Roll No: …….

Hi-Tech Institute of Engineering & Technology

DEPARTMENT OF MANAGEMENT

Course: BBA

(SEM-2nd) EVEN SEMESTER MODEL PAPER 2022-23

Subject Code: BBA-201 **Subject Name: Quantitative Techniques for Business**

Faculty Name: Mr. Vinay Kumar Agarwal

Time: Three Hours ***Total Marks: 75***

Note: 1. Attempt all Sections. If require any missing data; then choose suitably.

SECTION-A

Attempt all question in brief. 3x 5 = 15

Q.No	Question	Marks
a.	Define Probability?	3
b.	Give the meaning and definition of classification?	3
c.	Define the term of Histogram and Frequency Polygon?	3
d.	Calculate the range and its coefficient from the following data: - 20, 8, 0, -30, -5, 4	3
e.	Explain Various Mathematical properties of standard deviation?	3

SECTION-B

Attempt any TWO of the following: 2 x 7.5 =15

Q.No	Question	Marks
a.	If the arithmetic mean of the following frequency distribution is 39.25, find the following missing Terms?	7.5
b.	Discuss the Merits and Demerits of Karl Pearson's Coefficient of Correlation?	7.5
c.	What are the uses of coefficient of variation in Statistical Analysis? Discuss.	7.5

Daily Wages	25	30	35	50	60	75
No. of Labour	10	?	13	8	5	4

SECTION-C

Attempt any Three parts of the following: 3x15 = 45

<table>
<tr><th>Q.No</th><th>Question</th><th>Marks</th></tr>
<tr><td>1.</td><td>What is an Index Number? Explain the Terms Price Relative, Quantity Relative and Value Relative. Discuss in brief the uses of an Index Number?</td><td>15</td></tr>
<tr><td>2</td><td>Calculate Karl Person’s Coefficient of Correlation from the following data and interpret it:
<table>
<tr><td>Age of Husband</td><td>25</td><td>26</td><td>27</td><td>28</td><td>30</td><td>32</td><td>35</td></tr>
<tr><td>Age of Wife</td><td>20</td><td>22</td><td>24</td><td>25</td><td>26</td><td>27</td><td>31</td></tr>
</table></td><td>10</td></tr>
<tr><td>3.</td><td>Define Probability and explain the importance of the concept in statistics?</td><td></td></tr>
<tr><td>4.</td><td>Define Classification and explain in brief the various types of classifications?</td><td></td></tr>
<tr><td>5.</td><td>From the Following data obtain the two Regression Equations:
<table>
<tr><th>Sales</th><th>Purchases</th></tr>
<tr><td>91</td><td>71</td></tr>
<tr><td>97</td><td>75</td></tr>
<tr><td>108</td><td>69</td></tr>
<tr><td>121</td><td>97</td></tr>
<tr><td>67</td><td>70</td></tr>
<tr><td>124</td><td>91</td></tr>
<tr><td>51</td><td>39</td></tr>
<tr><td>73</td><td>61</td></tr>
<tr><td>111</td><td>80</td></tr>
<tr><td>57</td><td>47</td></tr>
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