STELLA MARIS COLLEGE, (AUTONOMOUS) CHENNAI-86 (For candidates admitted during the academic year 2019-20 and thereafter)

COURSE CODE: 19CM/PE/BD15

M.COM DEGREE EXAMINATION – NOVEMBER 2022 COMMERCE THIRD SEMESTER

COURSE TITLE : BUSINESS DATA ANALYSIS - THEORY

TIME : 1 HOUR MAX. MARKS: 40

Answer any Ten of the following:

 $(10 \times 4 = 40)$

- 1. Explain the different data types.
- 2. What is coding? How is it done?
- 3. Elucidate the techniques used in data analysis.
- 4. Describe the role of computers in data analysis.
- 5. Write a note on the use of spreadsheets in financial statement analysis.
- 6. Explain the steps involved in creating a chart in Excel.
- 7. Write the excel functions (with syntax) to calculate the present value and future value of money.
- 8. Expand SPSS. State its uses in business research.
- 9. What are the steps involved in testing of hypothesis?
- 10. In SPSS, what are the types of variables that could be entered?
- 11. Write a short note on the data files and output files in SPSS.
- 12. List the steps to be followed to perform the chi-square test in SPSS.

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M.COM DEGREE EXAMINATION – NOVEMBER 2022 COMMERCE

THIRD SEMESTER

COURSE TITLE : BUSINESS DATA ANALYSIS - PRACTICAL

TIME : 2 HOURS MAX. MARKS: 60

Answer any Six of the following:

 $(6 \times 10 = 60)$

1. Using the following data, prepare a table showing the distribution of wages among 50 workers. Also present the data in a chart using Excel.

130	125	121	100	96	128	76	78	103	100
110	62	151	142	71	74	66	142	136	85
145	110	107	80	76	144	98	101	122	123
150	118	95	60	132	134	114	116	124	65
130	90	96	85	81	105	150	61	101	78

2. (a) The production of cement by a firm in years 1 to 6 is given below:

Year 1 2 3 4 5 6 Production (tons) 400 550 575 616 723 848

Calculate 3 yearly moving averages. (Use Excel)

(b) Prepare a Comparative Statement from the following information: (Use Excel)

Balance Sheet of XYZ Ltd.

Liabilities	2017 Rs.	2018 Rs.	Assets	2017 Rs.	2018 Rs.
Share					
Capital	18000	19000	Cash	6000	4000
Creditors	6400	7600	Debtors	15500	19000
P & L a/c	2900	3500	Buildings	5000	6200
			Patent	800	900
	27300	30100		27300	30100

3. Balance Sheets of M/s. Black and White as on Jan 1, 2019 and Dec 31, 2019 were as follows:

Balance Sheet

(Rupees in lakhs)

Liabilities	1-1-2019	31-12-2019	Assets	1-1-2019	31-12-2019
Creditors	40000	44000	Cash	10000	7000
White's Loan	25000	-	Debtors	30000	50000
Loan from Bank	40000	50000	Stock	35000	25000
Capital	125000	153000	Machinery	80000	55000
			Land	40000	50000
			Buildings	35000	60000
	230000	247000	_	230000	247000

During the year machine costing Rs. 10,000 (accumulated depreciation Rs. 3,000) was sold for Rs. 5,000. The provision for depreciation against machinery as on Jan 1, 2019 was Rs. 25,000 and Dec 31, 2019 Rs. 40,000. Net profit for the year 2019 amounted to Rs. 45,000. Prepare Cash Flow Statement using Excel.

4. A Steel Manufacturing company requires you to calculate and present the budget for the next year from the following information using Excel:

Sales: Rs. 2,00,000

Direct materials cost: 50% of sales

Direct wages: 10 workers @ Rs. 125 per month

Factory overheads: Indirect labour:

Supervisor: Rs. 300 per month Factory Manager: Rs. 400 per month

Stores and spares: 2% of sales

Depreciation on Machinery: Rs. 10,000

Light and power: Rs. 4,000

Repairs and maintenance: Rs. 5,000 Other Sundries: 10% on direct wages Administration expenses: Rs. 12,000 p.a.

5. From the following data, obtain the two regression equations and calculate the coefficient of correlation: (Use SPSS)

Sales	91	97	108	121	67	124	51	73	111	57
Purchases	71	75	69	97	70	91	39	61	80	47

6. Two researchers adopted different sampling techniques while investigating the same group of students to find the number of students falling in different intelligence levels. The results are as follows:

Number of Students in each level

Researcher	Below		Above	Above			
	Average	Average	Average	Genius	Total		
X	86	60	44	10	200		
Y	40	33	25	2	100		

Would you say that the sampling techniques adopted by the two researchers are significantly different? (Use SPSS)

7. The following data represent the number of units of a commodity produced by 3 different workers using 3 different types of machines:

Machines	A	В	C
Workers			
X	16	64	40
Y	56	72	56
Z	12	56	28

Test (i) whether the mean productivity is the same for the different machine types, and (ii) whether the three workers differ with respect to mean productivity. (Use SPSS)
