ALLAMA IQBAL OPEN UNIVERSITY
Semester Terminal Exam Autumn 2020

Program /level:	BA/B.Com/Associate Degree Program	Maximum Marks	100
Title /Course Code	**Business Statistics (1430)**	Pass marks	40/50

Instructions for Exams:

1. Attempt All Questions.
2. Write answers in your own words and avoid copying from an internet source or any book.
3. Be precise, avoid unnecessary details, answer to each question must be between 600-800 words.
4. Students can attempt paper on any white page. Mention Roll No. , Name & Signature on every page. Attach undertaking with each course code.
5. Students are advised to post their answer sheets to their tutor well in time so the same must reach on or before **20-06-2021.**
6. Submissions after due date & time will not be entertained.

<table>
<tr><th>Q. No.</th><th>Questions</th><th>Marks</th></tr>
<tr><td>Q.No.1</td><td>(a) What do you understand by the term Statistics? Give its chief characteristics.
(b) Describe briefly the different types of diagrams generally used for presenting statistical data. State merits and demerits of any three of them.
(c) What criteria do you apply to judge the merits of an average? Discuss the merits and demerits of the different averages in common use with special reference to these criteria.</td><td>(11+11+11) 33</td></tr>
<tr><td>Q.No.2</td><td>(a) What do you mean by absolute and relative measures of dispersion? State the uses of the coefficient of variation in statistical analysis.
(b) Explain the meaning of the consumer price index number. Also state its uses.
(c) Define term correlation. Compute Correlation coefficient between X and Y:
<table>
<tr><td>X</td><td>2</td><td>4</td><td>5</td><td>6</td><td>8</td><td>11</td></tr>
<tr><td>Y</td><td>18</td><td>12</td><td>0</td><td>8</td><td>7</td><td>5</td></tr>
</table></td><td>(10+12+12) 34</td></tr>
<tr><td>Q.No.3</td><td>(a) What is the difference between the statistical model and the mathematical model? Explain it by giving examples?
(b) Describe the general procedure for testing a hypothesis about a population parameter.
(c) A sample of size 40 from a non-normal population yielded the sample mean $\bar{x} = 71$ and $S^2 = 200$ .Test $H_0 : \mu = 72$ against $H_1 : \mu \neq 72$ at $\alpha =$ 1%</td><td>(11+11+11) 33</td></tr>
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