Reg. No. : ....

Name : ....

V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.(T.T.M.)/B.B.A.(R.T.M.)/B.B.M./
B.T.T.M./B.C.A./B.S.W./B.A. Afsal-Ul-Ulama/B.B.A.(A.H.) Degree CBCSS
(OBE)-Regular Examination, November 2021
(2019 Admission Only) Open Course
5D01STA – BASICS OF STATISTICS

Time : 2 Hours

Max. Marks : 20

Instruction : *Use of Scientific calculators and statistical tables are permitted.*

PART – A
(Short Answer Questions)

Answer **all** the questions. **Each** carries **1** mark.

1. Define Statistics.

2. Distinguish between primary and secondary data.

3. What do you mean by class interval ?

4. What are the different measures of central tendency ?

5. Find the median of 31, 16, 15, 21, 9, 30, 17, 28, 23, 29.

6. Differentiate between standard deviation and coefficient of variation.   (6×1=6)

PART – B
(Short Essay)

Answer **any 4** questions. **Each** carries **2** marks.

7. Write a note on the scope of Statistics.

8. Briefly explain the limitations of statistics.

9. Draw a bar graph based on the following data.

Subject	Science	English	History	Mathematics	Malayalam
No. of Students Passed	60	40	80	40	90

P.T.O.

10. What are the desirable characteristics of a good measure of central tendency ?

11. Discuss the merits and demerits of arithmetic mean.

12. Evaluate the arithmetic mean, median and mode for the following data.

X	5	6	7	8	9
Frequency	3	8	12	10	7

(4×2=8)

PART – C
(Essay)

Answer **any 1** question. **Each** carries **6** marks.

13. Explain various methods in the collection of statistical data, with its merits and demerits.

14. Calculate mean, median, standard deviation and coefficient of variation for the following data.

Class	0 – 6	6 – 12	12 – 18	18 – 24	24 – 30
Frequency	5	12	15	21	27

(1×6=6)

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V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A. (T.T.M.)/B.B.A. (R.T.M.)/ B.B.M./B.T.T.M./B.C.A./B.S.W./B.A. Afsal-Ul-Ulama/B.B.A. (AH) Degree CBCSS (OBE)-Regular Examination, November 2021

(2019 Admission Only) Open Course

5D 02 STA : SAMPLING TECHNIQUES

Time : 2 Hours

Max. Marks : 20

PART – A
(Short Answer)

Answer **all** questions.

1. Define data.

2. What are the two types of data ?

3. State any one example for Multi stage sampling.

4. What do you mean by random sampling ?

5. What does ISI stand for ?

6. Where is the headquarter of Central Statistical Organisation ?   (6×1=6)

PART – B
(Short Essay)

Answer **any four** questions.

7. Write the different types of data.

8. Distinguish between primary and secondary data.

9. Differentiate between SRSWR and SRSWOR.

10. Write the responsibilities of Directorate of Indian Census Operation.

11. Describe the function of the "Central Statistical Organization" in the nation's planning and development processes.

12. What is the objective of National Sample Survey Organisation ?   (4×2=8)

PART – C
(Essay)

Answer **any 1** question.

13. Write a short note on different types of sampling.

14. What are the 5 methods of collecting primary data ?   (1×6=6)

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Reg. No. : ....

Name : ....

V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.(T.T.M.)/B.B.A.(R.T.M.)/B.B.M./
B.T.T.M./B.C.A./B.S.W./B.A. Afsal-Ul-Ulama/B.B.A. (A.H.) Degree CBCSS
(OBE) – Regular Examination, November 2021
(2019 Admission Only) Open Course
5D03STA : VITAL STATISTICS

Time : 2 Hours

Max. Marks : 20

PART – A

(Short Essay)

(6×1=6)

Answer **all** questions.

1. Define infant mortality rate.

2. What are the drawbacks of CDR ?

3. Define crude birth rate.

4. What is gross reproductive rate ?

5. Define standardised mortality rate.

6. What is meant by specific fertility rate ?

PART – B

(Short Essay)

(4×2=8)

Answer **any four** questions.

7. What are the methods of obtaining vital statistics ?

8. Define general fertility rate. Give its formula.

P.T.O.

Reg. No. : ....

Name : ....

V Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.(T.T.M.)/B.B.A.(R.T.M.)/ B.B.M./B.T.T.M./B.C.A./B.S.W./B.A. Afsal-Ul-Ulama/B.B.A.(AH) Degree CBCSS (OBE) – Regular Examination, November 2021 (2019 Admission Only) Open Course 5D04STA : INDEX NUMBERS AND TIME SERIES

Time : 2 Hours   Max. Marks : 20

PART – A

Answer **all** questions. **Each** question carries **1** mark.   (6×1=6)

1. Define quantity index number.

2. Differentiate base year and current year.

3. Give an example of price relative.

4. Which are the variables associated with time series data ?

5. "Estimating the total sales in next 3 years of an insurance company." Is it a time series problem ? Justify.

6. Quote two examples wherever time series is important.

PART – B

Answer **any four** questions in short essay. **Each** question carries **2** marks.   (4×2=8)

7. Discuss any four applications of index numbers.

8. Explain the components of time series with an example.

Reg. No. : ....

Name : ....

V Semester B.A./B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-T.T.M./B.B.A.-A.H./B.C.A./B.A. Afsal-Ul-Ulama/B.S.W. Degree (CBCSS – OBE – Regular/Supplementary/Improvement) Examination, November 2022
(2019 Admission Onwards)
Open Course
5D01 STA : BASICS OF STATISTICS

Time : 2 Hours

Max. Marks : 20

Instruction : *Calculators can be **permitted**.*

PART – A

Answer **all** questions. **Each** carries **1** mark :

(6×1=6)

1. The word "Statistics" is derived from the italian word _____

2. Give an example for secondary data.

3. Name the diagram that is used to represent two or more sets of inter-related data.

4. Which type of average is most suitable for the normal size of shirts for a readymade garment's manufacturer ?

5. Name the measure of degree of scatteredness.

6. Define coefficient of variation.

PART – B

Answer **any 4** questions. **Each** carries **2** marks :

(4×2=8)

7. Write any four functions of statistics.

8. What do you mean by census and sampling ?

P.T.O.

9. How do you construct a pie-chart ?

10. In a moderately skewed distribution, the median is 20 and the mean is 22.5. Obtain the mode.

11. Define any two measures of dispersion.

12. What is the coefficient of quartile deviation if $Q_1 = 174.90$, $Q_2 = 190.23$, $Q_3 = 203.83$?

PART – C

Answer **any 1** question, which carries **6** marks :

(1×6=6)

13. Construct a histogram for the following frequency distribution.

Class :	15 – 19	20 – 24	25 – 29	30 – 34
Freq. :	11	36	28	13

Class :	35 – 39	40 – 44	45 – 49
Freq. :	73	2	

14. Compute the median of the following data :

Marks :	0 – 10	10 – 30	30 – 60	60 – 80	80 – 90
Freq. :	5	15	30	8	2

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Reg. No. : ....

Name : ....

**V Semester B.A./B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-T.T.M./B.B.A.-
A.H./B.C.A./B.A. Afsal-Ul-Ulama/B.S.W. Degree (CBCSS – OBE – Regular/
Supplementary/Improvement) Examination, November 2022
(2019 Admission Onwards)
Open Course
5D02 STA : SAMPLING TECHNIQUES**

Time : 2 Hours   Max. Marks : 20

*Instruction : Calculators and statistical tables are **permitted.***

PART – A

Answer **all** questions. **Each** carries **1** mark.   **(6×1=6)**

1. Give a situation where census method is not practicable.

2. What is mixed sampling ?

3. Define simple random sampling.

4. Give an example of multi-stage sampling.

5. What is the full form of MoSPI ?

6. Name the department which organizes the statistical activities under Government
   of Kerala.

PART – B

Answer **any 4** questions. **Each** carries **2** marks.   **(4×2=8)**

7. What do you mean by probability sampling ? Give an example.

8. What is primary data ? Give two sources of secondary data.

9. What is the difference between linear and circular systematic sampling ?

10. State the functions of Indian Statistical Institute.

11. Name the four divisions of National sample survey organizations.

12. What are the various activities conducted by CSO ?

PART – C

Answer **any 1** question, which carries **6** marks.   (1×6=6)

13. Distinguish between Census and Sample surveys. What are the merits and demerits of sample surveys ?

14. a) Describe two methods of collecting simple random samples.

   b) A population consists of 12 units. We require a sample of size 4. Write down the layout of all possible systematic samples.

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Reg. No. : ....

Name : ....

V Semester B.A./B.A. Afsal-Ul-Ulama/B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-T.T.M./B.B.A.-A.H./B.C.A./B.S.W./B.M.M.C. Degree (CBCSS – OBE – Regular/Supplementary/Improvement) Examination, November 2023
(2019-2021 Admissions)
Generic Elective Course
5D01 STA : BASICS OF STATISTICS

Time : 2 Hours   Max. Marks : 20

PART – A
(Answer **all** questions. **Each** carries **1** mark.)   (6×1=6)

1. The word "Statistics" in plural sense refers to _____.

2. If an experiment is conducted to know the effect of a drug on the patients, the observations taken on each patient constitute the _____ data.

3. Name the type of classification in which the data are arranged according to attributes.

4. Which type of average is most suitable for the normal size of shirts for a readymade garment's manufacturer ?

5. _____ is the average of the squares of the deviations taken from mean.

6. Give the formula for coefficient of variation.

PART – B
(Answer **any 4** questions. **Each** carries **2** marks.)   (4×2=8)

7. Define statistics in the singular sense.

8. Define a population and a sample.

9. What is meant by tabulation of data ?

10. What are the characteristics of a good average ?

11. Compute the median of the following data :

    48, 35, 36, 40, 42, 54, 58, 60.

12. Define variance.

PART – C

(Answer **any 1** question which carries **6** marks.)   (1×6=6

13. The regional rainfall indices during the year 2016 to 2018 are given below :

Year	Zone		
	East	West	Centre
2016	84	78	87
2017	104	76	77
2018	108	121	90

    Represent the data by a multiple bar diagram.

14. The following data give the distribution of weight of boys and girls in a class :

	Boys	Girls
Number	100	50
Mean weight (in Kg)	60	45
Variance	9	4

    Find the standard deviation of the combined data.

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Reg. No. : ....

Name : ....

V Semester B.A./B.A. Afsal-Ul-Ulama/B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-
T.T.M./B.B.A.-A.H./B.C.A./B.S.W./B.M.M.C. Degree (CBCSS-OBE – Regular/
Supplementary/Improvement) Examination, November 2023
(2019 – 2021 Admissions)
Generic Elective Course
5D02 STA : SAMPLING TECHNIQUES

Time : 2 Hours

Max. Marks : 20

Instruction : Calculators and Statistical tables can be **used**.

PART – A

Answer **all** questions. **Each** carries **1** mark.

(6×1=6)

1. Give a situation where census method cannot be recommended.
2. Write down a demerit of judgment sampling.
3. Define SRSWR.
4. What is sampling interval in relation with systematic sampling ?
5. Where is the Headquarters of ISI located ?
6. What is the full form of ICMR ?

PART – B

Answer **any 4** questions. **Each** carries **2** marks.

(4×2=8)

7. What do you mean by probability sampling ? Give an example.
8. Give two sources of primary data.
9. A population consists of 11 units. Write down all possible circular systematic samples of size 3.
10. Give the two activities of NSO.
11. Give the two activities of Kerala State Economics and Statistics Department.
12. What are the four divisions of National Sample Survey Organizations ?

PART – C

Answer **any 1** question, which carries **6** marks.

(6×1=6)

13. Distinguish between primary and secondary data. What are the precautions (atleast four) while using secondary data ?
14. Give atleast six responsibilities mandated with NSO under MoSPI.

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Reg. No. : ....

Name : ....

V Semester B.A./B.A. Afsal-Ul-Ulama/B.Sc./B.Com./B.T.T.M./B.B.A./B.B.A.-T.T.M./B.B.A.-A.H./B.C.A./B.S.W./B.M.M.C. Degree (CBCSS – OBE – Regular/Supplementary/Improvement) Examination, November 2023
(2019 – 2021 Admissions)
Generic Elective Course
5D05 STA : BASIC PROBABILITY THEORY

Time : 2 Hours

Max. Marks : 20

PART – A

Answer **all** questions. **Each** carries **1** mark.

(6×1=6)

1. Define random experiment.

2. Find the value of $^4C_4$.

3. If A = {7, 8, 9}, B = {3, 4, 6}, (A∩B) is a _____ set.

4. Define the sample space.

5. Define null set.

6. What do you identify if P(A) = 2 ?

PART – B

Answer **any 4** questions. **Each** carries **2** marks.

(4×2=8)

7. A box contains three white balls, four black balls and three red balls. Find the number of ways in which three balls can be drawn from the box so that at least one of the balls is black.

8. A committee of 5 persons is to be formed from 6 men and 4 women. In how many ways can this be done when at least 2 women are included ?

9. What is the use of Venn Diagram ?

10. Give any one example for a singleton set.

11. Define exhaustive event of a random experiment.

12. Represent the Venn Diagram for (A∪B)′.