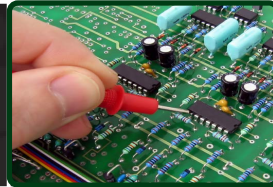


SANGAI INTERNATIONAL UNIVERSITY



Syllabus B. Sc. (Honours) Statistics

Syllabus B. Sc. (Honours) Statistics



Proposed Syllabus and Scheme of Examination

for

B. Sc. (Honours) Statistics

Submitted

to

*University Grants Commission
New Delhi*

under

Choice Based Credit System

May 2015

PREAMBLE

Statistics is the language of the uncertainties riddled modern information age. Statistics facilitates the decision making process by quantifying the element of chance or uncertainties. It's descriptive and inferential roles not only formulate the basis of the growth of almost all the disciplines of the contemporary world, but also provide an array of non-traditional employment avenues ranging from that of sport-analysts to business analysts. The thrust of the course is to prepare students to enter into a promising professional life even after graduation, as also provide to them a platform for pursuing higher studies leading to post-graduate or doctorate degrees.

PROPOSED SCHEME FOR CHOICE BASED CREDIT SYSTEM IN

B. Sc. Honours (Statistics)

	CORE COURSE (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Elective Course (SEEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	Descriptive Statistics(Theory+ Practical)	(English/MIL Communication) /Environmental Science			STAT-GE-1
	Calculus				
II	Probability and Prob. Distributions(Theory+ Practical)	Environmental Science/ (English/MIL Communication)			STAT-GE-2
	Algebra				
III	Sampling Distributions(Theory+ Practical)		STAT-SEE-1		STAT-GE-3
	Survey Sampling & Indian Official Statistics (Theory+Practical)				
	Mathematical Analysis				
IV	Statistical Inference(Theory+ Practical)		STAT-SEE-2		STAT-GE-4
	Linear Models(Theory+ Practical)				
	Statistical Quality Control(Theory+ Practical)				
V	Stochastic Processes and Queuing Theory(Theory+ Prac Practical)			STAT-DSE-1	
	Statistical Computing Using C/C++Programming(Theory+ Practical)			STAT-DSE -2	
VI	Design of Experiments (Theory+ Practical)			STAT-DSE -3	
	Multivariate Analysis and Nonparametric Methods (Theory+ Practical)			STAT-DSE -4	

SEMESTER I			
Paper Code	COURSE NAME		Credits
STAT-AEC-1	(English/MIL Communication) /Environmental Science	Ability Enhancement	2
STAT-C-101	Descriptive Statistics	Core Discipline	4
	Practical/Lab. work		2
STAT-C-102	Calculus	Core Discipline	5
	Tutorial		1
STAT-GE-1	Any one from the List of Generic Elective / Interdisciplinary Courses from other Subjects	Generic Elective / Interdisciplinary	4
	Practical/Lab. Work		2
SEMESTER II			
STAT-AEC-2	Environmental Science/ (English/MIL Communication)	Ability Enhancement	2
STAT-C-201	Probability and Probability Distributions	Core Discipline	4
	Practical/Lab. work		2
STAT-C-202	Algebra	Core Discipline	5
	Tutorial		1
STAT-GE-2	Any one from the List of Generic Elective / Interdisciplinary Courses from other Subjects	Generic Elective / Interdisciplinary	4
	Practical/Lab. Work		2
SEMESTER III			
STAT-C-301	Sampling Distributions	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-302	Survey Sampling & Indian Official Statistics	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-303	Mathematical Analysis	Core Discipline	5
	Tutorial		1
STAT-SEE-1	Any one from the List of Skill Enhancement Electives	Skill Enhancement Electives	2
STAT -GE-3	Any one from the List of Generic Elective / Interdisciplinary Courses from other Subjects	Generic Elective / Interdisciplinary	4
	Practical/Lab. Work		2
SEMESTER IV			
STAT-C-401	Statistical Inference	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-402	Linear Models	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-403	Statistical Quality Control	Core Discipline	4
	Practical/Lab. Work		2
STAT-SEE-2	Any one from the List of Skill Enhancement Electives	Skill Enhancement Electives	2
STAT -GE-4	Any one from the List of Generic Elective / Interdisciplinary Courses from other Subjects	Generic Elective / Interdisciplinary	4
	Practical/Lab. Work		2

SEMESTER V			
STAT-C-501	Stochastic Processes and Queuing Theory	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-502	Statistical Computing Using C/C++ Programming	Core Discipline	4
	Practical/Lab. Work		2
STAT-DSE-1	Any one from the List of Discipline Specific Elective(DSE)	Discipline Specific Elective	4
	Practical/Lab. Work		2
STAT-DSE-2	Any one from the List of Discipline Specific Elective(DSE)	Discipline Specific Elective	4
	Practical/Lab. work		2
SEMESTER VI			
STAT-C-601	Design of Experiments	Core Discipline	4
	Practical/Lab. Work		2
STAT-C-602	Multivariate Analysis and Nonparametric Methods	Core Discipline	4
	Practical/Lab. Work		2
STAT-DSE-3	Any one from the List of Discipline Specific Elective(DSE)	Discipline Specific Elective	4
	Practical/Lab. Work		2
STAT-DSE-4*	Any one from the List of Discipline Specific Elective(DSE)	Discipline Specific Elective	4
	Practical/Lab. Work		2

* Project Work will be offered in the Sixth Semester.