	.05705	.055
-1.4	.08076	.07927	.07780	.07636	.07493	.07353	.07215	.07078	.06944	.068
-1.3	.09680	.09510	.09342	.09176	.09012	.08851	.08691	.08534	.08379	.082
-1.2	.11507	.11314	.11123	.10935	.10749	.10565	.10383	.10204	.10027	.098
-1.1	.13567	.13350	.13136	.12924	.12714	.12507	.12302	.12100	.11900	.117(
-1.0	.15866	.15625	.15386	.15151	.14917	.14686	.14457	.14231	.14007	.137
-0.9	.18406	.18141	.17879	.17619	.17361	.17106	.16853	.16602	.16354	.161(
-0.8	.21186	.20897	.20611	.20327	.20045	.19766	.19489	.19215	.18943	.186
-0.7	.24196	.23885	.23576	.23270	.22965	.22663	.22363	.22065	.21770	.214
-0.6	.27425	.27093	.26763	.26435	.26109	.25785	.25463	.25143	.24825	.245
-0.5	.30854	.30503	.30153	.29806	.29460	.29116	.28774	.28434	.28096	.277(
-0.4	.34458	.34090	.33724	.33360	.32997	.32636	.32276	.31918	.31561	.312(
-0.3	.38209	.37828	.37448	.37070	.36693	.36317	.35942	.35569	.35197	.348
-0.2	.42074	.41683	.41294	.40905	.40517	.40129	.39743	.39358	.38974	.385
-0.1	.46017	.45620	.45224	.44828	.44433	.44038	.43644	.43251	.42858	.424(
-0.0	.50000	.49601	.49202	.48803	.48405	.48006	.47608	.47210	.46812	.464

STANDARD NORMAL DISTRIBUTION: Table Values Represent AREA to the LEFT of the Z score.

Z	.00	.01	.02	.03	.04	.05	.06	.07	.08	.09
0.0	.50000	.50399	.50798	.51197	.51595	.51994	.52392	.52790	.53188	.535
0.1	.53983	.54380	.54776	.55172	.55567	.55962	.56356	.56749	.57142	.575
0.2	.57926	.58317	.58706	.59095	.59483	.59871	.60257	.60642	.61026	.614
0.3	.61791	.62172	.62552	.62930	.63307	.63683	.64058	.64431	.64803	.651
0.4	.65542	.65910	.66276	.66640	.67003	.67364	.67724	.68082	.68439	.687
0.5	.69146	.69497	.69847	.70194	.70540	.70884	.71226	.71566	.71904	.722
0.6	.72575	.72907	.73237	.73565	.73891	.74215	.74537	.74857	.75175	.754
0.7	.75804	.76115	.76424	.76730	.77035	.77337	.77637	.77935	.78230	.785
0.8	.78814	.79103	.79389	.79673	.79955	.80234	.80511	.80785	.81057	.813
0.9	.81594	.81859	.82121	.82381	.82639	.82894	.83147	.83398	.83646	.838
1.0	.84134	.84375	.84614	.84849	.85083	.85314	.85543	.85769	.85993	.862
1.1	.86433	.86650	.86864	.87076	.87286	.87493	.87698	.87900	.88100	.882
1.2	.88493	.88686	.88877	.89065	.89251	.89435	.89617	.89796	.89973	.901
1.3	.90320	.90490	.90658	.90824	.90988	.91149	.91309	.91466	.91621	.917
1.4	.91924	.92073	.92220	.92364	.92507	.92647	.92785	.92922	.93056	.931
1.5	.93319	.93448	.93574	.93699	.93822	.93943	.94062	.94179	.94295	.944
1.6	.94520	.94630	.94738	.94845	.94950	.95053	.95154	.95254	.95352	.954
1.7	.95543	.95637	.95728	.95818	.95907	.95994	.96080	.96164	.96246	.963
1.8	.96407	.96485	.96562	.96638	.96712	.96784	.96856	.96926	.96995	.970
1.9	.97128	.97193	.97257	.97320	.97381	.97441	.97500	.97558	.97615	.976
2.0	.97725	.97778	.97831	.97882	.97932	.97982	.98030	.98077	.98124	.981
2.1	.98214	.98257	.98300	.98341	.98382	.98422	.98461	.98500	.98537	.985
2.2	.98610	.98645	.98679	.98713	.98745	.98778	.98809	.98840	.98870	.988
2.3	.98928	.98956	.98983	.99010	.99036	.99061	.99086	.99111	.99134	.991
2.4	.99180	.99202	.99224	.99245	.99266	.99286	.99305	.99324	.99343	.993
2.5	.99379	.99396	.99413	.99430	.99446	.99461	.99477	.99492	.99506	.995
2.6	.99534	.99547	.99560	.99573	.99585	.99598	.99609	.99621	.99632	.996
2.7	.99653	.99664	.99674	.99683	.99693	.99702	.99711	.99720	.99728	.997
2.8	.99744	.99752	.99760	.99767	.99774	.99781	.99788	.99795	.99801	.998
2.9	.99813	.99819	.99825	.99831	.99836	.99841	.99846	.99851	.99856	.998
3.0	.99865	.99869	.99874	.99878	.99882	.99886	.99889	.99893	.99896	.999
3.1	.99903	.99906	.99910	.99913	.99916	.99918	.99921	.99924	.99926	.999
3.2	.99931	.99934	.99936	.99938	.99940	.99942	.99944	.99946	.99948	.999
3.3	.99952	.99953	.99955	.99957	.99958	.99960	.99961	.99962	.99964	.999
3.4	.99966	.99968	.99969	.99970	.99971	.99972	.99973	.99974	.99975	.999
3.5	.99977	.99978	.99978	.99979	.99980	.99981	.99981	.99982	.99983	.999
3.6	.99984	.99985	.99985	.99986	.99986	.99987	.99987	.99988	.99988	.999
3.7	.99989	.99990	.99990	.99990	.99991	.99991	.99992	.99992	.99992	.999
3.8	.99993	.99993	.99993	.99994	.99994	.99994	.99994	.99995	.99995	.999
3.9	.99995	.99995	.99996	.99996	.99996	.99996	.99996	.99996	.99997	.999

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SOMAIYA VIDYAVIHAR UNIVERSITY

Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: 02 for BAF and 03 for BAF Hons **Programme:** Bachelor of Commerce in Accounting and Finance and Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department**: Accounting and Finance	
Course Code: 131U02C101 and 131U03C101	**Name of the Course:** Quantitative Method-I	
Duration : 2 Hrs.	**Maximum Marks : 60**	

Instructions: 1)Draw neat diagrams
2)Assume suitable data if necessary
3)Non-programmable calculators are allowed

Question No.		Max. Marks
Q.1	**(A)** Find mean, median and mode for the following data :	(10)

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60
frequency	16	13	17	20	25	19

(B) Compute the compound amount of Rs. 4800 if invested at 6.7% for 5 years and the interest compounded half yearly. (5)

OR

(A) Calculate coefficient of variation for the following data : (10)

Value	3	5	6	7	8	9
frequency	16	13	17	20	25	19

(B) A person deposits Rs. 10,000 in a bank which offers 7% p.a. Simple interest. After how many years will his balance of amount be Rs. 10,525? (5)

Q.2	**(A)** Find the principal and rate of interest under compound interest if a certain principal amounts to Rs. 5300 in 1 year and to Rs. 5618 in 2 years.	(8)
	(B) A bag contains 30 marvels. Twelve of which are red, seven are blue and eleven black. Three marvels are drawn at random from the bag, that is every ball has an equal chance of being included in the three. What is the probability that (a) The three marvels are of different colours. (b) Two marvels are of the same colour. (c) The marvels are all of the same colour?	(7)
	OR	
	(A) Let X be a random variable with Uniform distribution (a) Compute E(X) and V(X). (b) Evaluate P(X < 10) for n = 12.	(8)
	(B) Rocky wants to accumulate Rs. 7 crore for buying the KGF factory at the end of 15 years from now. How much should he invest every year at the rate of interest of 12% p.a. compounded quarterly?	(7)
Q.3	**(A)** When a coin is tossed ten times. (a) Construct the appropriate random variable- 'X' and what type of distribution X follows. (b) What is the probability of obtaining less than three heads (c) What is the probability of obtaining more than five heads?	(8)
	(B) A society has 73% of families with only sons and 29% of families with sons and daughters. Additionally, 48% of the families have only daughters. What is (a) the probability of a randomly selected family having a son or daughter? (b) the conditional probability that a randomly selected family has a son given that they have a daughter ?	(7)
	OR	
	(A) If a student contains 3 math, 3 statistics and 4 chemistry books in his bag, suppose the student draws three books without looking inside the bag. If X represents the number of math books selected and Y represents the number of chemistry books selected, then construct a joint probability distribution table.	(8)
	(B) An electric bulb of a certain company has an average life span of 15 years and standard deviation 3 years. What is the probability of: (a) finding a bulb which stops working before 10 years. (b) finding a bulb which lasts more than 20 years. (c) finding a bulb between 12 to 19 years.	(7)
Q.4		

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A. Multiple Choice Questions -

1. The probability of getting exactly two heads in 6 tosses of a fair coin is
   a. 15/64
   b. 11/64
   c. 17/64
   d. 13/64

2. If A and B be two independent events with p(AUB)=0.7 and P(A)=0.5 then P(B) is
   a. 0.4
   b. 0.5
   c. 0.6
   d. 0.7

3. If Standard deviation is 4 then variance is
   a. 4
   b. 2
   c. 8
   d. 16

4. If a coin is tossed 3 times, what is the probability of getting at least 2 heads ?
   a. ⅛
   b. ¼
   c. ½
   d. ⅜

5. Which of the following is the best measure of dispersion?
   a. Range
   b. Coefficient of range
   c. Coefficient of Quartile deviation
   d. Coefficient of variance

6. Find the median for the following data set:
   57, 34, 99, 89, 101, 10, 54.
   a. 54
   b. 57
   c. 89
   d. 63.43

7. If X follows Binomial distribution with n=8 and probability of success ¼. Then mean is
   a. ½
   b. 1
   c. 2
   d. ¾

B. True and False -

	1. The mean of 5, 7, 3, 11, 9 is 7. 2. Median is affected by the extreme values. 3. Median is the same as the second quartile for any data. 4. Compound interest is always better than simple interest. 5. Effective annual rate is less than the stated rate of interest. 6. Probability can be greater than one. 7. Mean of Bernoulli distribution is pq. 8. Probability for each value of random variable X is the same in Uniform distribution.	(8)

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SOMAIYA VIDYAVIHAR UNIVERSITY

Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: 02 for BAF and 03 for BAF Hons **Programme:** Bachelor of Commerce in Accounting and Finance and Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department:** Accounting and Finance	
Course Code: 131U02C101 and 131U03C1C1	**Name of the Course:** Quantitative Method-I	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1)Draw neat diagrams **2)Assume suitable data if necessary** **3)Non-programmable calculators are allowed**		

Question No.		Max. Marks
Q.1	**(A)** For the following data given below:	(15)

Class Interval	0-10	10-20	20-30	30-40	40-50
frequency	12	f	21	19	15

a. If the mean is 26.5, find 'f'.
b. Evaluate mode and median.
c. Calculate third quartile.

OR

(A) Thakur lent Rs. 2560 to Jay and Rs. 3650 to Veeru at 6% rate of interest. After how many years should he receive a total simple interest of Rs. 1863? (10)

(B) A person deposits Rs. 5000 in a bank which offers 8% p.a. Simple interest. After how many years will his balance of amount be Rs. 5325? (5)

Q.2	**(A)** If ABC bank offers 7% rate of interest compounded half yearly and XYZ bank offers 6.4% rate of interest compounded monthly. Identify which bank offers the best offer.	(8)
	(B) If COVID is detected in 80% of cases, and 5 people are selected at random. (i) Construct the appropriate random variable 'X' which follows Binomial distribution with success & failure probability. (ii) What is the probability of getting at least 3 persons with COVID? (iii) What is the probability of getting exactly 2 COVID persons?	(7)
	OR	
	(A) Let X be a random variable with Uniform distribution (a) Compute E(X) and V(X) for n=15 (b) Evaluate P(X < 12) for n = 15.	(8)
	(B) Sumit has taken out a loan of Rs. 30,000, subject to a 6% annual interest rate, compounded semi-annually, and with a repayment term of 5 years. Calculate the installment amounts he must pay periodically to repay the loan.	(7)
Q.3	**(A)** When a coin is tossed seven times. (a) Construct the appropriate random variable- 'X' and what type of distribution X follows. (b) What is the probability of obtaining less than three heads (c) What is the probability of obtaining more than five heads?	(8)
	(B) Three students carry 6 red pens, 4 black pens; 4 red pens, 6 black pens, and 5 red pens, 5 black pens respectively. One of the students is selected at random and a pen is taken from them. (a) Find the probability of black pen being taken from the first student. (b) If the pen taken is red, find the probability that it is taken from the first student.	(7)
	OR	
	(A) If a student contains 2 math, 3 physics and 5 chemistry books in his bag, suppose the student draws three books without looking inside the bag. If X represents the number of math books selected and Y represents the number of chemistry books selected, then construct a joint probability distribution table.	(8)
	(B) The life span of fans follow normal distribution with Average life of 10 years and standard deviation of 4 years. What is the probability of: a. getting a fan working for more than 15 years. b. getting a fan working for less than 7 years. c. getting a fan working between 5 years to 12 years.	(7)

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Q.4

A. Multiple Choice Questions - (7)

1. The probability of getting exactly three heads in 5 tosses of a fair coin is
   a. 5/32
   b. 10/32
   c. 17/32
   d. 1/32

2. If A and B be two independent events with $p(A \cap B)=0.7$ and $P(A)=0.85$ then $P(B)$ is
   a. 0.4
   b. 0.5
   c. 0.6
   d. 0.7

3. If Standard deviation is 5 then variance is
   a. 4
   b. 25
   c. 18
   d. 16

4. If a coin is tossed 3 times, what is the probability of getting at least 2 heads ?
   a. ⅛
   b. ¼
   c. ½
   d. ⅜

5. Which of the following is the best measure of dispersion?
   a. Range
   b. Coefficient of range
   c. Coefficient of Quartile deviation
   d. Coefficient of variance

6. Find the median for the following data set:
   47, 24, 89, 79, 91, 10, 44.
   a. 44
   b. 47
   c. 79
   d. 53.43

7. If X follows Binomial distribution with n=8 and probability of success ¼. Then mean is
   a. ½
   b. 1
   c. 2
   d. ¾

	B. True and False - 1. The mean of 5, 7, 3, 11, 9 is 7. 2. Mode is affected by the extreme values. 3. Median is the same as the third quartile for any data. 4. Compound interest is always better than simple interest. 5. Effective annual rate is less than the stated rate of interest. 6. Probability can be negative. 7. Mean of Bernoulli distribution is npq. 8. Probability for each value of random variable X is the same in normal distribution.	(8)

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SOMAIYA VIDYAVIHAR UNIVERSITY

Examination: End Semester Examination January 2023 (UG Programmes)

Programme code: 02 & 03 **Programme: B.Com (A&F) / B.Com (A&F) - Hons**	**Class:** FY	**Semester:** I
Name of the Constituent College: **S K Somaiya College**	**Name of the Department:** Accounting and Finance	
Course Code: 131U02C102 & 131U03C102	**Name of the Course: Cost and Management A/c I**	
Duration : 2 Hrs.	**Maximum Marks : 60**	

Instructions:
1) **Use of Simple Calculator is allowed.**
2) **Notes or Assumption, if any mention.**

Question No.		Max. Marks
Q.1.A]	Data relating to slotted angles in a steel furniture manufacturing unit is as follows: (a) Annual consumption 12000 tonnes (b) Unit cost Rs.100 per kilo (c) Storage/carrying cost 12% (d) Procurement cost Rs.20 per order **Calculate:** (a) EOQ per order in kilos. (b) Annual procurement cost. (c) Annual carrying cost.	**(08)**
Q.1.B]	The following details are given to you regarding a particular job. Monthly Working Hours 192 hours Hourly Wage Rate Rs.30 Piece Rate per unit Rs.12 Normal output per month 480 units Actual output per month 600 units **You are required to calculate for the month:** (a) Normal Piece Rate Method. (b) Merrick's Differential Piece Rate Method. (c) Halsey Premium Plan. (d) Halsey-Weir Premium Plan.	**(07)**
	OR	
Q.1. C]	PQR Tubes Ltd. are the manufacture of picture tubes for T.V. The following are the details of their operations during 2020-2021. Ordering cost Rs.100 per order Inventory carrying cost 20% p.a. Cost of tubes Rs. 500 per tube Normal usage 100 tubes per week Minimum usage 50 tubes per week Maximum usage 200 tube per week Lead time to supply 6-8 weeks **Required to calculate:** (a) Economic order quantity (b) Re-order level (c) Maximum level of stock (d) Minimum level of stock	**(15)**
Q.2.A]	Calculate the value of stock at the end by using Weighed Average Method.	**(08)**

Date	Transaction	Units	Price per unit
1-12-2020	Opening Stock	2,000	30.00
4-12-2020	Purchased	4,000	32.10

8-12-2020	Issued	4,500	-
12-12-2020	Purchased	3,500	32.50
16-12-2020	Issued	3,000	-
20-12-2020	Purchased	4,500	32.30
23-12-2020	Issued	4,000	-
25-12-2020	Purchased	3,000	33.25
27-12-2020	Issued	4,500	-
29-12-2020	Purchased	5,000	32.50
31-12-2020	Issued	3,500	-

Q.2. B] In an engineering factory, the standard time for a job is 24 hours and the basic wage is Rs.20 per hour. **(07)**

A bonus scheme is instituted so that the worker is to receive his normal rate for the hours actually worked and 50% for the hours saved.

Materials for the job cost Rs.600 and overheads are charged on a basis of Rs.40 per labour hour.

Calculate the wages and effective rate of earning per hour if the job is completed (a) in 18 hours and (b) in 21 hours. Also ascertain factory cost of the job on the same basis.

OR

Q.2. C] In a factory of Vidhi Ltd., the following particulars have been extracted for the period ended 31.3.2022. **(15)**

Particulars	Production Department		Service Department	
	Dept A Rs	Dept B Rs	Dept X Rs	Dept Y Rs
Direct Material	3,700	7,400	200	700
Direct Wages	1,850	3,700	100	350
Direct Expenses	11,250	22,500	50	175
Indirect Material	6,160	12,320	100	350
Indirect Wages	3,090	6,180	50	175
Asset Value	37,000	74,000	2,000	7,000
No. of Workers	37	74	2	7
HP Hours	74	148	4	14
Light Point	37	74	2	7
Floor Area (Sq. ft)	185	370	10	35
No of Working Hours	4,000	8,000	-	-

The detail of indirect expenses for the period is as under:

	Rs.
Staff Welfare Expenses	3,600
Supervision Expenses	3,600
Power	7,200
Lighting	3,600
Depreciation	7,200
Insurance (Assets)	600
Rent and Rates	600
Repairs (Building)	2,400
Employee's Insurance	600
General Store	480
Store Overhead	120

The expenses of service department X and Y are apportioned as under:

Department	A	B	X	Y
X	25%	50%	-	25%
Y	25%	50%	25%	-

You are required to prepare the statements showing:

(a) The allocation of overheads;

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(b) The apportionment of overheads;
(c) The distribution of service departments overheads by methods of
(a) Continued Distribution and (b) Algebraic Equations

Q.3. A] **From the following Balance Sheets of Vasundhara Ltd. Prepare a trend analysis with 2016 as the base year** **(15)**

(Rs in thousand)

No	Particulars	2016 Rs	2017 Rs	2018 Rs
1.1)	Proprietor's Equity	500	800	1,100
2)	Long Term Loans	300	200	100
3)	Current Liabilities	300	340	400
4)	Total Fund Employed	1,100	1,340	1,600
1.	Fixed Assets at Cost	160	240	320
	- Depreciation	60	100	160
	Fixed Assets	100	140	160
2.	Advances	150	200	250
	Stock	300	360	400
	Non - Quick Assets	450	560	650
3.	Debtors	450	540	690
	Bank	100	100	100
	Quick Assets	550	640	790
4.	Current Assets	1000	1,200	1,440
5.	Total Assets Owned	1,100	1,340	1,600

Income statement for the year ended 31st March

Particulars	2016 (Rs)	2017 (Rs)	2018 (Rs)
Net sales	30,000	36,000	40,000
Cost of sales	14,000	16,000	18,000
Gross profit	16,000	20,000	22,000
Operating Expense	11,000	14,000	16,000
Net profit	5,000	6,000	6,000

OR

Q.3. B] From the following profit and loss and balance sheet of Shree Ram limited for the year 2018 and 2019 Prepare a comparative income and balance sheet statement. **(15)**

Profit and loss A/c for the years ended 31st December 2018 and 2019

Particulars	**2018 (₹)**	**2019 (₹)**	**Particulars**	**2018 (₹)**	**2019 (₹)**
Administrative Expense	18,000	22,000	By Sales	6,00,000	10,00,000
Selling & Distribution Expense	33,000	23,000	Non- Operating income	500	500
Finance Expense	1000	----			
Non-operating Expenses	13,000	13,000			
Interest	10,000	5,000			
Prov for Taxation	38,000	28,000			
Cost of goods sold	4,40,000	8,80,000			

Balance sheet as on 31st December, 2018 and 2019

Liabilities	2018 (₹)	2019 (₹)	Assets	2018 (₹)	2019 (₹)
Equity share capital	6,00,000	6,00,000	Fixed assets	4,33,000	7,20,000
Preference share capital	-----	4,00,000	Investment	50,000	80,000
General Reserve	1,37,500	1,72,000	Stock	1,20,000	3,00,000
8% Debentures	1,00,000	50,000	Debtors	2,00,000	2,39,000
Bank loan	------	2,00,000	Bank	80,000	1,47,000
Sundry Creditors	32,500	50,000	Cash	17,000	10,000
Prov for taxation	30,000	24,000			
	9,00,000	14,96,000		9,00,000	14,96,000

Q.4. A] **Multiple Choice Questions** **(08)**

1) The cost which is directly chargeable to the product is_____
(a) Indirect cost (b) Direct cost (c) Overheads (d) Period cost

2) Average Consumption x Emergency time is a formula for the calculation of _____
(a) Maximum Level (b) Minimum Level (c) Re-Order Level (d) Danger Level

3) Standard output is 100 units per day of 8 hours and the piece rates are 20 paise per unit, under Taylor's differential piece rate system, what will be amount of wages if a worker produces 95 units in a day?
(a) Rs.14.00 (b) Rs.14.25 (c) Rs.15.20 (d) Rs.19.20

4) The main objective of management accounting is _____
(a) To maintain the accounting records
(b) To know the amount due from customers and suppliers
(c) To ascertain analyse and interpret the results of business operations
(d) To record all the business transactions

5) Balance sheet shows_____
(a) Profit and loss of a company (c) financial position of the company
(b) Cash flow of the company (d) None of the above

6) The scope of Management accounting includes _____
(a) Budgeting and forecasting (c) Financial and cost accounting
(b) Internal audit and tax accounting (d) All of the above

7) Under Time rate system, the wages is equal to _____
(a) Labour hours x Labour Hour rate (b) Piece completed x piece rate
(c) Actual output x Actual production hours (d) None of these

8) Balance Sheet is based upon which of the following formula?
a) assets = liabilities – stockholder's equity (b) assets + liabilities = stockholder's equity
c) assets + stockholder's equity = liabilities (d) assets = liabilities + stockholder's equity

B] **State whether the following Statement are TRUE or FALSE:** **(07)**

1) The objective of cost accounting is to facilitate cost estimation.
2) The historical cost does not reflect true value of the asset.
3) Allocation and apportionment of overheads means the same thing.
4) Overtime increases labour cost.
5) Use of management Accounting is compulsory.
6) Wage plan promote industrial peace.
7) Depreciation is a Source of fund.

B

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Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: 02 & 03 **Programme: B.Com (A&F) / B.Com (A&F) - Hons**	**Class:** FY	**Semester:** I
Name of the Constituent College: **S K Somaiya College**	**Name of the Department:** Accounting and Finance	
Course Code: 131U02C102 & 131U03C102	**Name of the Course: Cost and Management A/c I**	
Duration : 2 Hrs.	**Maximum Marks : 60**	

Instructions:
1) **Use of Simple Calculator is allowed.**
2) **Notes or Assumption, if any mention.**

Question No.		Max. Marks
Q.1.A]	From the following particulars calculate the Economic Order Quantity (EOQ) 1) Half yearly consumption requirement =800 units 2) Cost of placing and receiving per purchase order = Rs 50. 3) Cost of material per unit Rs 20. 4) Annual carrying Cost of material = 20% of Inventory value	(08)
Q.1.B]	Calculate the value of stock at the end by using FIFO method.	(07)

Date	Transaction	Units	Price per unit
01-01-2020	Opening Stock	2,250	10
05-02-2020	Purchase	1,000	15
10-03-2020	Purchase	900	18
15-03-2020	Sales	2,400	20
12-04-2020	Sales	1,000	25
16-05-2020	Purchase	900	20
25-06-2020	Sales	1,200	30

OR

Q.1. C] Compute the Machine Hour Rate from the following data. **(15)**

Cost of Machine	: Rs. 1,00,000
Installation Charges	: Rs. 10,000
Estimated Scrap Value after the expiry of its life (15 years)	: Rs. 5,000
Rent & Rates for the shop per month	: Rs. 200
General lighting for the shop per month	: Rs. 300
Insurance Premium for the machine per annum	: Rs. 960
Repairs & Maintenance Expenses per annum	: Rs. 1,000
Power Consumption	: 10 units per hour
Rate of power per 100 units	: Rs. 20
Estimated Working Hours per annum	: 2,200
This includes setting up time of 200 hours.	
Shop Supervisor's Salary per month	: Rs. 600

The machine occupied 1/4th of the total area of the shop.
The supervisor is expected to devote 1/5th of his time for supervising the machine.

Q.2.A] Standard time set for **Job A** and **Job B** is 60 hours and 150 hours respectively. **(08)**
Mr.Ram is engaged on **Job A** and **Mr.Shyam** is engaged on **Job B.**
Mr.Ram is paid under Halsey Plan. **Mr.Shyam** is paid under Rowan Plan.
Mr.Ram : Time rate per hour: Rs. 5.00. Actual Time taken: 36 hours.
Mr.Shyam : Time rate per hour: Rs. 4.00. Actual Time taken: 90 hours.
Calculate earnings of earning of **Mr. Ram and Mr.Shyam**

Q.2. B] VinayakLtd. has five departments P, Q, R, S and T. The actual costs incurred for the month of January, 2020 are as follows: **(07)**

Particulars	Rs.
Repairs	21,000
Rent	25,000
Depreciation	14,000
Supervision	56,000
Insurance	12,800
Employer's Liability for Employees Insurance	6,000
Lighting	18,000

The following data is also available in respect of the five departments:

Particulars	Dept. P	Dept. Q	Dept. R	Dept. S	Dept. T
Area (sq. ft.)	1400	1200	1100	900	400
No. of Workers	5	4	2	2	1
Total Wages	50,000	40,000	25,000	25,000	10,000
Value of Plant	1,00,000	90,000	80,000	50,000	30,000
Value of Stock	75,000	50,000	25,000	10,000	–

Consider stock value as a basis for apportioning insurance cost.
Prepared a statement showing primary distribution of overheads

OR

Q.2. C] From the following particulars calculate earnings of Mr. Jagdish & Mr. Sanjay who are paid wages under Merrick plan. **(08)**
Normal piece rate Rs 20 per unit.
High task rate: 60 units per week
Output of the worker per week:
Ajay 48 units
Vijay 61 units

Q.2.D] Company has three production depts. and two service depts. and for the period the departmental distribution summary shows the following figures of overheads. **(07)**

Production dept.			Service dept.	
P	Q	R	Y	Z
Rs. 6,000	Rs. 5,000	Rs. 3,750	Rs. 2,100	Rs. 2,250

The expenses of service dept. are charged on a percentage basis as follows.

Particulars	P	Q	R	Y	Z
Service dept. X	20%	40%	30%	-	10%
Service dept. Y	40%	20%	20%	20%	-

Prepare a statement showing the apportionment of two service dept. expenses to production dept. by the Repeated distribution method.

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Q.3. A] From the following details of A Ltd. Prepare a Comparative Balance Sheet in Vertical form suitable for analysis: **(08)**

M/s A Ltd

Particulars	Amount (Rs) 31/03/2016	Amount (Rs) 31/03/2017	Amount of changes (Rs) (+) ↑ / (-) ↓	% of changes (+) ↑ / (-) ↓
Share Capital	6,50,000	?	40,000	?
Reserve and Surplus	2,50,000	2,00,000	?	?
Debenture	1,50,000	?	(-) 50,000	?
Current Assets	?	3,00,000	40,000	?
Long term Investment	?	?	10,000	10
Current Liabilities	?	2,00,000	(-) 10,000	?
Fixed Assets	?	?	?	?

B] From the following information of Ganesh Ltd. Prepare Common Size Balance sheet in Vertical form as on 31st March, 2016: **(01)**

Particulars	Rs
Fixed Assets	1,50,000
Net Worth	1,50,000
Loan Fund	?
Working Capital	1,00,000
Total Capital Employed	2,50,000
Current Liabilities	1,00,000

OR

Q.3. C] Complete the following comparative Income Statement of Supriya Ltd by ascertaining the missing Figures: **(08)**

Particulars	2015 (Rs)	2016 (Rs)	Increase / (Decrease) in Rs.	% of Increase / (Decrease)
Sales	?	?	2,00,000	100
Cost of Goods Sold	?	1,80,000	1,20,000	200
Gross profit	?	?	?	?
Operating Expenses	40,000	?	?	120
Operating Profit	?	?	?	?
Non-Operating Income	?	?	3,000	30
Non-Operating Expenses	5,000	?	Nil	Nil
Net Profit Before Tax	?	?	?	?

D] From the following details of B Ltd, prepare Common Size Statement in Vertical form suitable for analysis: **(07)**

M/s B Ltd

Balance for the year ended on 31st March, 2022

Particulars	Rs
Sales	8,33,000
Return inwards	3,000
Carriage Inwards	4,150
Purchases	5,39,500
Opening Stock	8,300
Closing Stock	14,940
Office Expenses	99,600
Selling Expenses	1,49,400
Finance Expenses	41,500

Q.4. A]	**Multiple Choice Questions**	**(08)**
1)	Capital employed is equal to _____ (a) Fixed assets + current assets (b) Shareholder funds (c) Net worth + long-term liabilities (d) Total fund - Investment	
2)	_____ is most likely to a fixed cost (a) Cost of material used in production (b) Rent (c) Assembly Labour Cost (d) Commissions	
3)	_____ indicates maximum stock to be maintained. (a) Maximum Level (b) Minimum Level (c) Re-Order Level (d) Danger Level	
4)	Notional cost is also known as_____ (a) Imputed cost (b) Opportunity- cost (c) Out of pocket cost (d) Variable cost	
5)	Fixed Asset of the company increase from 300000 to 400000. What is the percentage of change? (a) 25% (b) 20% (c) 33.33% (d) 40%	
6)	Depreciation is _____Expenditure (a)Variable (b)Semi – variable (c)Fixed (d)None of the above	
7)	The main purpose of _____ accounting is preparation of financial statement (a) Management accounting (c) Cost Accounting (b) Financial Accounting (d) None of the above	
8)	The costing which determines cost after it has been actually incurred is _____ (a) Historical (b) Estimated (c) Standard (d) Marginal	
B]	**State whether the following Statement are TRUE or FALSE:**	**(07)**
1)	The function of cost accounting is cost control.	
2)	Earnings under Halsey and Rowan Plan are the same	
3)	Departments that assist production departments are called service departments	
4)	Bank overdraft is a non-quick liability	
5)	The main purpose of management accounting is preparation of financial statement	
6)	Influence by personal bias is an Advantage of Management Accounting	
7)	Time rate method remunerates the workers on the basis of time taken on the job	

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Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code:02 for BAF & 03 for BAF Hons **Programme:** Bachelor of Commerce in Accounting and Finance and Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department:** Accounting and Finance	
Course Code: 131U02C103 & 131U03C103	**Name of the Course:** Business Environment	
Duration: 2 Hrs.	**Maximum Marks: 60**	
Instructions: 1) Draw neat diagrams 2) Assume suitable data if necessary		

Question No.		Max. Marks
Q.1	A) Discuss the internal components of business environment with examples. B) Explain the scope of business environment. OR C) Enumerate the role modeling, teaching and coaching for imbibing ethical behaviour.	8 7 15
Q.2	A) State the benefits of CSR. B) Enlist the conflict management techniques adopted by managers. OR B) Define learning and explain its features. C) Discuss the elements good of corporate governance.	8 7 8 7
Q.3	A) "Organizational behaviour, as a discipline of study, has evolved over a period of time". Discuss this statement. B) "Social audit helps to narrow gaps between vision and reality". Explain the statement. OR C) Make in India is an initiative launched by the Government of India to encourage national and multinational companies to manufacture their products in India. It focuses on job creation and skill enhancement and is in twenty-five sectors of the economy. Under the initiative, brochures on these sectors and a web portal were released. The initiative aims at high quality standards and minimizing the impact on the environment. It also seeks to attract foreign capital investment in India. In context of the above case: Identify the various dimensions of business environment being referred to by quoting lines from the paragraph. D) Explain the following terms: Layoffs, Attrition, Termination.	7 8 5 10
Q.4	A) State whether the following statements are True or False: 1. Business environment consists of factors which are certain by nature. 2. The U form design is used to implement a strategy of related diversification. 3. People don't learn by observing from others. 4. Misconduct refers to willful violation of organization rules and regulation by the employee.	8

5. According to best practice, the audit committee should focus on the external auditors and not monitor and review the effectiveness of the internal audit activities.
6. There is total shortage of opportunities for competent persons in this world.
7. Matrix design is a mixture of the U and H form of organizational design.
8. Corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders.

B) Match the following:

Group A	Group B
1. TQM	a. Customs
2. Good working condition	b. Legal environment
3. Social Environment	c. Reason for discharge.
4. Unsatisfactory performances	d. Focus on continuous improvement.
5. Leadership	e. Human relations
6. Ignoring conflict	f. Direct method.
7. The companies Act 2013	g. Supportive model

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 02 & 03 **Programme: BAF & BAF (HONS)**	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department :** Accounting & Finance	
Course Code: 131U03C104	**Name of the Course: Fundamentals of Economics - I**	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1) All questions are compulsory. 2) Figures to the right indicate full marks. 3) Mention the Proper Question Number. 4) No need to write the questions for objective questions.		

Question No.		Max. Marks
Q-1	**Answer the following Questions:**	
A.	Explain the meaning of the Indifference Curve with its diagram & elaborate on all the Properties of the same.	(8)
B.	Define the meaning of a Budget Line with the help of a diagram & elaborate on the assumptions & features both.	(7)
	OR	
C.	Discuss the effect of change in income on consumer's equilibrium along with its diagram & explanation which then leads to ICC curve.	(8)
D.	Describe the Engel's curve with diagram & its explanation	(7)
Q-2	**Answer the following Questions:**	
A.	Explain the meaning & features of Monopoly Market Structure in detail. Provide appropriate examples as well.	(8)
B.	Given is the TVC of all the units & TFC is Rs. 1000. Calculate the TC, ATC, AVC, AFC & MC from the information given below:	(7)

Units	0	1	2	3	4	5	6	7
TVC	0	300	600	1000	1500	2100	2800	3600

OR

C.	Illustrate the diagrams of Super Normal profits & Normal profits along with the Equation of AC & AR of Perfect Competition & indicate it with the shaded area wherever necessary.	(8)
D.	**Case Study: Read the following case study & answer the following questions** The case is about the growing dominance of Indian telecommunications company Reliance Jio Infocomm Limited (Jio) in the Indian telecom sector. Jio	(7)

	entered the Indian market in 2016 with a host of freebies, including unlimited calling and data plans. Its entry revolutionized the telecommunication sector across the country. Its aggressive and innovative tariff plans helped Jio become the fourth-largest telecom provider in India within six months of its launch. Even after the freebie period ended on March 31, 2017, Jio continued to offer the cheapest data plans as compared to its rivals. This helped it maintain its competitive edge in the market. Joi's dominance continued, and it soon surpassed other major players in the market. Jio's rise led to consolidation in the market, with two of the top players, Idea and Vodafone, announcing a merger that left the country with three major telecom players. Jio's continuous strong run changed the dynamics of the Indian telecom industry, with experts opining that it would soon monopolize India's telecom sector. The competitors who were experiencing shrinking revenues, mounting quarterly losses, and high debt were taken aback when in October 2019, the Supreme Court of India gave a ruling directing Airtel and Vodafone Idea to pay dues amounting to Rs. 410 billion and Rs.400 billion respectively toward licensing fees and spectrum charges. Given the financial condition of these companies, they would find it difficult to pay the dues. The competitors' problems gave Jio ample time to execute its plans and consolidate its position at their cost. Jio's cheap pricing seemed attractive in the short run, but given the firm's investment in network coverage, quality, and technology, it was doubtful whether it could continue to offer low prices in the long run. a) Name the market structure of Telecom ? And analyze Jio's entry and growth in the Indian telecom market. b) Assess the impact of Jio's growth on the competitors. & if you were the Vice president of Jio, how would you try to increase your market share & maintain the position.	
Q-3	**Answer the following Questions:**	
A.	Describe the meaning of Anti trust policies? Explain in detail with examples: a) Market Allocation b) Bid Rigging	**(8)**
B.	Explain the meaning & features of Competition Act, 2002 in detail **OR**	**(7)**
C.	Elaborate on the meaning & advantages of creative destruction in detail.	**(8)**
D.	Evaluate the advantages of New Economy in detail, which is the need of the hour currently.	**(7)**

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Q-4

A. **Objective Questions**

State whether the following statements are true of false (6)

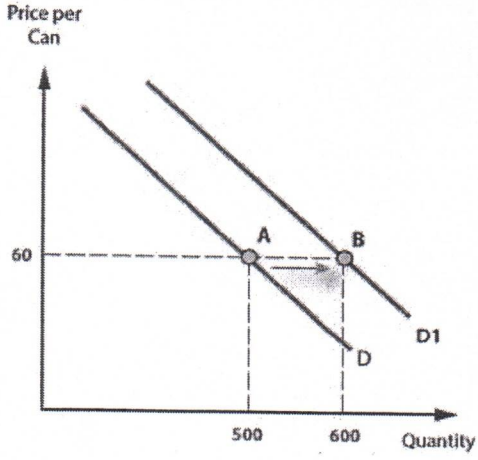
1. Price discrimination is a selling strategy that charges customers different prices for the same product or service based on what the seller thinks they can get the customer to agree to.
2. MC Curve should cut MR Curve from below is one of the conditions of equilibrium of the firm.
3. Demand Curve slopes downwards from right to left.
4. Perfect Competition relates to Group Behaviour.
5. Total Revenue of a Firm is Rs. 50,000 by the sale of 2,000 units. Hence, AR = Rs. 50,000 ÷ 2,000 = Rs. 2.5
6. The Competition Act 2002 has been enacted to promote competition in India.

B. **Match the following Questions:** (6)

A	B
1. Monopolist	a) Prof. J. R. Hicks
2. TR	b) Price Maker in the industry
3. Anti-Trust policy	c) P x Q,
4. Indifference Curve	d) protect consumers and regulate how companies operate their businesses.
5. MC cuts AC from below…	e) Shut Down Point
6. AR = AC	f) Normal profits
	g) Mr. Allen
	h) when AC is Maximum
	i) when AC is minimum.
	j) AR = Price.

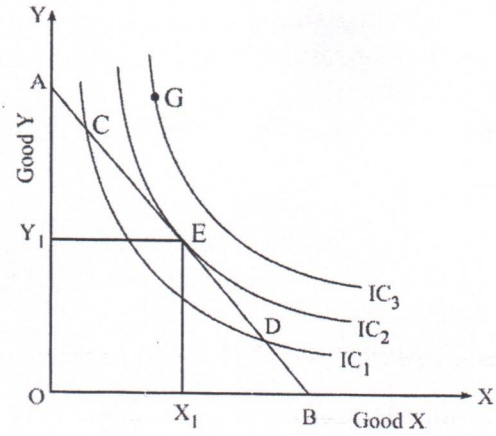
C. **Select the correct answers from the alternatives based on the diagrams: (DO NOT DRAW DIAGRAMS)** (3)

1. The diagram below depicts _____ (Increase / Decrease) in demand.

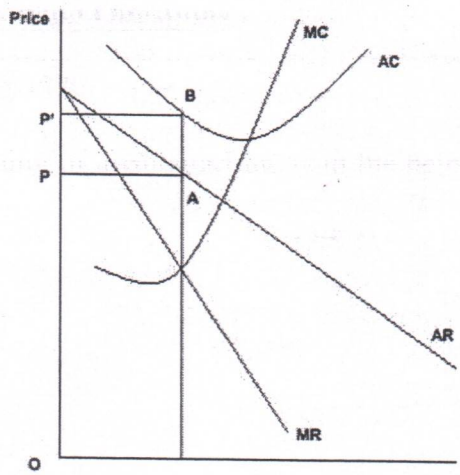


4

2. Point _____ (E / G) is the point of tangency between IC_2 & Budget Line



3. The diagram below depicts _____ under Monopoly market structure. (Losses / Shut down point)



SOMAIYA VIDYAVIHAR UNIVERSITY

Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 02 & 03 **Programme: BAF & BAF (HONS)**	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department :** Accounting & Finance	
Course Code: 131U03C104	**Name of the Course: Fundamentals of Economics - I**	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1) All questions are compulsory. 2) Figures to the right indicate full marks. 3) Mention the Proper Question Number. 4) No need to write the questions for objective questions.		

Question No.		Max. Marks
Q-1	**Answer the following Questions:**	
A.	Explain the meaning of the Indifference Curve with its diagram & elaborate on its advantages in detail.	**(8)**
B.	Define the meaning of a Budget Line with the help of a diagram & elaborate on the shifts in the budget line with respect to change in the income of the consumer.	**(7)**
	OR	
C.	Explain the ICC curve with the help of a diagram & its respective explanation.	**(8)**
D.	Discuss the Price Effect on Consumers Equilibrium.	**(7)**
Q-2	**Answer the following Questions:**	
A.	Explain the meaning & features of Perfect Competition Market Structure in detail.	**(8)**
B.	Given is the TVC of all the units & TFC is Rs. 1000. Calculate the TC, ATC, AVC, AFC & MC from the information given below:	**(7)**

Units	0	1	2	3	4	5	6	7
TVC	0	250	470	700	980	1350	1850	2520

OR

C.	Illustrate the diagrams of Super Normal profits & Normal profits along with the Equation of AC & AR of Monopoly & indicate it with the shaded area wherever necessary.	**(8)**
D.	**Case Study: Read the following case study & answer the following questions** The soap market in India is divided into various categories that is men's soaps, ladies soap and common soap. There is also a small share in the soap market	**(7)**

	which is held by specialty soaps like baby soaps, sandal soaps, glycerin soap etc. The market growth of the soap sector is estimated to be 7% p.a. and it is observed that rural market constitutes 60% of the soap sales. There are about 700 soap manufacturing companies in India. The Indian soap market's value is estimated to be around 60000 crores. In this huge market there are just a handful of key players who control the major chunk of the market share. These are HUL, Godrej, Wipro, P&G, Nirma and ITC. HUL enjoys over 54.3% of the market share with its brands such as Lux, Lifebuoy, Rexona, Breeze, Pears, Haman and Dove. Godrej Consumer Product Ltd.(GCPL) comes in second position with 11% of the market share with its brands such as Cinthol, Fairglow, Nikhar and Allcare. GCPL is among the biggest manufacturer of toilet soaps and it launched Fairglow, which was the first fairness soap in India. Wipro with its brands such as Santoor and Chandrika has a strong base in the soap market sector. Procter & Gamble (P&G) and Nirma are the other competitios with a strong presence in the market share. ITC is a fairly new entry into the soap market with the launch of its brand named Vivel. According to AC Nielson a global marketing research firm, Vivel soaps have witnessed a growth rate of 70-80% within a short period of time. ITC is now the fastest growing company in soap the soap market. a) Elaborate on the type of market structure of soaps along with their features. b) If you would be the Assistant Vice President of a company how would you increase the sales & market share of your brand?	**(3)** **(4)**
Q-3 A.	**Answer the following Questions:** Define the meaning of Anti trust policies? Explain in detail with examples: a) Price Fixing b) Monopolies	**(8)**
B.	Creative Destruction in an economy is unavoidable & its occurs in a economy on its own. Justify your answer with an example of any industry of your choice. **OR**	**(7)**
C.	Elaborate on the meaning of natural monopoly with the help of examples. Elaborate on its disadvantages in detail.	**(8)**
D.	Describe the Competition Commission of India in detail along with its functions.	**(7)**

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Q-4

A. **Objective Question**

State whether the following statements are true of false (6)

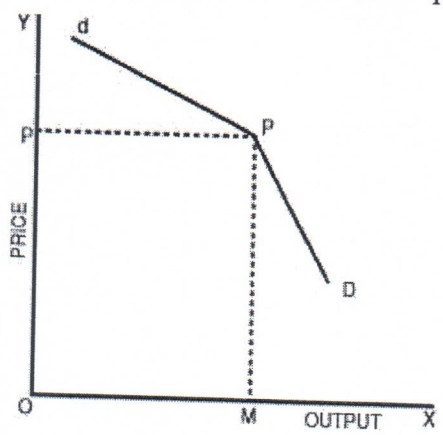
1. AR = Price
2. Market is a place where Producers and Sellers meet and bargain over a commodity for a price.
3. If a Firm sells 500 units of a product for Rs. 20 each, then its Total Revenue will be 500 units x Rs. 20 = Rs. 1000/-
4. Antitrust laws are statutes developed by Private Individuals to protect consumers from predatory business practices and ensure fair competition.
5. No two ICs will touch & intersect each other.
6. Budget Line is also called as Price Line.

B. **Match the following Questions:** (6)

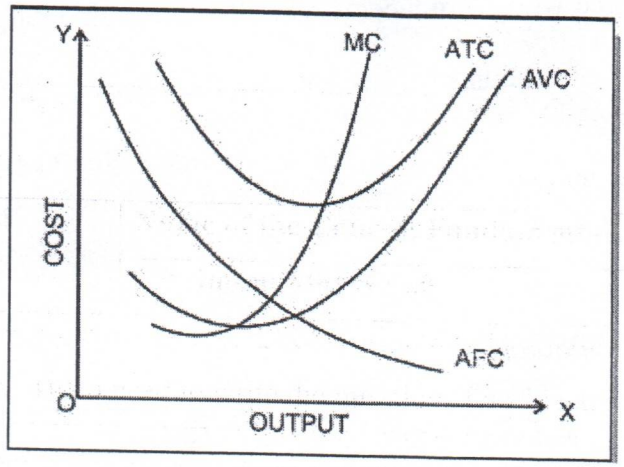
A	B
1. Perfect competition	a) Prof. J. R. Hicks
2. Demand	b) Originates from origin / Zero
3. AC Curve	c) German Statistician
4. TVC curve	d) TVC ÷ Q.
5. Engel Curve	e) Price Maker in the industry
6. AFC =	f) Many sellers in industry
	g) U shaped curve
	h) TFC ÷ Q
	i) Straight line parallel to Y axis
	j) Straight line parallel to X axis

C. **Select the correct answers from the alternatives based on the diagrams: (DO NOT DRAW DIAGRAMS)** (3)

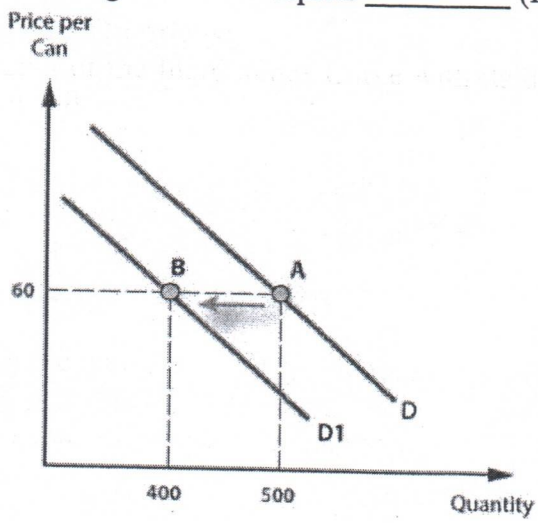
1. In the Diagram below, the lower portion is _____ elastic (more / less)



2. _____ curve is always a downward sloping curve & it never rises (AFC / AVC)



3. The diagram below depicts _____ (Increase / Decrease) in demand.



SOMAIYA VIDYAVIHAR UNIVERSITY

Semester (August 2022 to December 2022) Examination: End Semester Examination January 2023 (UG Programmes)		
Programme code: 03 **Programme:** F.Y. BAF (Hons)	**Class:** F.Y.BAF (Hons.)	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department:** Accounting and Finance	
Course Code: 131U03C105	**Name of the Course:** Corporate Finance	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Q. No.		Max. Marks
Q.1	a) The following information is available in respect of Rahul Ltd for the year ended 31st March 2022	15

Debentures (₹100 per debenture)	₹ 86,00,000
Preference Shares (₹100 per share)	₹ 34,00,000
Equity Shares (₹ 10 per share)	₹ 2,20,00,000

All these securities are traded in capital markets. Recent prices are Debentures @ ₹120, Preference Shares @ ₹130 and Equity Shares @ ₹29. Anticipated financial opportunities are: -

₹ 100 per Debenture redeemable at par with 20 years of maturity, 9% interest rate, 3% flotation cost, sale price ₹ 100.
₹ 100 Preference Shares redeemable at par with 15 years of maturity, 12% Dividend rate, 4% flotation cost, sale price ₹ 100
Equity Shares: - ₹ 5 per share flotation cost, sale price ₹ 30
The Dividend expected on the Equity Share at the end of year is ₹ 5 per share, the anticipated growth rate in dividends is 6% and the company has a practice of paying all its earnings in the form of dividends. The corporate tax rate is 25%.

You are required to calculate Weighted Average Cost of Capital by using
(i) Book Value Weights and
(ii) Market Value Weights.

OR

b) The Capital Structure of Mohan Ltd is as under: - **15**

- 7.5 % Debentures: - ₹ 22,00,000.
- 11% Preference Shares: - ₹ 18,00,000.
- Equity Shares (Face Value of ₹ 10 per share): ₹ 40,00,000.

Additional Information

₹ 100 per debenture redeemable at par has 4% flotation cost at the time of issue and 15 years of maturity.
The market price per debenture is ₹ 120.

	₹ 100 per preference share redeemable at par has 3% flotation cost at the time of issue and 10 years of maturity. The market price per preference share is ₹ 125. Equity Share has ₹ 5 flotation cost and market price per share of ₹30. The next year expected dividend is ₹ 8 per share with annual growth of 10%. The firm has a practice of paying all earnings in the form of dividends. Corporate Income Tax Rate is 30%. Required Calculate Weighted Average Cost of Capital using - (i) Book Value weights and (ii) Market Value Weights	
Q.2	a) A Company needs ₹31,25,000 for the construction of a new plant. The following three plans are feasible: *(I)* The Company may issue 3,12,500 equity shares at ₹10 per share. *(II)* The Company may issue 1,56,250 ordinary equity shares at `10 per share and 15,625 debentures of ₹100 denomination bearing 8% rate of interest. *(III)* The Company may issue 1,56,250 equity shares at ₹10 per share and 15,625 preference shares at ₹100 per share bearing at 8% rate of dividend. ***Required:*** If the Company's earnings before interest and taxes are ₹62,500, ₹1,25,000, ₹2,50,000, ₹3,75,000 and ₹6,25,000, what are the earnings per share under each of three financial plans? Assume a Corporate Income-tax rate of 40%. **OR** b) Discuss the functions of a Finance manager? **AND** c) Distinguish Between Financial Accounting and Financial management	**15** **7** **8**
Q.3	a) From the following information available for following 4 companies, **Calculate EPS, Operating Leverage, Financial Leverage and Combined Leverage**	**15**

Particulars	**P Ltd**	**Q Ltd**	**R Ltd**	**S Ltd**
Sales in units	40,000	50,000	60,000	80,000
Selling Price per unit	20	25	30	35
Variable Cost per unit	10	15	20	25
Fixed Cost (₹)	75,000	1,00,000	1,25,000	1,50,000
Interest (₹)	45,000	75,000	1,05,000	1,20,000

Tax Rate	30%	30%	30%	30%	
Number of Equity Shares	5,000	9,000	10,000	12,000	

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OR

b) An investor facing two mutually exclusive projects having life span of five years each provides you the following particulars **10**

Particulars	Proposal X	Proposal Y
Life of the project (years)	5	5
Initial Investment (₹)	1,60,000	48,000
Net Cash Flow (₹)		
Year 1	56,000	19,600
Year 2	56,000	19,600
Year 3	56,000	19,600
Year 4	56,000	19,600
Year 5	56,000	19,600

- Discounting Rate @ 12 %
- Scrap Value Rs.2000 for Proposal X and Rs.1000 for Proposal Y.
- Working Capital Rs.1000 for both the Proposal.

Compute and Rank the two proposals under – **NPV**

AND

c) Mohan deposited some amount in a bank for 7 ½ years at the rate of 6% p.a. simple interest. Mohan received Rs. 1,01,500 at the end of the term.Compute initial deposit of Mohan and also calculate simple interest if sum required to earn a monthly interest of RS. 1,200 at 1% per annum. **5**

Q.4 **(a) Multiple Choice Questions** **5**

1. The effective rate of interest corresponding to a nominal rate 3% p.a payable half yearly is_____
(a) 3.2% p.a
(b) 3.25% p.a
(c) 3.0225% p.a

2. Financial Management not deal with _____
a) Procurement of funds
b) Human Resource Management
c) Effective utilisation of funds

3. If DOL is 1.24 and DFL is 1.99, DCL would be_____
a) 2.14
b) 2.18
c) 2.47

4. The source of Finance which is cheaper due to its tax savings benefits_____
a) Equity shares

b) Debentures
c) Preferences

5. Operating leverage arises because of_____
a) Preference Share Capital
b) Fixed Interest cost
c) Variable cost

(b) State whether the following statements are true or false **10**

1. Operating leverage is multiplied by financial leverage to get combined leverage

2. Optimum capital structure is the level at which cost of capital is minimum and market price per share is maximum.

3. At the discount rate of Zero percent, the present value factor always equals one.

4. Cost of capital can be stated as the opportunity cost of an investment

5. Money has time value because you forgo something certain today for something uncertain tomorrow.

6. The market for new issues is called the Secondary market.

7. If current market price is not given, then assume face value as net proceeds

8. Financial system acts as a bridge between savers and investors.

9. Cost of capital is the maximum required rate of return expected by investors.

10. EBIT is divided by EBT to get financial leverage.

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 03 **Programme:** F.Y. BAF (Hons)	**Class:** F.Y.BAF (Hons.)	**Semester:** I
Name of the Constituent College: S K Somaiya College	**Name of the Department:** Accounting and Finance	
Course Code: 131U03C105	**Name of the Course:** Corporate Finance	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

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The Dividend expected on the Equity Share at the end of year is ₹ 5 per share, the anticipated growth rate in dividends is 6% and the company has a practice of paying all its earnings in the form of dividends. The corporate tax rate is 25%.

You are required to calculate Weighted Average Cost of Capital by using
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OR

b) An investor facing two mutually exclusive projects having life span of five years each provides you the following particulars — **10**

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 03 **Programme:** Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department :** Accounting and Finance	
Course Code: 131U03C303	**Name of the Course:** Professional Communication Skills	
Duration : 2 Hrs.	**Maximum Marks : 60**	
Instructions: 1) All questions are compulsory 2) Figures to the right indicates full marks		

Question No.		Max. Marks
Q.1	Attempt ANY ONE	**15**
A)	"Body language plays a key role in the success of any communication." List all the reasons that support the above statement.	10
B)	Explain the concept of Mass-line Communication.	5
	OR	
C)	"Technology is a boon to Business Communication." Justify the following statement with valid reasons.	10
D)	Illustrate with examples the relevance of Political Socialization.	5
Q.2	Attempt ANY ONE	**15**
A)	Discuss in detail all the Modern Technological methods and its relevance used in Business Communication.	10
B)	Explain the concept of Selective Retention with examples.	5
	OR	
C)	Enumerate all the factors which proves that Cultivation Theory is an important type of Mass Communication.	10
D)	Develop the Process of Communication diagram using an example.	5
Q.3	Attempt ANY ONE	**15**
A)	Explain in detail any two theories of Mass Communication with valid examples.	10
B)	Discuss the importance of Non-verbal Communication and list few examples.	5
	OR	

	C)	List at least five Functions of Communication in any organization and explain each with an example.	10
	D)	Analyze the importance of Instant Messaging in any organization.	5
Q.4	A)	State whether True or False:	**8**
	1)	Right pauses play a vital role in any form of oral communication.	
	2)	Written communication is not useful for conveying secrets.	
	3)	Public speaking is a type of Speech communication.	
	4)	Oral communication can only be in face-to-face communication method.	
	5)	Mao Zedong developed the concept of mass-line communication.	
	6)	Efficiency is an advantage of communication technology.	
	7)	Selective listening is when you focus your attention on some specific information.	
	8)	Media manipulation is a series of related techniques to create an image that favors a particular interest.	
	B)	Match the following:	**7**

Column A	Column B
1) Selective communication	1) Serves as proof
2) Intrapersonal communication	2) Study of space dynamics
3) Video conferencing	3) Conversation
4) Proxemics	4) News magazines
5) Press media	5) Not giving full attention
6) Written communication	6) talking to ourselves
7) Face-to-face communication	7) Connect anywhere anytime

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 03 **Programme:** Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department :** Accounting and Finance	
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5) Press media	5) Not giving full attention
6) Written communication	6) talking to ourselves
7) Face-to-face communication	7) Connect anywhere anytime

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Semester (August 2022 to December 2022) **Examination: End Semester Examination January 2023 (UG Programmes)**		
Programme code: 03 **Programme:** Bachelor of Commerce in Accounting and Finance (Honours)	**Class:** FY	**Semester:** I
Name of the Constituent College: S K Somaiya College (SKSC)	**Name of the Department :** Accounting and Finance	
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Instructions: 1) All questions are compulsory 2) Figures to the right indicates full marks		

Question No.		Max. Marks
Q.1	Attempt ANY ONE	**15**
A)	"Body language plays a key role in the success of any communication." List all the reasons that support the above statement.	10
B)	Explain the concept of Mass-line Communication.	5
	OR	
C)	"Technology is a boon to Business Communication." Justify the following statement with valid reasons.	10
D)	Illustrate with examples the relevance of Political Socialization.	5
Q.2	Attempt ANY ONE	**15**
A)	Discuss in detail all the Modern Technological methods and its relevance used in Business Communication.	10
B)	Explain the concept of Selective Retention with examples.	5
	OR	
C)	Enumerate all the factors which proves that Cultivation Theory is an important type of Mass Communication.	10
D)	Develop the Process of Communication diagram using an example.	5
Q.3	Attempt ANY ONE	**15**
A)	Explain in detail any two theories of Mass Communication with valid examples.	10
B)	Discuss the importance of Non-verbal Communication and list few examples.	5
	OR	

	C)	List at least five Functions of Communication in any organization and explain each with an example.	10
	D)	Analyze the importance of Instant Messaging in any organization.	5
Q.4	A)	State whether True or False:	**8**
	1)	Right pauses play a vital role in any form of oral communication.	
	2)	Written communication is not useful for conveying secrets.	
	3)	Public speaking is a type of Speech communication.	
	4)	Oral communication can only be in face-to-face communication method.	
	5)	Mao Zedong developed the concept of mass-line communication.	
	6)	Efficiency is an advantage of communication technology.	
	7)	Selective listening is when you focus your attention on some specific information.	
	8)	Media manipulation is a series of related techniques to create an image that favors a particular interest.	
	B)	Match the following:	**7**

Column A	Column B
1) Selective communication	1) Serves as proof
2) Intrapersonal communication	2) Study of space dynamics
3) Video conferencing	3) Conversation
4) Proxemics	4) News magazines
5) Press media	5) Not giving full attention
6) Written communication	6) talking to ourselves
7) Face-to-face communication	7) Connect anywhere anytime