PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BCom(CS) / BCom DEGREE EXAMINATION MAY 2025
(Second Semester)

Common to Branch -**CORPORATE SECRETRYSHIP/ COMMERCE/ COMMERCE (COMPUTER APPLICATIONS)/ COMMERCE (e-COMMERCE)/ COMMERCE (ACCOUNTING & FINANCE)/ COMMERCE (BANKING & INSURANCE)/ STATISTICS**

Time: Three Hours   Maximum: 75 Marks

SECTION-A (10 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What is primary data? a) Data collected from existing records b) Data gathered directly from respondents c) Data from secondary sources d) Processed data from experiments	K1	CO1
	2	Which diagram is best for showing proportions of categories? a) Bar diagram b) Histogram c) Pie chart d) Line graph	K2	
2	3	What is the median? a) The most frequently occurring value b) The middle value when data is arranged in order c) The sum of all values divided by the number of values d) The range of the data	K1	CO2
	4	If the mean, median, and mode of a data set are equal, the data is: a)Positively skewed b) Negatively skewed c) Symmetrical or normally distributed d) Bimodal	K2	
3	5	Which method is commonly used to visually represent correlation between two variables? a) Histogram b) Pie chart c) Frequency polygon d) Scatter diagram	K1	CO3
	6	The regression line represents: a) The relationship between two variables b) The mean of the dataset c) The mode of the dataset d) None of the above	K2	
4	7	What is an index number? a) A number that measures changes in a variable over time b) A measure of central tendency c) A form of skewness d) A type of frequency distribution	K1	CO4
	8	The Consumer Price Index (CPI) is an example of: a) Weighted mean index b) Fixed base index number c) Chain base index number d) Cost of living index number	K2	
5	9	What is the sum of probabilities for all possible outcomes of an event? a)1 b) 0.5 c) 0 d) Depends on the event	K1	CO5
	10	The binomial distribution is used to model: a) Continuous outcomes b) The number of successes in a fixed number of trials c) The time between events in a sequence d) Normally distributed data	K2	

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks   (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Discuss on the statistical investigation and its need.	K4	CO1
		(OR)		
	11.b.	Explain the types of data collection with examples.		
2	12.a.	Elucidate on any two measures of central tendency with its merits and demerits.	K4	CO2
		(OR)		
	12.b.	Compute the standard deviation and variance for the following data: <table><tr><td>Expenditure</td><td>50-100</td><td>100-150</td><td>150-200</td><td>200-250</td><td>250-300</td></tr><tr><td>No. of families</td><td>20</td><td>10</td><td>30</td><td>5</td><td>10</td></tr></table>		
3	13.a.	What is Correlation give its importance in business?	K5	CO3
		(OR)		
	13.b.	What is regression taxes and give its properties?		
4	14.a.	Following are the data related with the prices and quantity consumed for 2006 and 2007. <table><tr><td></td><td>2006</td><td></td><td>2007</td><td></td></tr><tr><td>Commodity</td><td>Price (Rs)</td><td>Quantity(Kg)</td><td>Price(Rs)</td><td>Quantity(Kg)</td></tr><tr><td>Rice</td><td>25</td><td>10</td><td>27</td><td>15</td></tr><tr><td>Wheat</td><td>20</td><td>5</td><td>22</td><td>7</td></tr><tr><td>Sugar</td><td>22</td><td>4</td><td>24</td><td>6</td></tr><tr><td>Tea</td><td>15</td><td>2</td><td>17</td><td>5</td></tr></table>Construct price index numbers by i) Laspeyre's ii) Paasche's iii) Bowley-Doorfish iv) Fisher's	K6	CO4
		(OR)		
	14.b.	Discuss the cost of living index numbers.		
5	15.a.	What is probability & give the importance of Mathematical properties?	K5	CO5
		(OR)		
	15.b.	Describe Normal distribution with its properties.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks   (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Discuss the various diagrammatic representations of data.	K4	CO1
2	17	Compute the Pearson's coefficient of skewness from the following data: <table><tr><td>X</td><td>100-110</td><td>110-120</td><td>120-130</td><td>130-140</td><td>140-150</td><td>150-160</td><td>160-170</td><td>170-180</td></tr><tr><td>Frequency</td><td>6</td><td>18</td><td>36</td><td>54</td><td>66</td><td>52</td><td>31</td><td>7</td></tr></table>	K4	CO2
3	18	Construct the regression equation 'x' on 'y' and 'y' on 'x' from the following data: <table><tr><td>x</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td><td>40</td><td>45</td></tr><tr><td>Y</td><td>8</td><td>14</td><td>20</td><td>26</td><td>32</td><td>38</td><td>44</td></tr></table>	K5	CO3
4	19	Elucidate the definitions of Index numbers with its uses.	K6	CO4
5	20	What is binomial distribution and give tis importance probability?	K5	CO5

Z-Z-Z-   END