UNIVERSITY INSTITUTE OF APPLIED MANAGEMENT SCIENCES
PANJAB UNIVERSITY, CHANDIGARH

End Semester Examinations- MBA (Sectoral Management) –1st Sem-March, 2021

Important Instructions:

1) Please download the Question Paper immediately on receipt of the same.

2) Mark your attendance online After Receiving the Question Paper

3) Please put Roll No, Subject Code, Page No. and Signatures on all pages of the answer sheet

4) Maximum Number of pages in Answer Sheet are 24.

5) Timing of Examinations are 10.00 a.m. to 1.00 p.m.

6) Attempt Questions as per instruction in the question paper. ALL Questions carry Equal Marks

7) Preserve the original Answer Sheet. It may be required to be submitted at a later date.

8) The candidate will be required to submit a single PDF file of his/her answer sheet from their registered email address to the NEW GOOGLE FORM (22.3.2021) link https://forms.gle/X4BJDmk34V112ebd6 within 90 minutes from completion of examination i.e. till 2.30 p.m. on the day of examination.

UNIVERSITY INSTITUTE OF APPLIED MANAGEMENT SCIENCES
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END TERM & REAPPEAR EXAMINATION, MBA (SECTORAL) 1ˢᵗSEMESTER, MARCH 2021

PAPER TITLE: BUSINESS STATISTICS
PAPER CODE: MBA-1004

MAX. MARKS: 50   **TIME: 3 HOURS**

Note: Attempt five questions in all, Selecting at least one question from each unit/section. All questions carry equal marks.

SECTION-A

1. Calculate the mode from the following data:

X	0-5	5-10	10-20	20-25	25-30	30-40	40-44	44-50	50-70
f	4	8	10	9	13	30	6	9	12

2. The scores of two batsmen A and B in ten innings during a certain match are:

A	32	28	47	63	71	39	10	60	96	14
B	19	31	48	53	67	90	10	62	40	80

   Find out who is a better scorer and who is more consistent batsman?

3. What are Index Numbers? Discuss the various tests of adequacy of index number formulae.

SECTION-B

4. (a) A card is drawn out of a pack of cards. Find the probability that the card is an ace, a king, a queen or a card of clubs.
   (b) A bag contains 6 black and 9 white balls. A person draws out 2 balls. If on every black ball, he gets Rs. 20 and on every white ball Rs. 10, find out his expectation.

5. What is Binomial Distribution? What are the assumptions to apply Binomial Distribution? State its properties.

SECTION-C

6. What is statistical hypothesis? Discuss the procedure of testing a statistical hypothesis.

7. An insurance company has introduced a new scheme for employees. Independent random samples of 100 males and 120 females when examined to know their views about the new scheme yielded the following results:

	For	Against	Indifferent	Total
Male	25	40	35	100
Female	35	55	30	120
Total	60	95	65	220

   Test the hypothesis at $\alpha=.01$ that the two samples have come from homogenous populations.

SECTION-D

8. Calculate coefficient of correlation by means of ranking method from the following data:

X	40	50	60	60	80	50	70	60
Y	80	120	160	170	130	200	210	130

9. What are regression coefficients? Explain the properties of regression coefficients.

10. Fit a straight line trend by the method of Least Square to the following data and estimate the profits for the year 1970.

Year	1961	1962	1963	1964	1965	1966	1967	1968
Profits (Rs. crore)	80	90	92	83	94	99	92	104