

IMBA in FM/HRPA/BM (Rep.) Sem.-3 Examination

HR/BEM/FM_BBA_CC-202

FOS-II

Time : 2-30 Hours]

November-2025

[Max. Marks : 70

Q.1 Define Population and Sample. Explain the differences between Population Inquiry and Sample Inquiry. Discuss the characteristics of a good sample. (14)

Q.2 A machine produces bulbs with an average life of 1,200 hours and standard deviation of 100 hours. A random sample of 64 bulbs gave an average life of 1,170 hours. At 5% level of significance, test whether the machine needs adjustment. (Use large sample test for mean.) (14)

Or

Q.2 In a survey of 500 people, 280 were found to prefer Brand A. In another survey of 400 people, 170 preferred Brand A. Test whether there is a significant difference between the proportions of people preferring Brand A in the two surveys at 5% level of significance. (14)

Q.3 Set up an analysis of variance table from the following information relating to three subjects testing to judge the effectiveness of creativity for four students: (14)

Students	Subjects		
	Math	Sci	Eng
A	5	4	3
B	7	5	4
C	4	5	5
D	8	6	2

{F(2,6) = 5.14} {F(3,6)=4.76}

Or

Q.3 What are non-parametric tests? Explain the uses, advantages and disadvantages of non-parametric tests. (14)

Q.4 What is a Normal Distribution? Discuss its properties and applications in business and economics. (14)

Or

Q.4 Explain the assumptions and significance of z-test and t-test. (14)

Q.5 What is sampling? Explain the difference between probability and non- probability sampling. (14)

