STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600086
(For candidates admitted from the academic year 2015 – 2016)

SUBJECT CODE: 15EC/ME/RM55

B.A. DEGREE EXAMINATION, APRIL 2021

COURSE: MAJOR ELECTVE **MAX. MARKS: 25**
PAPER: RESEARCH METHODS AND ECONOMIC ANALYSIS (PRACTICAL)
TIME: 45 MINUTES

SECTION – A **(1 x 5 = 5)**

ANSWER ANY ONE OUT OF TWO QUESTIONS.

1. Represent the following data using a Pie Chart

S.NO	ITEM	Units Sold
1	Apple	420
2	Custard Apple	98
3	Orange	318
4	Grapes	368
5	Mango	403
6	Pomegranate	257
7	Watermelon	88
8	Strawberry	195

2. The growth of Fish production for the period 1998-99 to 2006-07 is given in Lakh tons below. Represent the same using a Bar Graph.

Year	MARINE	INLAND	TOTAL
1989-99	26.96	26.02	52.98
1999-00	28.52	28.23	56.75
2000-01	28.11	28.45	56.56
2001-02	28.3	31.2	59.56
2002-03	29.9	32.1	62
2003-04	29.41	34.58	63.99
2004-05	27.78	35.26	63.04
2005-06	28.16	37.55	65.71
2006-07	30.24	38.45	68.69

SECTION – B (2 x 10 = 20)

ANSWER ANY TWO OUT OF THREE QUESTIONS.

3. Following is the data of U.S. economy for the years mentioned. Run a Regression Test for the following data, interpret the R Square value and also construct appropriate regression equation for the same.

Year	Real Gross Product (mln USD) (Y)	Labour days (mln Days) (X2)	Real Capital Input (mln USD) (X3)
1958	16607.7	275.5	17803.7
1959	17511.3	274.4	18096.8
1960	20171.2	269.7	18271.8
1961	20932.9	267	19167.3
1962	20406	267.8	19647.6
1963	20831.6	275	20803.5
1964	24806.3	283	22076.6
1965	26465.8	300.7	23445.2
1966	27403	307.5	24939
1967	28628.7	303.7	26713.7

4. Run appropriate Dummy variable test for the following data by taking D1=0 for Male, D1=1 for female & D2=1 for Rural and D2=0 for Urban. Estimate the appropriate regression equation for the same.

Monthly Wages	Region (R= rural, U=urban)	Gender (Female, male)
19583	R	F
20263	R	F
20325	R	M
26800	U	M
29470	U	F
24624	R	F
27186	U	M
33990	U	M
23382	R	M
20627	R	F
22482	R	F
20989	R	F
27224	U	F
25892	U	M
22644	R	M

5. A super market that has a chain of stores is concerned about its service quality reputation perceived by its customers. The Table below shows the perceived service quality with regards to politeness of the staff. The number in each cell of the table is percentage of people who have said that the staffs are polite. Perform appropriate statistical test and draw your inferences about the population means of the politeness corresponding to the days, as well as the stores.

DAY/STORE	A	B	C	D	E
Monday	79	81	74	77	66
Tuesday	78	86	89	97	86
Wednesday	81	87	84	94	82
Thursday	80	83	81	88	83
Friday	70	74	77	89	68

❄❄❄❄❄