# BA DEGREE (CBCS) EXAMINATION, MAY 2019 

Second Semester
B.A Corporate Economics Model III

Core Course - EC2CRT05-ELEMENTARY STATISTICS FOR ECONOMICS-II
2017 ADMISSION ONWARDS
8DCF5AC0
Maximum Marks: 80

## Part A

Answer any ten questions.
Each question carries 2 marks

1. Define SRSWR
2. Define sample design
3. Define sampling errors
4. Define partial correlation
5. What would be your interpretation if the correlation coefficient $r$ is equal to 1) 0,2$)-1$, 3) 1 ,4) 0.2
6. Define linear regression
7. Define method of least squares
8. Define index numbers
9. What is paasches method
10. What is value index number
11. What are the uses of time series
12. What is secular trend

## Part B

Answer any six questions.
Each question carries 5 marks.
13. What are the criteria for choosing census method and sample survey method
14. What are the merits of samplig
15. What are the essentials of good questionnaire
16. Explain scatter diagram
17. What are the merits and demerits of rank correlation coefficient?
18. What are the properties of regression analysis?
19. CALCULATE FISHERS INDEX NUMBER and examine whether it satisfies 1) time reversal test 2) factor revresal test

| items | 2009 <br> price | 2009 <br> quantity | 2010 <br> price | 2010 <br> quantity |
| :--- | :--- | :--- | :--- | :--- |
| A | 6 | 50 | 10 | 56 |
| B | 2 | 100 | 2 | 120 |
| C | 4 | 60 | 6 | 60 |
| D | 10 | 30 | 12 | 24 |

20. F Fit a straight line trend to the following series by method of least squares

| year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| production | 56 | 55 | 51 | 47 | 42 | 38 | 35 | 32 |

21. What are the uses of secular trend?

## Part C

Answer any two questions
Each question carries 15 marks.
22. Find karl pearsons coefficient of correlation

| X | 78 | 89 | 96 | 69 | 59 | 79 | 68 | 61 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| y | 125 | 137 | 156 | 112 | 107 | 136 | 123 | 108 |

23. From the following data of the ages of husband and the age of wife ,form 2 regression equations and calculate husbands age

| Husbands age | 36 | 23 | 27 | 28 | 28 | 29 | 30 | 31 | 33 | 35 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wife's age | 29 | 18 | 20 | 22 | 27 | 21 | 29 | 27 | 29 | 28 |

24. From the following data construct index number using unweighted index number?

| commodity | A | B | C | D | E |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Price in <br> 1998 | 50 | 40 | 80 | 110 | 20 |
| Price in <br> 2006 | 70 | 60 | 90 | 120 | 20 |

25. Trend equation is given by $3 \times 2+2 x+4$ with 2000 as origin.shift the origin to 2002 and obtain the equation?
