



- Notes : 1. All questions are compulsory.
2. All questions carry equal marks.

1. A) Explain the concept of Statistical Decision Theory. Determine characteristics and classification Decisions Environment. **16**

OR

- B) Calculate Karl Person's coefficient of correlation and it's Probable Error. **16**

	Age of Husband (Y)					
Age of Wife (x)	20-30	30-40	40-50	50-60	60-70	Total
15-25	5	9	3	-	-	17
25-35	-	10	25	2	-	37
35-45	-	1	12	2	-	15
45-55	-	-	4	16	5	26
55-65	-	-	-	4	2	6
Total	5	20	44	24	7	100

2. A) Following table gives the wheat yields in bushels per Acer of 4 varieties grown in 5 blocks. Test whether the mean yield of these varieties significantly. **16**

Table values of $F = 3.24$.

	Varieties			
Block	A	B	C	D
1	16	14	19	20
2	20	23	11	27
3	26	24	23	19
4	12	29	17	21
5	21	25	20	13

(Given for $v_1 = 3$ and $v_2 = 16$)

OR

- B) Ticket are numbered from 1 to 100. They are well shuffled and a ticket is drawn at random. What is the Probability that the drawn ticket has. **16**

- a) An odd number
b) A number 5 or multiple of 5
c) A number which is square
d) A number which is greater than 75.

3. A) Following are the Marks obtained by 492 Candidates in a certain examination. **16**

Not more than 40 Marks 210 Candidate
Not more than 45 Marks 253 Candidate
Not more than 50 Marks 307 Candidate
Not more than 55 Marks 381 Candidate
Not more than 60 Marks 413 Candidate

Not more than 65 Marks 492 Candidate

Find out the No. of Candidates.

- i) Who secured More than 48 but not More than 50 Marks.
- ii) Less than 48 but not less than 45 Marks.

OR

- B) Following table gives the normal weight of a babies during the first twelve months of life. **16**

Age in Months	0	2	5	8	10	12
Weight in (lbs)	7½	10¼	15	16	18	21

Find the weight of a 7 months old baby.

4. A) A survey was conducted in respect of martial Status and Success in examination out of 2000 person who appeared for an Examination 80% of them were Boys and rest were Girl. Among 300 Married Boys 140 were Successful. 1100 Boys were Successful among Unmarried Boys. In respect of 100 Married Girls 40 were Successful 200 Unmarried Girls were Successful. **16**

Construct two Separate Nine-Square Table and find out Coefficient of association to discuss the association between Martial Status and passing to Examination.

OR

- B) Two Laboratories carry out independent estimates of the fat content in Ice-cream made by a certain firm A, Sample is taken from each batch and separated halved sent to the two laboratories. They obtained following results. **16**

Percentage of fat content in Ice cream

Batch No.=	1	2	3	4	5	6	7	8	9	10
Lab A =	7	8	7	3	8	6	9	4	7	8
Lab B =	9	8	8	4	7	7	9	6	6	6

Assuming that the two laboratories carry out the same test in the reliable T. V. of "t" at 9 degree of freedom is 2.26.

5. Write short answers.

- a) Explain the types of Decision Making Environment. **4**
- b) Utility of Statistical Quality Control in Industry. **4**
- c) Use of Time Series. **4**
- d) Sampling **4**

M.Com. - II (New CBCS Pattern) Semester-III
PCC3C01 - Statistical Techniques

Time : Three Hours

Max. Marks : 80

- सुचना :- 1. सर्व प्रश्न अनिवार्य आहेत.
2. सर्व प्रश्नांना समान गुण आहेत.

- | | | |
|----|--|----|
| 1. | सांख्यिकीय निर्णय सिद्धांताची संकल्पना स्पष्ट करा. निर्णयाचे मुलभुत लक्षणे तसेच निर्णय वातावरणाचे वर्गीकरण स्पष्ट करा. | 16 |
| | किंवा | |
| | इंग्रजी माध्यमाप्रमाणे | 16 |
| 2. | इंग्रजी माध्यमाप्रमाणे | 16 |
| | किंवा | |
| | इंग्रजी माध्यमाप्रमाणे | 16 |
| 3. | इंग्रजी माध्यमाप्रमाणे | 16 |
| | किंवा | |
| | इंग्रजी माध्यमाप्रमाणे | 16 |
| 4. | इंग्रजी माध्यमाप्रमाणे | 16 |
| | किंवा | |
| | इंग्रजी माध्यमाप्रमाणे | 16 |
| 5. | थोडक्यात उत्तरे लिहा. | |
| | अ) निर्णय वातावरणाच्या प्रकाराचे विस्तृत विवेचन करा. | 4 |
| | ब) उद्योगामध्ये सांख्यिकीय गुणवत्ता नियंत्रणाची उपयोगिता | 4 |
| | क) कालमालेची उपयोगिता | 4 |
| | ड) नमुना निवड | 4 |

M.Com. - II (New CBCS Pattern) Semester-III
PCC3C01 - Statistical Techniques

Time : Three Hours

Max. Marks : 80

- सुचनाएँ :- 1. सभी प्रश्न अनिवार्य हैं।
2. सभी प्रश्नों को समान अंक है।

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|----|--|----|
| 1. | सांख्यिकीय निर्णय सिद्धांत की संकल्पना स्पष्ट किजिए। निर्णयोके मुलभुत विशेषताएं एवंम वातावरण के वर्गीकरण स्पष्ट किजीए। | 16 |
| | अथवा | |
| | अंग्रेजी माध्यम के अनुसार। | 16 |
| 2. | अंग्रेजी माध्यम के अनुसार। | 16 |
| | अथवा | |
| | अंग्रेजी माध्यम के अनुसार। | 16 |
| 3. | अंग्रेजी माध्यम के अनुसार। | 16 |
| | अथवा | |
| | अंग्रेजी माध्यम के अनुसार। | 16 |
| 4. | अंग्रेजी माध्यम के अनुसार। | 16 |
| | अथवा | |
| | अंग्रेजी माध्यम के अनुसार। | 16 |
| 5. | संक्षिप्त में उत्तर लिखिए। | |
| | अ) निर्णय वातावरण के प्रकारोंका विस्तृत विवेचन किजिए। | 4 |
| | ब) उद्योगमध्ये सांख्यिकीय गुणवत्ता नियंत्रण की उपयोगिता। | 4 |
| | क) कालमालाकी उपयोगिता। | 4 |
| | ड) प्रतिचयन। | 4 |
