Sant Gadge Baba Amravati University, Amravati

Three Years – Six Semester Bachelor's Degree Programme

Syllabus

B.A. First Year – Semester 1 Theory Examination

Subject / Course Name : Statistics

Level	Semester	Course Code	Course Name	Credits	Teaching Hours	Exam Duration	Max. Marks
4.5	1	665201	Basic Statistics	2	30	3 Hrs	30

Course Objective :

1.Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

2.Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

4. Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

5. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes.

Course Outcomes :

After completing this course students will be able to

1. Students developed with basic knowledge about Statistics and its scope in various fields.

2. Become familiar with handling of data.

3. Can express the vast and diverse data into compact and more specific manner

4. Enable to estimate the trends in vital events like births and deaths

5 Understand the working of federal and private Statistical office local to their residence.

Notes :

a. The strength of batch of practical for UG classes in statistcs shall be 16 with an addition of 10% with the permission of Honerable Vice Chancellor.

b. For theory 1 credit shall mean 1 hour teaching per week per semester (Total 30 Hrs / semester). The duration of 1 teaching period will be 60 minutes.

c. For practical 1 credit shall mean 2 Hrs teaching per week per semester (Total 30 Hrs / semester).

d. For examination and evaluation for theory course, 40% marks shall be assigned to Internal Examination and 60% marks shall be assigned to end semester External University Examination.

Theory Syllabus

Serial No.	Contents	Workload Alloted	Weightage of Marks Alloted
Unit I	Introduction to Statistics 1.1 Meaning, origin and definition of Statistics 1.2 Importance and Scope of Statistics in planning, economics, Agriculture, medical science and education, limitation of Statistics. 1.3 Limitations and distrust of Statistics. 1.4 Meaning of population, sample, data.	7 Hrs	7 Marks
Unit II	Types of data 2.1 Types of data: Quantitative, qualitative, nominal, ordinal. 2.2 Time Series data, frequency and non-frequency data. 2.3 Primary and secondary data with example. 2.4 Discrete & continuous data with example.	8 Hrs	7 Marks
Unit III	Classification 3.1 Classification of data, definition, rules, advantages of classification. 3.2 Class, Class limits, Class interval, Types of classes 3.3 Tabulation of data,rules and signifacance 3.4 types of table.	7 Hrs	8 Marks
Unit IV	Central Tendency 4.1 Concept, meaning and definition of central tendency. 4.2 Ideal measure of central tendency. 4.3 Arithmetic mean median, mode definition and uses. 4.4 Weighted arithmetic mean, definition and uses.	8 Hrs	8 Marks

References :

Course Material/Learning Resources

Text books:

1) मुलभूत सांख्यिंकी प्रा. राम देशमुख विद्दयाप्रकाशन

2) संख्यात्मक तंत्रे प्रा. राम देशमुख विद्दयाप्रकाशन

3) सांख्यिंकीमुलभूततंत्रे : प्रा. पुरूषोत्तम नवघरे

Reference Books:

1) Bhat B.R. Shrivenkataraman T and Rao Madhava K.S. (1996) : Statistics: A Beginners's Text Vol.1, New Age International (P) Ltd.

2) Goon A.M., Guptam M.K., Dasgupta B: Fundamental of Statistics, Vol 1, 2, World Press Calcutta.

3) Croxton F.E. , Cowden D.J.and Kelin S: Applied Generatl Statistics, Prentice Hall India

4) Gupta S.C. , Kapoor V.K. : Fundamental of Mathematical Statistics; S. Chand & Company

B.A. First Year – Semester I Practical Examination

Level	Semester	Course Code	Course Name	Credits	Teaching Hours	Exam Duration	Max. Marks
4.5	**I**	**665202**	**Statistics 1 Laboratory Work**	**2**	**2 per batch**	**3Hrs**	**50**

Course Outcomes

By the end of the Lab/Practical Course, generally students should be able to:

1. Represent collected data with the help of graphs and diagram..
2. Calculate various measures of central tendencies.
3. Present the data in frequency table.

*** List of Practical/Laboratory Experiments/Activities etc.**

1	Presentation of data by frequency table
2	Calculation of arithmetic mean for grouped and ungrouped frequency distribution
3	Calculation of median for grouped and ungrouped frequency distribution
4	Calculation mode for grouped and ungrouped frequency distribution
5	Calculation of weighted aritemetic mean