

INDIRA UNIVERSITY, PUNE

SET-1

SCHOOL OF PHARMACY- MBA(PHM)

Term End Examination (2025 Pattern) December – 2025 - Semester – I

Subject Name: Foundations of Business Analytics
Subject Code: GC06-106

Max. Marks: 25
Time: 1:30 Hrs.

Instructions

- Attempt all questions
- Draw suitable diagrams wherever necessary

CO #	Cognitive Ability	Course Outcome
CO1	Remember	Remember the types of analytics.
CO3	Apply	Utilize basic tools of business analytics, such as data exploration and visualization tools, to perform basic exploratory data analysis and data cleaning tasks
CO4	Analyze	Break down business problems into key questions and analyze data to derive meaningful insights for decision-making in various business domains like marketing, finance, HR, Operations

Q1.	Attempt the questions: (5 Marks) A local pharmacy offering free home delivery wants to improve monthly sales. They want clarity on: past performance, why customers stopped ordering, who may order next and what actions can increase sales. Describe four analytics types (descriptive, diagnostic, predictive, prescriptive) and write one question for each type that can help improve sales.	CO1
Q2.	Solve any 1 out of 2 Questions: (10 Marks) a) A medical shop shares monthly data for oximeters, masks, steamers and sanitizers. Issues found: missing quantities, dates recorded as '5-Mar-25' and '2025/03/25', inconsistent city spellings ('Chennai','chennai') and one inflated order of 52 oximeters. Explain what Exploratory Data Analysis (EDA) is and describe any three EDA cleaning steps directly linked to these issues such as handling missing values, fixing date formats, standardizing category names and validating outliers.	CO3
	b) A wellness store's dataset for protein powders and supplements contains: blank bill amounts, mixed date styles, inconsistent product names ('ProtienPowder', 'proteinpowder') and suspicious order of 38 units.	CO3

	Explain EDA and list three important steps you would use to clean and standardize this dataset.	
Q3.	Solve any 1 out of 2 Questions: (10 Marks) a) Vitamin C data: Units= {300,320,340,360,350,370}; Revenue= {90,000,95,000,100,000,108,000,105000,112,000} Using max 2 charts, justify chart choice, dual axis need, wrong charts and give an insight.	CO4
	b) ORS Sales: Units= {500,530,550,600,570,620} Revenue = {70,000,75000,78,000,85,000,82,000,90,000} Select charts, justify choices, dual-axis decision, wrong charts and write insight	CO4
