Sanjay Ghodawat University, Kolhapur

2020-21

Established as State Private University under Govt. of Maharashtra. Act No XL, 2017

EXM/P/09/00

Year and Program: 2021 B.Com	**School of Commerce and Management**	**Department: Commerce**
Course Code: CBC104R02	**Course Title: Business Mathematics & Statistics**	**Semester :II**
Day and Date:	**End Semester Examination**	**Time:2 Hrs. Max Marks:50**

Instructions: 1) All Questions are compulsory.

		Marks	Bloom's Level	CO
Q.1	**Answer/Solve the following (any Two)**			
a)	i)Mother divided the money among Ron, Sam and Maria in the ratio 2:3: 5. If Maria got $150, find the total amount and the money received by Ron and Sam. ii) Divide $370 into three parts such that second part is 1/4 of the third part and the ratio between the first and the third part is 3 : 5. Find each part.	8	L1	Co1
b)	i) Robert deposits $ 3000 in State Bank of India for 3 years which earn him an interest of 8%.What is the amount he gets after 1 year, 2 years and 3 years ii) At what rate per cent per annum will Ron lends a sum of $2000 to Ben. Ben returned after 2 years $2205, compounded annually?	8	L1	Co2
c)	i)The true discount on a bill due 9 months hence at 12% per annum is Rs 540. Find the amount of the bill and its present worth. ii) The banker's discount on Rs. 1800 at 12% per annum is equal to the true discount on Rs. 1872 for the same time at the same rate. Find the time.	8	L1	Co2
Q.2	**Answer/Solve the following (any two) –**			
a)	In class X, 20% of the students are boys and 80% of them are girls. The probability that boys passed in mathematics is 0.5 and the probability that girls passed in mathematics is 0.10. One student is selected at random. What is the probability that the selected student is passed in mathematics?	8	L2	Co3
b)	Uncle Bruno owns a garden with 30 black cherry trees. Each tree is	8	L2	Co4

of a different height. The height of the trees (in inches): 61, 63, 64, 66, 68, 69, 71, 71.5, 72, 72.5, 73, 73.5, 74, 74.5, 76, 76.2, 76.5, 77, 77.5, 78, 78.5, 79, 79.2, 80, 81, 82, 83, 84, 85, 87. Construct the histogram and frequency polygon for the above data .

c) The table given below shows the marks obtained by 80 students in science. Construct (i) less than ogive (ii) more than ogive. 8 L2 Co4

Marks	No. of students
0-10	3
10-20	8
20-30	17
30-40	29
40-50	15
50-60	6
60-70	2

Q.3 Answer/Solve the following (any two) –

a) The following table indicates the data on the number of patients visiting a hospital in a month.Find the average number of patients visiting the hospital in a day, median and mode 9 L3 Co5

Number of patients	0-10	10-20	20-30	30-40	40-50	50-60
Number of days visiting hospital	2	6	9	7	4	2

b) The following table gives the marks of 108 students in economics. Calculate the standard deviation for the data. 9 L3 Co6

Marks	0-2	2-4	4-6	6-8	8-10	10-12
No. of students	5	16	13	7	5	4

c) Form the data given in the following table, determine which of the two series is more consistent. 9 L4 Co6

Variable	5-10	10-15	15-20	20-25	25-30
Series A	2	9	29	54	6
Series B	9	15	30	32	14

*****