

M.C.A. I Semester Supplementary Examinations, August 2015
Accounting and Financial Management

Max. Marks: 60

Time: 3 Hours

Answer *all five* units by choosing one question from each unit (5 x 12 = 60Marks)

UNIT-I

1. a) Define Accounting. Explain the functions of Accounting 8M
 b) What are the objectives and limitations of Accounting? 4M

OR

2. a) What is Trading account and Profit and Loss account? Give a specimen of Trading account and Profit and Loss account. 6M
 b) What is a Balance Sheet? Why is it prepared? Give a specimen of Balance Sheet 6M

UNIT-II

3. a) What is Profit Volume Ratio? How can it be improved? 8M
 b) Write a brief note on Margin of Safety. 4M

OR

4. Calculate the break-even point for the following data:
 The Fixed costs for the year are Rs.1,50,000; Variable cost per unit for the single product being produced is Rs.8. Estimated sales for the period are valued at Rs.2,00,000. Each unit sell at Rs.40. 12M

UNIT-III

5. Describe the various methods of classification of ratios and explain them. 12M

OR

6. a) How can the solvency position of a business be measured? 8M
 b) Explain the meaning and significance of Debt Equity Ratio and Proprietary Ratio. 4M

UNIT-IV

7. a) Define the term Financial Management. 5M
 b) What are the objectives of Financial Management? Discuss the objectives of Financial Management in detail. 7M

OR

8. Explain the nature and functions of Financial Management 12M

UNIT-V

9. What are the various methods of Capital Budgeting? 12M

OR

10. Jeevan company has to select one of the following two projects: 12M

	Project X(Rs.)	Project Y(Rs.)
Cost	22,000	20,000
Cash Flows:		
Year 1	12,000	2,000
Year 2	4,000	2,000
Year 3	2,000	4,000
Year 4	10,000	20,000

Using IRR method, suggest which project is preferable?

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Probability & Statistics

Max. Marks: 60

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UNIT-I

1. a) Define pairwise independent events
Prove that if E_1, E_2 and E_3 are random events in a sample space and if E_1, E_2, E_3 are pairwise independent and E_1 is independent of $(E_2 \cup E_3)$ then E_1, E_2 and E_3 are mutually independent 6M
- b) State and prove multiplication theorem on probability 6M

OR

2. The probability density function of a variate X is

X	0	1	2	3	4	5	6
p(x)	K	3K	5K	7K	9K	11K	13K

- (i) Find $P(X < 4), P(X \geq 5), P(3 < X \leq 6)$
- (ii) What will be the minimum value of k so that $P(X \leq 2) > 0.3$? 12M

UNIT-II

3. Show that mean and variance of a Binomial distribution is np and npq . 12M

OR

4. The marks obtained in mathematics by 1000 students is normally distributed with mean 78% and standard deviation 11%. Determine
- How many students got marks above 90%.
 - What was the highest mark obtained by the lowest 10% of the students
 - Within what limits did the middle of 90% of the students lie. 12M

UNIT-III

5. Samples of size 2 are taken from the population 3,6,9,15,27 with replacement. Find
- The mean of the population
 - The standard deviation of the population
 - Mean of the sampling distribution of means
 - The standard deviation of the sampling distribution of means. 12M

OR

6. a) Prove that for a random sample of size n, X_1, X_2, \dots, X_n taken from an infinite population $s^2 = \frac{1}{n} \sum_{i=1}^n (X_i - \bar{X})^2$ is not unbiased estimator of the parameter σ^2
but $\frac{1}{n-1} \sum_{i=1}^n (X_i - \bar{X})^2$ is unbiased. 6M
- b) What is the size of the smallest sample required to estimate an unknown proportion to within a maximum error of 0.06 with at least 95% confidence. 6M

UNIT-IV

7. a) A die is tossed 960 times and it falls with 5 upwards 184 times. Is the die unbiased at a level of significance of 0.01? 6M
- b) In a big city 325 men out of 600 men were found to be smokers. Does this information support the conclusion that the majority of men in this city are smokers? 6M

OR

8. Ten soldiers participated in a shooting competition in the first week. After intensive training they participated in the competition in the second week. Their scores before and after training are given as follows:

Scores before	67	24	57	55	63	54	56	68	33	43
Scores after	70	38	58	58	56	67	68	75	42	38

Do the data indicate that the soldiers have been benefited by the training? 12M

UNIT-V

9. A pair of dice are thrown 360 times and the frequency of each sum is indicated below:

Sum	2	3	4	5	6	7	8	9	10	11	12
Frequency	8	24	35	37	44	65	51	42	26	14	14

Would you say that the dice are fair on the basis of the chi-square test at 0.05 level of significance? 12M

OR

10. Explain ANOVA with One-Way classification. 12M

Code: 4P2C16

M.C.A. I Semester Supplementary Examinations, August 2015
Technical Communication & Computer Ethics

Max. Marks: 60

Time: 3 Hours

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UNIT-I

1. Define Communication and explain the importance of Technical Communication. 12M

OR

2. Differentiate hearing and Listening and discuss various types of listening. 12M

UNIT-II

3. Explain the role of technology in communications. 12M

OR

4. Discuss your strategy for effective oral presentation. 12M

UNIT-III

5. Define the purpose of Group Discussion. Explain different roles in group discussion. 12M

OR

6. Discuss different types of Interviews with special emphasis on job interviews. 12M

UNIT-IV

7. Define ethics and professional ethics. Mention the need of ethics for IT professions. 12M

OR

8. Explain how lack of ethics in the IT professionals leads to many problems in the society. 12M

UNIT-V

9. Define privacy and explain how to protect privacy. 12M

OR

10. Discuss the issues related to privacy and Anonymity in Information Technology 12M
