Baba Ghulam Shah Badshah University
Rajouri - 185234 (J&K)

The IQAC Coordinator
BGSB University
Rajouri

No. BGSBU/Acad/19//70
Dated: 22-07-2019

Sir,

Kindly find attached herewith the course structure of various UG and PG Programmes offering elective/CBCS system as mentioned below:

:

1	Master of Computer Sciences	15	M.A Economics
2	MCA	16	M.A Arabic
3	M.Sc (IT)	17	M.A Islamic Studies
4	M.Sc. Mathematics (Morning)	18	M.A Urdu
5	M.Sc. Mathematics (Evening)	19	M.A English
6	M.Sc. Mathematics (Spl. In App. Mathematics)	20	M.Ed.
7	M.Sc. Physics	21	MBA
8	B.Tech. Civil Engineering	22	MBA(H&T)
9	B.Tech. Computer Science Engineering	23	M.Sc Biotechnology
10	B.Tech. Electronics & Communication Engineering	24	M.Sc Botany
11	B.Tech. Electrical Engineering	25	M.Sc Zoology
12	B.Tech. Information Technology Engineering	X	—
13	B.E Civil Engineering	X	—
14	B.E Electrical Engineering	X	—

Yours faithfully

Deputy Registrar 25/7/19
(Academic Affairs)

B.E. (Evening) Civil Engineering

Baba Ghulam Shah Bad...
Rajouri (J&K)-185131

Department of Civil Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

28/8/14

Semester-III

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-321	Mathematics -III	3	40	60	100	4	0	0
CE-322	Structural Analysis-I	3	40	60	100	3	1	0
CE-323	Hydraulics-I	3	40	60	100	3	1	0
CE-324	Surveying-I	3	40	60	100	3	1	0
CE-325	Building Material & Const.	3	40	60	100	3	1	0
CE-326	Entrepreneurship Dev. Mgmt.	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-331	Structural Analysis-I	2	25	25	50	0	0	2
CE-332	Hydraulics Lab-I	2	25	25	50	0	0	2
CE-333	Surveying-I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-IV

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-421	Mathematics-IV	3	40	60	100	4	0	0
CE-422	Structural Analysis-II	3	40	60	100	3	1	0
CE-423	Hydraulics-II	3	40	60	100	3	1	0
CE-424	Surveying-II	3	40	60	100	3	1	0
CE-425	Construction Tech. & Mgn,	3	40	60	100	3	1	0
CE-426	Building Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-431	Structural Analysis-II	2	25	25	50	0	0	2
CE-432	Hydraulics Lab-II	2	25	25	50	0	0	2
CE-433	Surveying-II	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

For laboratory courses the assessment pattern will be as shown in table 2.

Table 2 Distribution of Weightage for laboratory courses of 50 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Continuous assessment of practical work, timely submission of lab records.	15	Lab experiment/procedure/ writing /tabulation/innovation as applicable	20
Test	05	Viva Voce	05
Attendance	05		
Total	**25**		**25**

Semester-V

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-521	Estimating & Costing	3	40	60	100	4	0	0
CE-522	Structural Analysis-III	3	40	60	100	3	1	0
CE-523	Design of Structures-I	3	40	60	100	3	1	0
CE-524	Geotechnical Engineering-I	3	40	60	100	3	1	0
CE-525	Concrete Technology	3	40	60	100	3	1	0
CE-526	Environmental Engg. I	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-531	Geotechnical Engineering-I	2	25	25	50	0	0	2
CE-532	Concrete Technology	2	25	25	50	0	0	2
CE-533	Environmental Engg- I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-621	Transportation Engineering-I	3	40	60	100	4	0	0
CE-622	Water Resources Engg.	3	40	60	100	3	1	0
CE-623	Design of Structures-II	3	40	60	100	3	1	0
CE-624	Geotechnical Engineering-II	3	40	60	100	3	1	0
CE-625	Geology & Earthquake Engg	3	40	60	100	3	1	0
CE-626	Environmental Engineering- II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-631	Transportation Engineering -I	2	25	25	50	0	0	2
CE-632	Geotechnical Engineering-II	2	25	25	50	0	0	2
CE-633	Survey Camp	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII university examination. The examination of Industrial Training shall be conducted during semester VII examination.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-721	Transportation Engg-II	3	40	60	100	4	0	0
CE-722	Irrigation & Flood Control	3	40	60	100	3	1	0
CE-723	Design of Structures III	3	40	60	100	3	1	0
CE-724	Major Project-I	3	100		100	3	1	0
CE-7xx	Elective – I	3	40	60	100	0	0	3
CE-7xx	Elective – II	3	40	60	100	3	1	0
Total			**300**	**300**	**600**			

Laboratory Courses

CE-731	Industrial Training	2	50		50	0	0	2
CE-732	Seminar	2	50		50	0	0	2
CE-732	STAAD Pro	2	50		50	0	0	2
Total			**150**		**150**			
Total (Theory + Lab)			**450**	**300**	**750**			

During semester VI every student shall be allotted a Major Project-I pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-I under the supervision of an allotted mentor. Students are required to complete the Major Project-I during semester VII. Major Project-I shall be evaluated internally as per university statutes by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s) of minor project/training

The distribution of marks for Minor Project & Industrial Training of 50 marks is as follow:

Table 3 Distribution of Weightage for Minor project & Industrial Training of 50 marks.

Component	Weightage
Minor Project : Practical Work/Fabrication of Model/Drawing etc.	35
Industrial Training	15
Total	**50**

Elective-I	
CODE	SUBJECT
CE-741	Rock Mechanics
CE-742	Adv. Geo-Technical Engg.
CE-743	Tunnel Engineering
CE-744	Rural Construction Technology
CE-745	Environmental Assessment & Modelling

Elective-II	
CODE	SUBJECT
CE-746	Applied Hydrology
CE-747	Design of Hydraulic Structures
CE-748	Remote sensing & GIS
CE-749	Disaster Management
CE-750	Maintenance Engineering

After the university Exam of semester VII every student shall be allotted a Major Project-II pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-II under the supervision of an allotted mentor. Students are required to complete the Major Project-II during semester VIII. Depending upon the infrastructure, Computing and other laboratories facilities the students shall be offered in house project on campus are they can complete their project work in any organization/industry outside the campus. Major Project-II shall be evaluated externally as per university statues.

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-821	Major Project		250	200	450			
CE-8xx	Elective – III		40	60	100			
CE-8xx	Elective – IV		40	60	100			
	Total (Theory + Lab)		**330**	**320**	**650**			

Table 4 Distribution of Weightage for Major Project of 450 marks.

Internal Component	Weightage	External Component	Weightage
Quality of work	100	Dissertation	100
Presentation	50	Presentation	50
Viva Voce	100	Viva Voce	50
Total	250		200

Elective Papers:

- Students will be required to opt for one elective paper, from CE-741 to CE-745 and other from CE-746 to CE-750 in 7th semester. They are also required to opt for one elective paper, from CE-841 to CE-845 and other from CE-846 to CE-850 in 8th semester

- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Elective-III	
CODE	SUBJECT
CE-841	Architecture & Town Planning 8/7
CE-842	Earthquake Resistant Designs 8/7
CE-843	Bridge Engineering
CE-844	Soil Chemistry 8/7
CE-845	Tall Buildings

Elective-IV	
CODE	SUBJECT
CE-846	Hydro-Power Engineering — 8/7
CE-847	Ground Water Hydrology — 8/7
CE-848	Optimization in Civil Engineering — 8/7
CE-849	Industrial structures
CE-850	Prefabricated structures

Rural water Supply & Sanitation

B.E. (Evening) Electrical Engineering

Baba Ghulam S.
Rajouri (J&K)-185

Department of Electrical and Renewable Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

26/09/2014

26/09/14

Semester-III

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-321	Mathematics-III	3	40	60	100	4	0	0
ERE-322	E M Wave Theory	3	40	60	100	3	1	0
ERE-323	Electrical Machines-I	3	40	60	100	3	1	0
ERE-324	Signals & Systems	3	40	60	100	3	1	0
ERE-325	Digital Electronics	3	40	60	100	3	1	0
ERE-326	Applied Electronics	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-331	Electrical Machines-I	2	25	25	50	0	0	2
ERE-332	Digital Electronics	2	25	25	50	0	0	2
ERE-333	Applied Electronics	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

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Semester-IV

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-421	Mathematics-IV	3	40	60	100	4	0	0
ERE-422	Network Analysis & Synthesis	3	40	60	100	3	1	0
ERE-423	Engineering Material Science	3	40	60	100	3	1	0
ERE-424	Power System-I	3	40	60	100	3	1	0
ERE-425	Electrical Machines-II	3	40	60	100	3	1	0
ERE-426	Electrical Measurements-I	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-431	Network Analysis & Synthesis	2	25	25	50	0	0	2
ERE-432	Electrical Machines-II	2	25	25	50	0	0	2
ERE-433	Electrical Measurements	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-V

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-521	Power System-II	3	40	60	100	4	0	0
ERE-522	Microprocessor & Interfacing	3	40	60	100	3	1	0
ERE-523	Control System-I	3	40	60	100	3	1	0
ERE-524	Communication Systems	3	40	60	100	3	1	0
ERE-525	Power Engineering	3	40	60	100	3	1	0
ERE-526	Design of Power Apparatus	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-531	Power System	2	25	25	50	0	0	2
ERE-532	Microprocessor & Interfacing	2	25	25	50	0	0	2
ERE-533	Control System-I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-621	Power Electronics	3	40	60	100	4	0	0
ERE-622	Electrical Measurement-II	3	40	60	100	3	1	0
ERE-623	Power System Stability	3	40	60	100	3	1	0
ERE-624	Energy Audit & Management	3	40	60	100	3	1	0
ERE-625	Renewable Energy Sources	3	40	60	100	3	1	0
ERE-626	Control System-II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

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Laboratory Courses

ERE-631	Power Electronics	2	25	25	50	0	0	2
ERE-632	MATLAB	2	25	25	50	0	0	2
ERE-633	Renewable Energy Sources	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII University Exam. Evaluation of Industrial Training shall be conducted during semester VII.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-721	Power System Protection	3	40	60	100	3	1	0
ERE-722	Electric Drives	3	40	60	100	3	1	0
ERE-723	ED Management	3	40	60	100	3	1	0
ERE-724	Major Project Phase –I	3	100	0	100	-	-	-
ERE-7xx	Elective-I	3	40	60	100	3	1	0
ERE-7xx	Elective-II	3	40	60	100	3	1	0
Total			**300**	**300**	**600**			

Laboratory Courses

ERE-731	Power System Protection	2	25	25	50	0	0	2
ERE-732	Seminar	2	50	0	50	0	0	2
ERE-733	Industrial Training	2	50	0	50	0	0	0
Total			**125**	**25**	**150**			
Total (Theory + Lab)			**425**	**325**	**750**			

At the start of VII semester every student shall be allotted a Major Project-I under the supervision of an allotted mentor. Students are required to do preliminary exercise, survey of literature and preparation of a road map of the selected Major Project phase-I under the supervision of their allotted mentor. Students are required to complete the Major Project-I during semester VII. Major Project-I shall be evaluated internally as per university statutes by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s) of minor project/training

Elective Papers

- Students will be required to opt for two elective papers, from ERE-741 to ERE-752.
- The choice of electives will rest with the students. However, in no case will the department run more than two courses for one elective paper.

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Seventh Semester Electives-I & II			
Course Code	Course Title	Course Code	Course Title
ERE-741	Electric Substation Design	ERE-747	Embedded systems
ERE-742	High Voltage Engineering	ERE-748	Artificial Intelligence
ERE-743	Virtual Instrumentation	ERE-749	VLSI Design
ERE-744	Digital Signal Processing	ERE-750	Simulation and Modeling
ERE-745	Power System Transients	ERE-751	Industrial Electronics
ERE-746	Display System Engineering	ERE-752	Disaster Management

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-821	Major Project Phase –II		250	200	450			
ERE-8xx	Elective-III	3	40	60	100	3	1	0
ERE-8xx	Elective-IV	3	40	60	100	3	1	0
Total			**330**	**320**	**650**			

After the university Exam of semester VII every student shall be allotted a Major Project-II pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-II under the supervision of an allotted mentor. Students are required to complete the Major Project-II during semester VIII. Depending upon the infrastructure, Computing and other laboratories facilities the students shall be offered in house project on campus are they can complete their project work in any organization/industry outside the campus. Major Project-II shall be evaluated externally as per university statues.

Elective Papers

- Students will be required to opt for two elective papers, from ERE-831 to ERE-842.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Eighth Semester Electives-III & IV			
Course Code	Course Title	Course Code	Course Title
ERE-831	EHV AC & DC Transmission	ERE-837	Energy Economics and Planning
ERE-832	Microcontroller & Interfacing	ERE-838	Solar Passive Architecture
ERE-833	Process Control System	ERE-839	Wireless Networks
ERE-834	Restructuring of Power System	ERE-840	Principles of Marketing and Management
ERE-835	Biomedical Instrumentation	ERE-841	Random Process and Information Theory
ERE-836	Electronic Workshop Technology	ERE-842	Neural Networks and Fuzzy Systems

26/09/14

Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Syllabus First to Eighth Semester
B. Tech. Degree Course

Department of Civil Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

28/8/14

Curriculum Structure
(2012 – 2016)
Semester–I

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-121	Fundamentals of Mech. Engg.	3	40	60	100	3	1	0
CE-122	Mathematics-I	3	40	60	100	3	1	0
CE-123	Computer Fundamentals	3	40	60	100	3	1	0
CE-124	Basic Electrical Engineering	3	40	60	100	3	1	0
CE-125	Engineering Physics	3	40	60	100	3	1	0
CE-126	Engg. Chemistry & Env. Sc.	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Course

CE-131	Computer Fundamentals	2	25	25	50	0	0	2
CE-132	Basic Electrical Engineering	2	25	25	50	0	0	2
CE-133	Engineering Physics	2	25	25	50	0	0	2
CE-134	Engineering Chemistry	2	25	25	50	0	0	2
Total			**100**	**100**	**200**			
Total (Theory + Lab)			**340**	**460**	**800**			

Semester–II

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-221	Communication Skills	3	40	60	100	4	0	0
CE-222	Mathematics-II	3	40	60	100	3	1	0
CE-223	C Programming	3	40	60	100	3	1	0
CE-224	Basic Electronics	3	40	60	100	3	1	0
CE-225	Engineering Mechanics	3	40	60	100	3	1	0
CE-226	Engineering Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-231	C Programming	2	25	25	50	0	0	2
CE-232	Basic Electronics	2	25	25	50	0	0	2
CE-233	Engineering Mechanics	2	25	25	50	0	0	2
CE-234	Workshop Practice	2	50		50	0	0	2
	Total		**125**	**75**	**200**			
Total (Theory + Lab)			**365**	**435**	**800**			

For each theory course the assessment pattern will be as shown in table 1.

Table 1: Distribution of Weightage for theory courses of 100 marks.

Continuous Assessment		University Examination	
Component	Weightage	Component	Weightage

Cyclic Test 1	10	Written Examination	60
Cyclic Test 2	10		
Assignment 1	05		
Assignment 2	05		
Attendance	10		
Total	**40**		**60**

Semester-III

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-321	Mathematics -III	3	40	60	100	4	0	0
CE-322	Structural Analysis-I	3	40	60	100	3	1	0
CE-323	Hydraulics-I	3	40	60	100	3	1	0
CE-324	Surveying-I	3	40	60	100	3	1	0
CE-325	Building Material & Const.	3	40	60	100	3	1	0
CE-326	Entrepreneurship Dev. Mgmt.	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-331	Structural Analysis-I	2	25	25	50	0	0	2
CE-332	Hydraulics Lab-I	2	25	25	50	0	0	2
CE-333	Surveying-I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-IV

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-421	Mathematics-IV	3	40	60	100	4	0	0
CE-422	Structural Analysis-II	3	40	60	100	3	1	0
CE-423	Hydraulics-II	3	40	60	100	3	1	0
CE-424	Surveying-II	3	40	60	100	3	1	0
CE-425	Construction Tech. & Mgn,	3	40	60	100	3	1	0
CE-426	Building Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-431	Structural Analysis-II	2	25	25	50	0	0	2
CE-432	Hydraulics Lab-II	2	25	25	50	0	0	2
CE-433	Surveying-II	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

For laboratory courses the assessment pattern will be as shown in table 2.

Table 2 Distribution of Weightage for laboratory courses of 50 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Continuous assessment of practical work, timely submission of lab records.	15	Lab experiment/procedure/ writing /tabulation/innovation as applicable	20
Test	05	Viva Voce	05
Attendance	05		
Total	**25**		**25**

Semester-V

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-521	Estimating & Costing	3	40	60	100	4	0	0
CE-522	Structural Analysis-III	3	40	60	100	3	1	0
CE-523	Design of Structures-I	3	40	60	100	3	1	0
CE-524	Geotechnical Engineering-I	3	40	60	100	3	1	0
CE-525	Concrete Technology	3	40	60	100	3	1	0
CE-526	Environmental Engg. I	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-531	Geotechnical Engineering-I	2	25	25	50	0	0	2
CE-532	Concrete Technology	2	25	25	50	0	0	2
CE-533	Environmental Engg- I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-621	Transportation Engineering-I	3	40	60	100	4	0	0
CE-622	Water Resources Engg.	3	40	60	100	3	1	0
CE-623	Design of Structures-II	3	40	60	100	3	1	0
CE-624	Geotechnical Engineering-II	3	40	60	100	3	1	0
CE-625	Geology & Earthquake Engg	3	40	60	100	3	1	0
CE-626	Environmental Engineering- II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CE-631	Transportation Engineering -I	2	25	25	50	0	0	2
CE-632	Geotechnical Engineering-II	2	25	25	50	0	0	2
CE-633	Survey Camp	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII university examination. The examination of Industrial Training shall be conducted during semester VII examination.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-721	Transportation Engg-II	3	40	60	100	4	0	0
CE-722	Irrigation & Flood Control	3	40	60	100	3	1	0
CE-723	Design of Structures III	3	40	60	100	3	1	0
CE-724	Major Project-I	3	100		100	3	1	0
CE-7xx	Elective – I	3	40	60	100	0	0	3
CE-7xx	Elective – II	3	40	60	100	3	1	0
Total			**300**	**300**	**600**			

Laboratory Courses

CE-731	Industrial Training	2	50		50	0	0	2
CE-732	Seminar	2	50		50	0	0	2
CE-732	STAAD Pro	2	50		50	0	0	2
Total			**150**		**150**			
Total (Theory + Lab)			**450**	**300**	**750**			

During semester VI every student shall be allotted a Major Project-I pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-I under the supervision of an allotted mentor. Students are required to complete the Major Project-I during semester VII. Major Project-I shall be evaluated internally as per university statutes by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s) of minor project/training

The distribution of marks for Minor Project & Industrial Training of 50 marks is as follow:

Table 3 Distribution of Weightage for Minor project & Industrial Training of 50 marks.

Component	Weightage
Minor Project : Practical Work/Fabrication of Model/Drawing etc.	35
Industrial Training	15
Total	**50**

Elective-I	
CODE	SUBJECT
CE-741	Rock Mechanics – 7/7
CE-742	Adv. Geo-Technical Engg. 7/7
CE-743	Tunnel Engineering 7/7
CE-744	Rural Construction Technology
CE-745	Environmental Assessment & Modelling

Elective-II	
CODE	SUBJECT
CE-746	Applied Hydrology – 7/7
CE-747	Design of Hydraulic Structures 7/7
CE-748	Remote sensing & GIS
CE-749	Disaster Management – 7/7
CE-750	Maintenance Engineering – 7/7

After the university Exam of semester VII every student shall be allotted a Major Project-II pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-II under the supervision of an allotted mentor. Students are required to complete the Major Project-II during semester VIII. Depending upon the infrastructure, Computing and other laboratories facilities the students shall be offered in house project on campus are they can complete their project work in any organization/industry outside the campus. Major Project-II shall be evaluated externally as per university statues.

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CE-821	Major Project		250	200	450			
CE-8xx	Elective – III		40	60	100			
CE-8xx	Elective – IV		40	60	100			
	Total (Theory + Lab)		**330**	**320**	**650**			

Table 4 Distribution of Weightage for Major Project of 450 marks.

Internal Component	Weightage	External Component	Weightage
Quality of work	100	Dissertation	100
Presentation	50	Presentation	50
Viva Voce	100	Viva Voce	50
Total	250		200

Elective Papers:

- Students will be required to opt for one elective paper, from CE-741 to CE-745 and other from CE-746 to CE-750 in 7th semester. They are also required to opt for one elective paper, from CE-841 to CE-845 and other from CE-846 to CE-850 in 8th semester

- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Elective-III	
CODE	SUBJECT
CE-841	Architecture & Town Planning 8/7
CE-842	Earthquake Resistant Designs 8/7
CE-843	Bridge Engineering
CE-844	Soil Chemistry 8/7
CE-845	Tall Buildings

Elective-IV	
CODE	SUBJECT
CE-846	Hydro-Power Engineering — 8/7
CE-847	Ground Water Hydrology — 8/7
CE-848	Optimization in Civil Engineering — 8/7
CE-849	Industrial structures
CE-850	Prefabricated structures

Rural water Supply & Sanitation

Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Syllabus First to Eighth Semester
B. Tech. Degree Course

Department of Electronics and Communication Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Curriculum Structure
(2012 - 2016)

Semester–I

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-121	Communication Skills	3	40	60	100	3	1	0
ECE-122	Mathematics-I	3	40	60	100	3	1	0
ECE-123	Computer Fundamentals	3	40	60	100	3	1	0
ECE-124	Basic Electronics	3	40	60	100	3	1	0
ECE-125	Engineering Mechanics	3	40	60	100	3	1	0
ECE-126	Engineering Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Course

ECE-131	Computer Fundamentals	2	25	25	50	0	0	2
ECE-132	Basic Electronics	2	25	25	50	0	0	2
ECE-133	Engineering Mechanics	2	25	25	50	0	0	2
ECE-134	Workshop Practice	2	50		50	0	0	2
Total			**125**	**75**	**200**			
Total (Theory + Lab)			**365**	**435**	**800**			

Semester – II

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-221	Fundamentals of Mech. Engg.	3	40	60	100	3	1	0
ECE-222	Mathematics-II	3	40	60	100	3	1	0
ECE-223	C Programming	3	40	60	100	3	1	0
ECE-224	Basic Electrical Engineering	3	40	60	100	3	1	0
ECE-225	Engineering Physics	3	40	60	100	3	1	0
ECE-226	Engineering Chemistry & Env. Sc.	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ECE-231	C Programming	2	25	25	50	0	0	2
ECE-232	Basic Electrical Engineering	2	25	25	50	0	0	2
ECE-233	Engineering Physics	2	25	25	50	0	0	2
ECE-234	Engineering Chemistry	2	25	25	50	0	0	2
	Total		**100**	**100**	**200**			
Total (Theory + Lab)			**340**	**460**	**800**			

Assessment Procedure: For each theory course the assessment pattern will be as shown in table 1.

Table 1 Distribution of Weightage for theory courses of 100 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Cyclic Test 1	10	Written Examination	60
Cyclic Test 2	10		
Assignment 1	05		
Assignment 2	05		
Attendance	10		
Total	**40**		**60**

Semester-III

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-321	Mathematics-III	3	40	60	100	3	1	0
ECE-322	EM Wave Theory	3	40	60	100	3	1	0
ECE-323	Solid state electronic device	3	40	60	100	3	1	0
ECE-324	Signals & Systems	3	40	60	100	3	1	0
ECE-325	Digital Electronics	3	40	60	100	3	1	0
ECE-326	Advanced Electronic Circuit	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ECE-331	MATLAB Programming	2	25	25	50	0	0	2
ECE-332	Digital Electronics	2	25	25	50	0	0	2
ECE-333	Advanced Electronic Circuit	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-IV

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-421	Mathematics-IV	3	40	60	100	3	1	0
ECE-422	Network Analysis & Synthesis	3	40	60	100	3	1	0
ECE-423	Analog Communication System	3	40	60	100	3	1	0
ECE-424	Linear Integrated Circuits	3	40	60	100	3	1	0
ECE-425	Antenna & Wave Propagation	3	40	60	100	3	1	0
ECE-426	Elec. Measurements & Instrument.	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses								
ECE-431	EM&I/NWA&S	2	25	25	50	0	0	2
ECE-432	Analog Comm. Systems	2	25	25	50	0	0	2
ECE-433	Linear Integrated Circuits	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

For laboratory courses the assessment pattern will be as shown in table 2.

Table 2: Distribution of Weightage for laboratory courses of 50 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Continuous assessment of practical work, timely submission of lab records.	15	Lab experiment / procedure /writing /tabulation/innovation as applicable	20
Test	05	Viva Voce	05
Attendance	05		
Total	**25**		**25**

Semester-V

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-521	Electronic Multimedia Engg.	3	40	60	100	3	1	0
ECE-522	µProcessor & Interfacing	3	40	60	100	3	1	0
ECE-523	Pulse & Switching Circuits	3	40	60	100	3	1	0
ECE-524	Digital Com. Systems	3	40	60	100	3	1	0
ECE-525	Linear Control Systems	3	40	60	100	3	1	0
ECE-526	Electrical Machines	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ECE-531	Digital Comm. Systems	2	25	25	50	0	0	2
ECE-532	µProcessor & Interfacing	2	25	25	50	0	0	2
ECE-533	Electrical Machines	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-621	Power Electronics	3	40	60	100	3	1	0
ECE-622	Mobile & Wireless Comm.	3	40	60	100	3	1	0
ECE-623	Digital Signal Processing	3	40	60	100	3	1	0
ECE-624	Data Comm. & Comp. NWs	3	40	60	100	3	1	0
ECE-625	Random Processes and Information Theory	3	40	60	100	3	1	0
ECE-626	Adv. µprocessor and µControllers	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ECE-631	Power Electronics	2	25	25	50	0	0	2
ECE-632	Digital Signal Processing	2	25	25	50	0	0	2
ECE-633	Adv. μprocessor and μControllers	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII university examination. Beside this a Minor Project will also be allotted to each student/group of students which has to be completed during semester VII. The examination of Industrial Training and Mini Project shall be conducted during semester VII examination.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-721	Microwave Engineering	3	40	60	100	4	0	0
ECE-722	Optical Communication	3	40	60	100	3	1	0
ECE-723	ED Management	3	40	60	100	3	1	0
ECE-724	Elective-I	3	40	60	100	3	1	0
ECE-725	Elective-II	3	40	60	100	3	1	0
ECE-726	Major Project Phase-1	0	100	0	100			0
Total			**240**	**360**	**600**			

Laboratory Courses

ECE-731	Microwave/Optical Comm.	2	25	25	50	0	0	2
ECE-732	PCB and VLSI	2	25	25	50	0	0	2
ECE-733	Ind. Training	2	50	0	50	0	0	2
Total			**100**	**50**	**150**			
Total (Theory + Lab)			**340**	**410**	**750**			

During the semester students are required to complete the Minor Project work under the supervision of an allotted mentor. The Minor Project shall normally be evaluated through the quality of work carried out, the report submission content and presentation. The evaluation shall be done by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s) of minor project/training

The distribution of marks for Minor Project of 50 marks is as follow:

Table 3 Distribution of Weightage for Minor project & Industrial Training of 50 marks.

Component	Weightage
Mini Project : Practical Work/Fabrication of Model/Drawing etc.	35
Industrial Training	15
Total	**50**

Elective Papers

- Students will be required to opt for one elective paper, from ECE-741 toECE-745 and other from ECE-751 to ECE-755.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Seventh Semester Electives-I & II			
Course Code	**Course Title**	**Course Code**	**Course Title**
ECE-741	Biomedical Instrumentation	ECE-751	Non Conventional Energy Sources
ECE-742	Advanced Control Engineering	ECE-752	Power Systems
ECE-743	Electronics Workshop Technology	ECE-753	VLSI Design
ECE-744	Industrial Technology	ECE-754	Radar Engineering
ECE-745	Embedded Systems	ECE-755	Neural Networks

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ECE-821	Major Project		250	200	450			
ECE-83X	Elective-III	3	40	60	100	3	1	0
ECE-84X	Elective-IV	3	40	60	100	3	1	0

After the university examination of semester VII every student shall be allotted a Major Project pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major project under the supervision of an allotted mentor. Students are required to complete the Major project work during semester VIII. Depending upon the infrastructure, computing and other laboratory facility the student shall be offered in-house project on campus or they can complete their project work in any organization/Industry outside the campus. Major Project shall be evaluated externally through the quality of work carried out, the report submission content and presentation. The distribution of marks shall be as follow;

Eighth Semester Electives-III & IV			
Course Code	**Course Title**	**Course Code**	**Course Title**
ECE-841	Analog Mixed Signal Design	ECE-851	Device Modeling for Circuit Simulations
ECE-842	Neno Technology	ECE-852	Satellite Communication
ECE-843	Advanced 3G & 4G Wireless Mobile Communications	ECE-853	Advanced Communication Systems
ECE-844	Optical Networks	ECE-854	Digital Image Processing
ECE-845	RF IC Design	ECE-855	Optoelectronic Devices
ECE-846	Real Time Operating System(RTOS)	ECE-856	PLCs & SCADA

Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Syllabus First to Eighth Semester
B. Tech. Degree Course

Department of Electrical and Renewable Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

26/09/2014

26/09/14

Curriculum Structure
(2012 - 2016)

Semester–I

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-121	Fundamentals of Mech. Engg.	3	40	60	100	3	1	0
ERE-122	Mathematics-I	3	40	60	100	3	1	0
ERE-123	Computer Fundamentals	3	40	60	100	3	1	0
ERE-124	Basic Electrical Engineering	3	40	60	100	3	1	0
ERE-125	Engineering Physics	3	40	60	100	3	1	0
ERE-126	Engineering Chemistry	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-131	Computer Fundamentals	2	25	25	50	0	0	2
ERE-132	Basic Electrical Engineering	2	25	25	50	0	0	2
ERE-133	Engineering Physics	2	25	25	50	0	0	2
ERE-134	Engineering Chemistry & Environmental Science	2	25	25	50	0	0	2
Total			**100**	**100**	**200**			
Total (Theory + Lab)			**340**	**460**	**800**			

Semester – II

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-221	Communication Skills	3	40	60	100	4	0	0
ERE-222	Mathematics-II	3	40	60	100	3	1	0
ERE-223	C Programming	3	40	60	100	3	1	0
ERE-224	Basic Electronics	3	40	60	100	3	1	0
ERE-225	Engineering Mechanics	3	40	60	100	3	1	0
ERE-226	Engineering Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-231	C Programming	2	25	25	50	0	0	2
ERE-232	Basic Electronics	2	25	25	50	0	0	2
ERE-233	Engineering Mechanics	2	25	25	50	0	0	2
ERE-234	Workshop Practice	2	50	0	50	0	0	2
	Total		**125**	**75**	**200**			
Total (Theory + Lab)			**365**	**435**	**800**			

26/09/12

Assessment Procedure: For each theory course the assessment pattern will be as shown in table 1.

Table 1 Distribution of Weightage for theory courses of 100 marks.

Continuous Assessment		University Exam	
Component	**Weightage**	**Component**	**Weightage**
Cyclic Test 1	15	Written Exam	60
Cyclic Test 2	15		
Assignment 1	5		
Assignment 2	5		
Total	**40**		**60**
Note: 75 % Attendance is compulsory for each theory as well as lab course.			

For laboratory courses the assessment pattern will be as shown in table 2.

Table 2: Distribution of Weightage for laboratory courses of 50 marks.

Continuous Assessment		University Exam	
Component	**Weightage**	**Component**	**Weightage**
Continuous assessment of practical work, timely submission of lab records.	15	Lab experiment/procedure/ writing /tabulation/ innovation as applicable	15
Test	10	Viva Voce	10
Total	**25**		**25**

Semester-III

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-321	Mathematics-III	3	40	60	100	4	0	0
ERE-322	E M Wave Theory	3	40	60	100	3	1	0
ERE-323	Electrical Machines-I	3	40	60	100	3	1	0
ERE-324	Signals & Systems	3	40	60	100	3	1	0
ERE-325	Digital Electronics	3	40	60	100	3	1	0
ERE-326	Applied Electronics	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-331	Electrical Machines-I	2	25	25	50	0	0	2
ERE-332	Digital Electronics	2	25	25	50	0	0	2
ERE-333	Applied Electronics	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

26/09/14

Semester-IV

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-421	Mathematics-IV	3	40	60	100	4	0	0
ERE-422	Network Analysis & Synthesis	3	40	60	100	3	1	0
ERE-423	Engineering Material Science	3	40	60	100	3	1	0
ERE-424	Power System-I	3	40	60	100	3	1	0
ERE-425	Electrical Machines-II	3	40	60	100	3	1	0
ERE-426	Electrical Measurements-I	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-431	Network Analysis & Synthesis	2	25	25	50	0	0	2
ERE-432	Electrical Machines-II	2	25	25	50	0	0	2
ERE-433	Electrical Measurements	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-V

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-521	Power System-II	3	40	60	100	4	0	0
ERE-522	Microprocessor & Interfacing	3	40	60	100	3	1	0
ERE-523	Control System-I	3	40	60	100	3	1	0
ERE-524	Communication Systems	3	40	60	100	3	1	0
ERE-525	Power Engineering	3	40	60	100	3	1	0
ERE-526	Design of Power Apparatus	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ERE-531	Power System	2	25	25	50	0	0	2
ERE-532	Microprocessor & Interfacing	2	25	25	50	0	0	2
ERE-533	Control System-I	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-621	Power Electronics	3	40	60	100	4	0	0
ERE-622	Electrical Measurement-II	3	40	60	100	3	1	0
ERE-623	Power System Stability	3	40	60	100	3	1	0
ERE-624	Energy Audit & Management	3	40	60	100	3	1	0
ERE-625	Renewable Energy Sources	3	40	60	100	3	1	0
ERE-626	Control System-II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

26/09/14

Laboratory Courses

ERE-631	Power Electronics	2	25	25	50	0	0	2
ERE-632	MATLAB	2	25	25	50	0	0	2
ERE-633	Renewable Energy Sources	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII University Exam. Evaluation of Industrial Training shall be conducted during semester VII.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-721	Power System Protection	3	40	60	100	3	1	0
ERE-722	Electric Drives	3	40	60	100	3	1	0
ERE-723	ED Management	3	40	60	100	3	1	0
ERE-724	Major Project Phase –I	3	100	0	100	-	-	-
ERE-7xx	Elective-I	3	40	60	100	3	1	0
ERE-7xx	Elective-II	3	40	60	100	3	1	0
Total			**300**	**300**	**600**			

Laboratory Courses

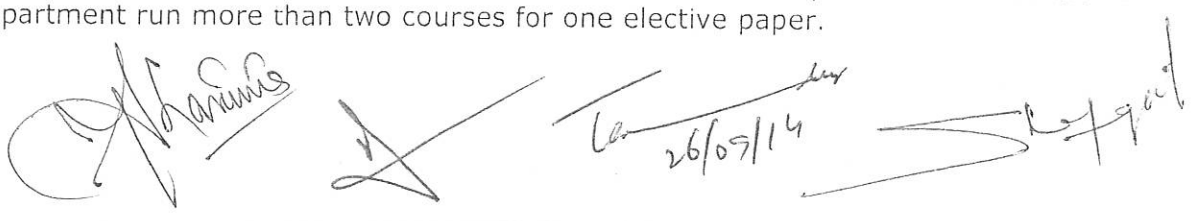
ERE-731	Power System Protection	2	25	25	50	0	0	2
ERE-732	Seminar	2	50	0	50	0	0	2
ERE-733	Industrial Training	2	50	0	50	0	0	0
Total			**125**	**25**	**150**			
Total (Theory + Lab)			**425**	**325**	**750**			

At the start of VII semester every student shall be allotted a Major Project-I under the supervision of an allotted mentor. Students are required to do preliminary exercise, survey of literature and preparation of a road map of the selected Major Project phase-I under the supervision of their allotted mentor. Students are required to complete the Major Project-I during semester VII. Major Project-I shall be evaluated internally as per university statutes by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s) of minor project/training

Elective Papers

- Students will be required to opt for two elective papers, from ERE-741 to ERE-752.
- The choice of electives will rest with the students. However, in no case will the department run more than two courses for one elective paper.



Seventh Semester Electives-I & II			
Course Code	Course Title	Course Code	Course Title
ERE-741	Electric Substation Design	ERE-747	Embedded systems
ERE-742	High Voltage Engineering	ERE-748	Artificial Intelligence
ERE-743	Virtual Instrumentation	ERE-749	VLSI Design
ERE-744	Digital Signal Processing	ERE-750	Simulation and Modeling
ERE-745	Power System Transients	ERE-751	Industrial Electronics
ERE-746	Display System Engineering	ERE-752	Disaster Management

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Exam				Hrs./Week		
		Duration (Hrs.)	IA	UE	Total Marks	L	T	P
ERE-821	Major Project Phase –II		250	200	450			
ERE-8xx	Elective-III	3	40	60	100	3	1	0
ERE-8xx	Elective-IV	3	40	60	100	3	1	0
Total			**330**	**320**	**650**			

After the university Exam of semester VII every student shall be allotted a Major Project-II pertaining to his/her stream under the supervision of an allotted mentor. Students are required to report in their respective departments to do preliminary exercise of survey of literature and preparation of a road map of the selected Major Project-II under the supervision of an allotted mentor. Students are required to complete the Major Project-II during semester VIII. Depending upon the infrastructure, Computing and other laboratories facilities the students shall be offered in house project on campus are they can complete their project work in any organization/industry outside the campus. Major Project-II shall be evaluated externally as per university statues.

Elective Papers

- Students will be required to opt for two elective papers, from ERE-831 to ERE-842.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Eighth Semester Electives-III & IV			
Course Code	Course Title	Course Code	Course Title
ERE-831	EHV AC & DC Transmission	ERE-837	Energy Economics and Planning
ERE-832	Microcontroller & Interfacing	ERE-838	Solar Passive Architecture
ERE-833	Process Control System	ERE-839	Wireless Networks
ERE-834	Restructuring of Power System	ERE-840	Principles of Marketing and Management
ERE-835	Biomedical Instrumentation	ERE-841	Random Process and Information Theory
ERE-836	Electronic Workshop Technology	ERE-842	Neural Networks and Fuzzy Systems

26/09/14

BABA GHULAM SHAH BADSHAH UNIVERSITY RAJOURI (J&K)-185234

DEPARTMENT OF ENGLISH

COUIRSE SCHEME

Course Structure of M.A English Semester-I

Course Code	Course Title	Credit Value	Internal Marks	External Marks	Total Marks
	Core Courses				
Eng-101	British Non-Fictional Prose	4	40	60	100
Eng-102	British Drama -I	4	40	60	100
Eng-103	British Poetry -I	4	40	60	100
Eng-104	British Novel-I	4	40	60	100
	Total	16	160	240	400

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Course Structure of M.A English Semester-II

Course Code	Course Title	Credit Value	Internal Marks	External Marks	Total Marks
	Core Courses				
Eng-201	Literary Theory and Criticism-I	4	40	60	100
Eng-202	British Drama-II	4	40	60	100
Eng-203	British Poetry- II	4	40	60	100
Eng-209	**(Open Elective/Common Course)** Applied English	4	40	60	100
	Total	**16**	**160**	**240**	**400**

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Course Structure of M.A English Semester-III

Course Code	Course Title	Credit Value	Internal Marks	External Marks	Total Marks
	Core Courses				
Eng-301	Literary Theory and Criticism-II	4	40	60	100
Eng-302	Indian English Literature	4	40	60	100
Eng-303	Modern Poetry	4	40	60	100
Eng-304	British Novel-II	4	40	60	100
	Total	**16**	**160**	**240**	**400**

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Course Structure of M.A English SEMESTER- IV

Course Code	Course Title	Credit Value	Internal Marks	External Marks	Total Marks
	Core Courses				
Eng-401	Literary Theory and Criticism-III	4	40	60	100
Eng-402	American Literature	4	40	60	100
Eng-403	World Literature	4	40	60	100
Choice Based Complementary Elective Courses (Students are required to opt any one of the following courses)					
Eng-450	Introduction to Sufism	4	40	60	100
Eng-451	Literature in Translation	4	40	60	100
Eng-452	Literature and Gender	4	40	60	100
	Total	**16**	**160**	**240**	**400**

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M. Sc. BIOTECHNOLOGY SYLLABUS

SUMMARY OF CREDIT DISTRIBUTION AND MARKS AS PER CBCS

SEMESTER	COURSES								Total Credits	Marks
	CORE				ELECTIVE			FOUNDATION		
	Theory (Core)	Practical (Core)	Seminar / Journal Club (Core)	Dissertation	Open (OE)	Discipline Centric (DCE) (Theory)	Discipline Centric (DCE) (Lab)	Compulsory (CF)		
Semester-1	14	6						4	24	600
Semester-2	12	6	2		4				24	600
Semester-3	14	6				2	2		24	600
Semester-4				24					24	600
	TOTAL								96	2400

M. Sc. BIOTECHNOLOGY SYLLABUS

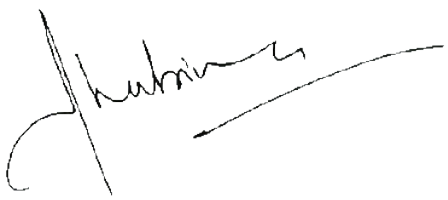
LIST OF PAPERS ALONG WITH CREDIT DISTRIBUTION AND MARKS AS PER CBCS

SEMESTERI

PAPER					CREDITS	MARKS		
S. No.	**Code**	**Title**	**Category**	**Duration [Hours]**		**Internal Assessment**	**University Examination**	**Total Marks**
1	Bio-1014	Foundation Course	Compulsory Foundation	72	4	40	60	100
2	Bio-1024	Molecular Biology	Core	72	4	40	60	100
3	Bio-1032	Microbial Bioresources	Core	36	2	20	30	50
4	Bio-1042	Plant Bioresources	Core	36	2	20	30	50
5	Bio-1052	Animal Bioresources	Core	36	2	20	30	50
6	Bio-1062	Cell Biology	Core	36	2	20	30	50
7	Bio-1072	Biomolecules	Core	36	2	20	30	50
8	Bio-1712	**Laboratory I:** Molecular Biology and Microbial Bioresources	Core	72	2	25	25	50
9	Bio-1722	**Laboratory II:** Plant and Animal Bioresources	Core	72	2	25	25	50
10	Bio-1732	**Laboratory III:** Biomolecules and Cell Biology	Core	72	2	25	25	50
Sub-total			**Core**	Theory	**14**	**140**	**210**	**350**
				Practical	**6**	**75**	**75**	**150**
			Foundation		**4**	**40**	**60**	**100**
TOTAL					**24**	**255**	**345**	**600**

SEMESTERII

PAPER					CREDITS	MARKS		
S. No.	**Code**	**Title**	**Category**	**Duration [Hours]**		**Internal Assessment**	**University Examination**	**Total Marks**
1	Bio-2014	Genetic Engineering	Core	72	4	40	60	100
2	Bio-2022	Genomics and Proteomics	Core	36	2	20	30	50
3	Bio-2034	Enzymology and Metabolism	Core	72	4	40	60	100
5		**Open Elective (OE)***						
	Bio-2514	Fundamentals of Biotechnology[@]	Elective	72	4	40	60	100
	Bio-2052	Plant Biotechnology	Core	36	2	20	30	50
6	Bio-2662	Seminar/Journal Club (JC)	Core	36	2	50		50
7	Bio-2712	**Laboratory IV:** Enzymology and Metabolism	Core	72	2	25	25	50
8	Bio-2722	**Laboratory V:** Plant Biotechnology and Genomics	Core	72	2	25	25	50
9	Bio-2732	**Laboratory VI:** Genetic Engineering	Core	72	2	25	25	50
Sub-total			**Core**	Theory	**12**	**120**	**180**	**300**
				Practical	**6**	**75**	**75**	**150**
				Seminar/JC	**2**	**50**		**50**
			Elective (Open)		**4**	**40**	**60**	**100**
TOTAL					**24**	**285**	**315**	**600**

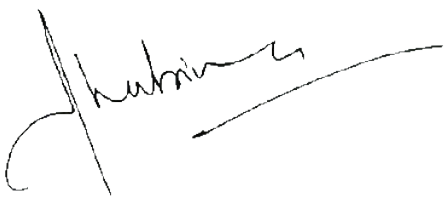


*** Open Elective Course:** Candidate has to opt 1 course out of 14 courses offered. The courses are listed separately.

[@] Open Elective Course: For students other than Biotechnology.

SEMESTERIII

PAPER					CREDITS	MARKS		
S. No.	**Code**	**Title**	**Category**	**Duration [Hours]**		**Internal Assessment**	**University Examination**	**Total Marks**
1	Bio-3012	Animal Biotechnology	Core	36	2	20	30	50
2	Bio-3022	Genetics	Core	36	2	20	30	50
2	Bio-3032	Industrial Biotechnology	Core	36	2	20	30	50
3	Bio-3042	Bioinformatics and Bio entrepreneurship	Core	36	2	20	30	50
4	Bio-3054	Immunology	Core	72	4	40	60	100
5	Bio-3062	Analytical Techniques	Core	36	2	20	30	50
6		**Discipline Centric Elective (DCE)[#]**	**Elective**	**36**	**2**	**20**	**30**	**50**
	Bio-3512	Crop Biotechnology[#]	DCE	36	2	20	30	50
	Bio-3522	Human Genetic Disorders[#]	DCE	36	2	20	30	50
	Bio-3532	Signal Transduction and Cancer Biology#	DCE	36	2	20	30	50
	Bio-3542	Protein Engineering#	DCE	36	2	20	30	50



8	Bio-3712	**Laboratory VII:** Bioinformatics and Industrial Biotechnology	Core	72	2	25	25	50
9	Bio-3722	**Laboratory VIII:** Immunology and Animal Biotechnology	Core	72	2	25	25	50
10	Bio-3732	**Laboratory IX:** Analytical Techniques and Genetics	Core	72	2	25	25	50
	Bio-3742	**Laboratory X:** Discipline Centric Elective Lab	DCE	72	2	25	25	50
Sub-total			**Core**	Theory	**14**	**140**	**210**	**350**
				Practical	**6**	**75**	**75**	**150**
			Elective (DCE) Theory		**2**	**20**	**30**	**50**
			Elective (DCE) Practical		**2**	**25**	**25**	**50**
TOTAL					**24**	**285**	**315**	**600**

[#] **Discipline Centric Elective:**Candidate has to opt 1 course out of 4 courses offered. The courses are separately listed.

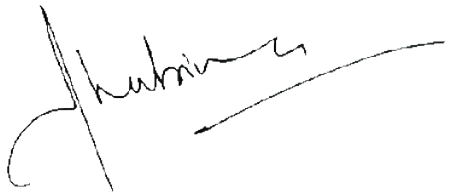
SEMESTERIV

PAPER					**CREDITS**	**MARKS**		
S. No.	**Code**	**Title**	**Category**	**Duration [Hours]**		**Internal Assessment**	**University Examination**	**Total Marks**
1	Bio-4824	Dissertation	Core	864	24		600	600
TOTAL					**24**		**600**	**600**

LIST OF OPEN ELECTIVES

SECOND SEMESTER			
S.	**Paper**	**Paper Title**	**Course**

No.	Code		Type
1	Math-201	Mathematical Tools for Real World Problems	OE
2	IT-202	Soft Skills in Information Technology	OE
3	Comp-203	Computer Applications and Operations	OE
4	Bot-205	Mysteries of Green Plants	OE
5	Bot-206	Botany in Rural Development	OE
6	Zol-207	Nutrition, Health and Hygiene	OE
7	Arab-208	Fundamentals of Arabic Language	OE
8	Eng-209	Applied English	OE
9	Edu-210	Higher Education	OE
10	Eco-211	Principles of Banking	OE
11	HT-212	Basics of Tourism and Travel Agencies	OE
12	HT-213	Tourism Resources of J&K	OE
13	Mgt-214	Business Communication and Soft Skills	OE
14	Edu-215	Instructional Technology	OE
THIRD SEMESTER			
S. No.	**Paper Code**	**Paper Title**	**Course Type**
1	Bio-3512	Protein Engineering	DCE
2	Bio-3522	Human Genetic Disorders	DCE
3	Bio-3532	Crop Biotechnology	DCE
4	Bio-3542	Signal Transduction and Cancer Biology	DCE



Semester-I

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-111	Micro Economics- I	4	40	60	100
2	MAE-112	Macro Economics-I	4	40	60	100
3	MAE-113	Mathematics for Economics	4	40	60	100
4	MAE-114	Economics of Development	4	40	60	100
Total			16	160	240	400

14/01/17

14.01.17

Semester-II

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-221	Micro Economics-II	4	40	60	100
2	MAE-222	Macro Economics-II	4	40	60	100
3	MAE-223	Statistical Methods	4	40	60	100
Choice Based Complementary Electives courses (students are required to opt any two out of the following courses)						
1		Fundamental of English	4	40	60	100
2		Fundamental of Arabic Language	4	40	60	100
3		Applied Calculus	4	40	60	100
4		Software Skills in Information technology	4	40	60	100
5		Computer Application & Operations	4	40	60	100
6		Basics of Computing	4	40	60	100
7		Basics of Tourism	4	40	60	100
8		Tourism Resources of Jammu & Kashmir	4	40	60	100
9		Mysteries of Green Plants: The corner Stone of Life	4	40	60	100
10		Botany in Rural Development	4	40	60	100
11		Fundamental of Biotechnology	4	40	60	100

14/11/17

~~Semester-III~~

SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MA Economics

Semester-III

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-331	International Economics	4	40	60	100
2	MAE-332	Public Finance	4	40	60	100
3	MAE-333	Basic Econometrics	4	40	60	100
Choice Based Complementary Electives courses (students are required to opt any two out of the following courses)						
4	MAE-334	Demography	4	40	60	100
5	MAE-335	Industrial Economics	4	40	60	100
6	MAE-336	Environmental Economics	4	40	60	100
7	MAE-337	Indian Financial System	4	40	60	100
8	MAE-338	Islamic Economics	4	40	60	100
Total			16	160	240	400

29/7/17

14/1/17

SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MA Economics

Semester-IV

Sr. No.	Course Code	Core Courses	Credit	Internal marks	University Exam Marks	Total Marks
1	MAE-441	Theory of Economic Growth	4	40	60	100
2	MAE-442	International Political Economy	4	40	60	100
3	MAE-443	Indian Economy	4	40	60	100
4	MAE-444	Dissertation (Viva-Voce 50& project work50)				100
Choice Based Complementary Electives courses (students are required to opt any one out of the following courses)						
5	MAE-445	Agricultural Economics	4	40	60	100
6	MAE-446	J&K Economy	4	40	60	100
7	MAE-447	Research Methodology& Computer Application	4	40	60	100
8	MAE-449	Political Economy	4	40	60	100
9	MAE-450	Advanced Econometrics	4	40	60	100
Total			16	160	240	400

20/3/17

20/3/17

M.A (ISLAMIC STUDIES)

SEMESTER I

Course Code	Course Title	Credits	Distribution of Marks		
			Sessional Assessment	University Examination	Total
MIS-101	Introduction to Islamic Studies	4	40	60	100
MIS-102	History of Islamic Civilization: Origin and Development (upto Khulafa-I Rashidin)	4	40	60	100
MIS-103	Islamic Religious Sciences-I (Study of Quran)	4	40	60	100
MIS-104	Islamic Religious Sciences-II(Study of Hadith)	4	40	60	100
MIS-105	Proficiency in Arabic- I	2	20	30	50
Total		18	180	270	450

Semester II

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			Sessional Assessment	University Examination	Total
MIS-201	History of Islamic Civilization (Umayyads and Abbasids)	4	40	60	100
MIS-202	Islamic Religious Sciences-III (Fiqh)	4	40	60	100
MIS-203	Ilm al-Kalam and Muslim Philosophy	4	40	60	100
MIS-204	Proficiency in Arabic-II	2	20	30	50

Complementary Choice Based Elective:

Course Code	Course Title	Credits	Distribution of Marks		
			Sessional Assessment	University Examination	Total
MIS-205	Introduction to Islamic Religious Sciences	4	40	60	100
Total		18	180	270	450

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Semester III

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MIS-301	History of Islamic Civilization in West Asia and Africa	4	40	60	100
MIS-302	Islam in the Modern World: West Asia and Africa (Thinkers, Trends & Movements)	4	40	60	100
MIS-303	Tasawwuf	4	40	60	100
MIS-304	Proficiency in Arabic-III	2	20	30	50
Complementary Choice Based Electives: *(Any one of the following)*					
MIS-305	Islamic Dawah	4	40	60	100
MIS-306	Islamic Economics and Finance	4	40	60	100
MIS-307	Islam and Science	4	40	60	100
MIS-308	Islam and Gender Studies	4	40	60	100
		18	**180**	**270**	**450**

Semester -IV

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MIS-401	Islamic Civilization in Indian Sub-Continent	4	40	60	100
MIS-402	Islam in Modern world; South Asia (Thinkers, Trends and Movements)	4	40	60	100
MIS-403	Human Rights in Islam	4	40	60	100
MIS-404	Major World Religions	4	40	60	100
MIS-405	Proficiency in Arabic-IV	2	20	30	50
	Total	**18**	**180**	**270**	**450**

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COURSE STRUCTURE & SYLLABUS FOR M.Sc. INFORMATION TECHNOLOGY (M.Sc.-IT)

FOR THE YEAR 2016, 2017, 2018

Semester-I

Course Code	Course Title	Credit Value	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MIT-141	Data Structures Using C	4	3	40	60	100
MIT-142	Internet and Web Technologies	4	3	40	60	100
MIT-143	Operating System	4	3	40	60	100
MIT-144	Digital Electronics	4	3	40	60	100
MIT -171	Lab -1: Data Structure	4	3	50	50	100
MIT -172	Lab -2: Web Technologies	4	3	50	50	100
Total		**24**	-	**260**	**340**	**600**

Semester-II

Course Code	Course Title	Credit Value	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MIT-241	Java Programming	4	3	40	60	100
MIT-242	Database Management System	4	3	40	60	100
MIT-243	Data Communication and Computer Networks	4	3	40	60	100
Choice Based Open Electives(Students are required to opt any one of the following courses)						
Math-201	Mathematical Tools in Real World Problems	4	3	40	60	100
Comp-203	Computer Applications & Operations	4	3	40	60	100
Bio-204	Fundamentals of Biotechnology	4	3	40	60	100
Bot-205	Mysteries of Green Plants	4	3	40	60	100
Bot-206	Botany in Rural Developments	4	3	40	60	100
Zol-207	Nutrition, Health & Hygiene	4	3	40	60	100
Arab-208	Fundamentals of Arabic Language	4	3	40	60	100
Eng-209	Applied English	4	3	40	60	100
Edu-210	Higher Education	4	3	40	60	100
Eco-211	Principles of Banking	4	3	40	60	100
HT-212	Basics of Tourism and Travel Agencies	4	3	40	60	100
HT-213	Tourism Resources of J&K	4	3	40	60	100
Mgt-214	Business Communication soft Skills	4	3	40	60	100
Edu-215	Instructional Technology	4	3	40	60	100
Lab Course						
MIT-271	Lab -3: Java Programming	4	3	50	50	100
MIT-272	Lab-4: Pl/SQL	4	3	50	50	100
	Total	**24**		**260**	**340**	**600**

Semester-III

Course Code	Course Title	Credit Value	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MIT-341	Dot Net Technologies using C#	4	3	40	60	100
MIT-342	Wireless and Mobile Communication	4	3	40	60	100
MIT-343	Design and Analysis of Algorithms	4	3	40	60	100
Choice based Complimentary Elective Courses(Students are required to opt any one of the following courses)						
MIT-345	Information Security	4	3	40	60	100
MIT-346	Bioinformatics	4	3	40	60	100
MIT-347	Cloud Computing	4	3	40	60	100
MIT-348	Distributed Database Management.	4	3	40	60	100
MIT-349	Web Mining	4	3	40	60	100
MIT-350	Distributed Computing	4	3	40	60	100
Lab Course						
MIT-371	Lab-5: C#	4	3	50	50	100
MIT-372	Lab-6: Algorithm Design Techniques	4	3	50	50	100
Total		24		260	340	600

Semester-IV

Course Code	Course Title	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MIT-441	Project	24	-----	200	400	600

The Components and bifurcation of marks of the course code MIT-441 in Semester IV shall be as follows:

Components	IA	UE
Project Work	-	100
Presentation	100	150
Viva Voce	100	150
Total	200	400

IA- Internal Assessment
UE- University Examination

Outline Curriculum for M. Sc. Programme in Zoology-2017-2020

Semester I

Course	Theory course		Credits
	Course code	Course title	
Core courses	Zol-150	Principles of Animal Taxonomy	02
	Zol-151	Animal Resources and their utilization	02
	Zol-152	Invertebrates: structure and function	04
	Zol-153	Cell Biology	02
	Zol-154	Molecular Biology	04
	Zol-155	Elements of Toxicology	02
	Lab course		
	Zol-160	Lab course on Animal Taxonomy & Animal Resources	02
	Zol-161	Lab course on Elements of Toxicology & Cell Biology	02
	Zol-162	Lab course on Invertebrates & Molecular Biology	04
		Total Credits	**24**

Semester II

	Theory course		Credits
	Course code	Course title	
Core courses	Zol-250	Vertebrates: Structure and Function	04
	Zol-251	Genetic Engineering	02
	Zol-252	Fundamentals of Biochemistry	04
	Zol-253	Bioinformatics and Biostatistics	02
Open courses			
	Math-201	Mathematical Tools for Real World Prob'ems	04
	IT.- 202	Soft Skills in Information Technology	04
	Comp.-203	Computer Applications and Technology	04
	Bio-204	Fundamentals of Biotechnology	04
	Bot-205	Mysteries of Green Plants	04
	Bot-206	Botany in Rural Development	04
	Arab-208	Fundamentals of Arabic Language	04
	Eng-209	Applied English	04
	Edu-210	Higher Education	04
	Eco-211	Principles of Banking	04
	HT-212	Basics of Tourism and Travel Agencies	04
	HT-213	Tourism Resources of J&K	04
	MGT-214	Business Communication and Skills	04
	Edu-215	Instructional Technology	04
	Lab Course		
	Zol-260	Lab course on Vertebrates & Bioinformatics and Biostatistics	04
	Zol-261	Lab course on Fundamentals of Biochemistry & Genetic Engineering	04
		Total Credits	**24**

Semester III

Course	Theory course		Credits
	Course code	Course title	
Core courses	Zol-350	Animal Biotechnology	02
	Zol-351	Animal Resources, Threats and conservation	02
	Zol-352	Biology of Immune system	04
	Zol-353	Cytology and Cytogenetics	04
	Zol-354	Embryology and Histology	02
Elective courses		One of the following	
	Zol-355	Principles of Parasitology	02
	Zol-356	Insect Morphology and Physiology	02
	Zol-357	Elements of Ichthyology	02
	Lab Course	Any	
	Zol-360	Lab course on Animal Biotechnology, Embryology and Histology & Biology of Immune system	04
	Zol-361	Lab course on Elective course, Animal Resources, Threats and conservation & Cytology and Cytogenetic	04
		Total Credits	**24**

Semester IV

Course	Theory courses		Credits
	Course code	Course title	
	Zol-450	Ecology and Environmental Biology	02
	Zol-451	Animal Physiology	04
	Zol-452	Fundamentals of Endocrinology	04
	Zol-453	[redacted] Dissertation	04
Elective courses			
	Zol-454	Nematode Structure	02
	Zol-455	Human Genetics	02
	Zol-456	Wildlife Biology, Conservation and Management	02
	Lab Course		
	Zol-460	Lab course on Ecology and Environmental Biology & Elective paper	04
	Zol-461	Lab course on Animal physiology & Endocrinology.	04
		Total Credits	**24**

COURSE STRUCTURES FOR M A ARABIC

Semester I

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MAR-141	Classical Arabic Prose-I	4	40	60	100
MAR-142	Classical Arabic Poetry-I	4	40	60	100
MAR-143	History of Arabic Literature-I	4	40	60	100
MAR-144	Applied Arabic Grammar and Morphology	4	40	60	100
Total		**16**	**160**	**240**	**400**

Semester II

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MAR-241	Classical Arabic Prose-II	4	40	60	100
MAR-242	Classical Arabic Poetry-II	4	40	60	100
MAR-243	History of Arabic Literature-II	4	40	60	100
Choice Based Open Elective Course (Students are required to opt any one of the following courses)					
Math- 201	Applied Calculus	4	40	60	100
I.T. 202	Soft Skills in Information Technology	4	40	60	100
Comp-203	Computer Applications and Operations	4	40	60	100
Bio- 204	Fundamentals of Biotechnology	4	40	60	100
Bot- 205	Mysteries of Green Plants	4	40	60	100
Bot- 206	Botany in Rural Developments	4	40	60	100
Zol- 207	Nutrition, Health & Hygiene	4	40	60	100
ARB-208	Fundamentals of Arabic Language	4	40	60	100
Eng- 209	Applied English	4	40	60	100
Edu- 210	Higher Education	4	40	60	100
Eco- 211	Principles of Banking	4	40	60	100
HT- 212	Basic of Tourism and Travel Agency	4	40	60	100
HT- 213	Tourism Resources of J&K	4	40	60	100
		16	**160**	**240**	**400**

214
215

18/11/2017 Md. Affan

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Semester III

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MAR-341	Modern Arabic Prose-I	4	40	60	100
MAR-342	Modern Arabic Poetry-I	4	40	60	100
MAR-343	Translation and Composition-I	4	40	60	100
MAR-344	Fundamentals of Rhetoric	2	20	30	50
Complementary Choice Based Electives: *(Any one of the following)*					
MAR-345	Fundamentals of Literary Criticism	4	40	60	100
MAR-346	Arabic Literature in India	4	40	60	100
MAR-347	Mahjar Literature	4	40	60	100
MAR-348	History of Arabic Literature in Spain	4	40	60	100
MAR-349	Arabic Prose and Poetry In Spain	4	40	60	100
MAR-350	Modern Trends in Arabic Literature	4	40	60	100
	Total	**18**	**180**	**270**	**450**

Semester IV

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			**Sessional Assessment**	**University Examination**	**Total**
MAR-441	Modern Arabic Prose-II	4	40	60	100
MAR-442	Modern Arabic Poetry-II	4	40	60	100
MAR-443	Translation and Composition-II	4	40	60	100
MAR-444	Arabic Linguistics	2	20	30	50
MAR-445	Research Methodology	2	20	30	50
MAR-446	Project-Viva Voce	2	-	50	50
	Total	**18**	**180**	**270**	**450**

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18/11/2017

COURSE STRUCTURES FOR M A URDU

Semester I

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			Sessional Assessment	University Examination	Total
MUR-101	Classical Urdu Ghazal	4	40	60	100
MUR-102	Urdu Masnavi	4	40	60	100
MUR-103	Urdu Qasida	4	40	60	100
MUR-104	Urdu Marsiya	4	40	60	100
Total		**16**	**160**	**240**	**400**

Semester II

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			Sessional Assessment	University Examination	Total
MUR-201	Jadeed Urdu Ghazal	4	40	60	100
MUR-202	Jadeed Urdu Nazm	4	40	60	100
MUR-203	Urdu Novel	4	40	60	100
MUR-204	Urdu Afsana	4	40	60	100
Choice Based Open Elective Course (Students are required to opt any one of the following courses)					
Math- 201	Mathematical Tools for Real World Problems	4	40	60	100
I.T. 202	Soft Skills in Information Technology	4	40	60	100
Comp-203	Computer Applications and Operations	4	40	60	100
Bio- 204	Fundamentals of Biotechnology	4	40	60	100
Bot- 205	Mysteries of Green Plants	4	40	60	100
Bot- 206	Botany in Rural Developments	4	40	60	100
Zol- 207	Nutrition, Health & Hygiene	4	40	60	100
ARB-208	Fundamentals of Arabic Language	4	40	60	100
Eng- 209	Applied English	4	40	60	100
Edu- 210	Higher Education	4	40	60	100
Eco- 211	Principles of Banking	4	40	60	100
HT- 212	Basic of Tourism and Travel Agencies	4	40	60	100
HT- 213	Tourism Resources of J&K	4	40	60	100
MGT-214	Business Communication and Soft				

	Skills				
Edu-215	Instructional Technology				
Total		**20**	**200**	**300**	**500**

Semester III

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			Sessional Assessment	University Examination	Total
MUR-301	Urdu Nasr Ki Tareekh	4	40	60	100
MUR-302	Urdu Adab Ki Tareekh	4	40	60	100
MUR-303	Urdu Drama	4	40	60	100
MUR-304	Urdu Mein Adabi Tahreekat O- Rujhanat	4	40	60	100
Electives (Any one of the following)					
MUR-305	Special Study of Mir Taqi Mir	4	40	60	100
MUR-306	Special Study of Iqbal	4	40	60	100
MUR-307	Special Study of Prem Chand	4	40	60	100
MUR-308	Special Study of Sir Syed Tahreek	4	40	60	100
MUR-309	Translation Urdu to English and Vice Versa	4	40	60	100
	Total	**20**	**200**	**300**	**500**

Semester- IV

Course Code	Course Title	Credits	Distribution of Marks		
Core Courses:			Sessional Assessment	University Examination	Total
MUR-401	Ghair Afsanavi Nasr	4	40	60	100
MUR-402	Urdu mein Tahqeeq aur Tanqeed ki Rewayat	4	40	60	100
MUR-403	Urdu ke muasir adabi nazireyat(Theories)	4	40	60	100
MUR-404	Zaraya Tarseel o Ibagh	4	40	60	100
MUR-405	Project Report (Maqala)	4	40	60	100
	Total	**20**	**200**	**300**	**500**

Syllabus

for

M.Ed Programme

(from the academic session 2017 and onwards)

SCHOOL OF EDUCATION

Baba Ghulam Shah Badshah University

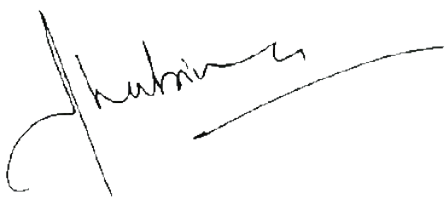
Rajouri (J&K)-185234

M.ED

1st Semester

Course Code	Title	Credit Value	Internal Marks	External Narks	Total Marks
Semester I					
M.Ed-110	Philosophical Perspectives of Education	4	40	60	100
M.Ed-111	Psychological Perspectives of Education	4	40	60	100
M.Ed-112	Development of Education System in India	4	40	60	100
M.Ed-113	Methodology of Educational Research	4	40	60	100
Practicum					
M.Ed-150	Self-Development (Communication and Expository Writing)	2	25	25	50
M.Ed-150	Computer Fundamentals and its Application	2	25	50	50

Aggregate Marks of 1st Semester = 500 **Total credits= 20**



Course Structure for M. Ed
Semester-II

Course Code	Course Title	Credit Value	Internal Marks	External Narks	Total Marks
	Core Courses				
M.Ed-210	Sociological Perspectives of Education	4	40	60	100
M.Ed-211	Teacher Education	4	40	60	100
M.Ed-212	Statistics in Education and Psychology	4	40	60	100
M.Ed-213	Comparative Education and Curriculum Development	4	40	60	100
M.Ed-214	Dissertation Work-I	2	50	X	50
Choice Based Open Elective Course (Students are required to opt any one of the following courses)					
Math- 201	Mathematical Tools for Real World	4	40	60	100
IT- 202	Soft Skill in Information Technology	4	40	60	100
Comp-203	Computer Applications and Operations	4	40	60	100
Bio- 204	Fundamentals of Biotechnology	4	40	60	100
Bot- 205	Mysteries of Green Plants	4	40	60	100
Bot- 206	Botany in Rural Developments	4	40	60	100
Zol- 207	Nutrition, Health & Hygiene	4	40	60	100
Arab- 208	Fundamental of Arabic Language	4	40	60	100
Eng- 209	Fundamentals if English	4	40	60	100
Eco- 211	Principles of Banking	4	40	60	100
HT- 212	Basic of Tourism and Travel Agency	4	40	60	100
HT- 213	Tourism Recourses of J&K	4	40	60	100
Mgt - 214	Business Communication and Soft Skills	4	40	60	100
	Total	**22**	**250**	**300**	**550**

Aggregate marks of Semester-II = 550

Total credits = 22

H.O.D.
Dept. of Education
BGSBU, Rajouri

Azad Ahmed
Sayeema Kauser

Course Structure for M.Ed

Semester-III

Course Code	Course Title	Credit Value	Internal Marks	External Narks	Total Marks
	Core Courses				
M.Ed-310	Educational Technology	4	40	60	100
M.Ed-311	Educational Measurement and Evaluation	4	40	60	100
M.Ed-312	Guidance and Counselling	4	40	60	100
M.Ed-313	Dissertation Work-II	2	50	X	50
Choice Based Complementary Elective Courses (Students are required to opt any one of the following courses)					
M.Ed-313	Secondary Education	4	40	60	100
M.Ed-314	Environmental Education	4	40	60	100
M.Ed-315	Higher Education	4	40	60	100
M.Ed-316	Gender Studies	4	40	60	100
Practicum					
M.Ed-350	Field Attachment/Internship	4	40	60	100
	Total	**22**	**250**	**300**	**550**

Aggregate Marks of 1st Semester = 550

Total credits= 22

Course Structure for M. Ed
Semester-IV

Course Code	Course Title	Credit Value	Internal Marks	External Narks	Total Marks
	Core Courses				
M.Ed-410	Educational Administration and Management	4	40	60	100
M.Ed-411	Information and Communication Technologies (ICTs)	4	40	60	100
M.Ed-412	Inclusive Education	4	40	60	100
M.Ed-413	Dissertation Work-III	4	50	50	100
Choice Based Complementary Elective Courses (Students are required to opt any one of the following courses)					
M.Ed-414	Peace Education	4	40	60	100
M.Ed-415	Early Childhood Care and Education	4	40	60	100
M.Ed-416	History and Problems of Education in J&K	4	40	60	100
M.Ed-417	Mental Health and Education	4	40	60	100
	Total	**20**	**210**	**290**	**500**

Aggregate marks of semester-IV = 500

Total credits = 20

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Semester - I

S. No.	COURSE CODE	COURSE TITLE	No. of Credits	Distribution of Marks		
				SA	UE	Total
Theory						
1.	MPH-111	Classical Mechanics and Relativity	4	40	60	100
2.	MPH-112	Mathematical Physics	4	40	60	100
3.	MPH-113	Solid State Physics	4	40	60	100
4.	MPH-114	Electronics	4	40	60	100
5.	MPH-115	Crystal Growth Techniques	4	40	60	100
Practical						
1.	MPH-116	General Physics Lab	2	25	25	50
2	MPH-117	Electronics Lab	2	25	25	50
		Total	**24**	**250**	**350**	**600**

SA: Sessional Assessment
UE: University Examination

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Semester – II

S. No.	COURSE CODE	COURSE TITLE	Credits	Distribution of Marks		
				SA	UE	Total
Theory						
1.	MPH-211	Quantum Mechanics-I	4	40	60	100
2.	MPH-212	Thermodynamics and Statistical Physics	4	40	60	100
3.	MPH-213	Atomic Physics and Molecular Spectroscopy	4	40	60	100
4.	MPH-214	Digital Electronics and Microprocessors	4	40	60	100
5.	MPH-215	Seminar	2	50	-	50
Choice based open elective course *Student are required to opt any one of the following courses*						
1.	IT. 202	Soft skills in Information Technology	04	40	60	100
2.	Comp. 203	Computer Applications and Operations	04	40	60	100
3.	Bio. 204	Fundamentals of Biotechnology	04	40	60	100
4.	Bot. 205	Mysteries of Green Plants	04	40	60	100
5.	Bot. 206	Botany in Rural Development	04	40	60	100
6.	Zol. 207	Nutrition, Health and Hygiene	04	40	60	100
7.	Arab. 208	Fundamentals of Arabic Language	04	40	60	100
8.	Eng. 209	Applied English	04	40	60	100
9.	Edu. 210	Higher Education	04	40	60	100
10.	Eco. 211	Principles of Banking	04	40	60	100
11.	HT. 212	Basics of Tourism and Travel Agencies	04	40	60	100
12.	HT. 213	Tourism Resources of J and K	04	40	60	100
13.	Mgt. 214	Business communication and soft skills	04	40	60	100
14.	Edu. 215	Instructional Technology	04	40	60	100
Practical						
1.	MPH-216	Advanced General Physics Lab	2	25	25	50
		Total	**24**	**275**	**325**	**600**

SA: Sessional Assessment
UE: University Examination

Semester – III

S.No.	COURSE CODE	COURSE TITLE	Credits	Distribution of Marks		
				SA	UE	Total
Theory						
1.	MPH-311	Quantum Mechanics-II	4	40	60	100
2.	MPH-312	Electrodynamics & Electromagnetic Theory	4	40	60	100
3.	MPH-313	Nuclear Physics-I	4	40	60	100
Choice based Complementary Electives						
(Students are required to choose any two of the following courses)						
1.	MPH-331	Materials Science and Characterization	4	40	60	100
2.	MPH-332	Biomedical Instrumentation	4	40	60	100
3.	MPH-333	Signal Processing and Comm.	4	40	60	100
4.	MPH-334	Biophotonics	4	40	60	100
5.	MPH-335	Thin film Science and Technology	4	40	60	100
6.	MPH-336	Nanoscience and Technology	4	40	60	100
7.	MPH-337	Satellite Comm. and Remote sensing	4	40	60	100
8.	MPH-338	Radiation Physics	4	40	60	100
PRACTICAL						
1.	MPH- 314	Project work – Phase I	2	25	25	50
2.	MPH- 315	Advanced Electronics Lab	2	25	25	50
		Total	**24**	**250**	**350**	**600**

SA: Sessional Assessment
UE: University Examination

Semester – IV

S. No	COURSE CODE	COURSE TITLE	Credits	Distribution of Marks		
				SA	UE	Total
Theory						
1.	MPH-411	Numerical Methods & Programming	4	40	60	100
2.	MPH-412	Nuclear Physics-II	4	40	60	100
Choice based Complementary Electives *(The students are required to choose any two of the following courses)*						
1.	MPH-441	Nanophotonics	4	40	60	100
2.	MPH-442	Chaos and Solitons	4	40	60	100
3.	MPH-443	Nonlinear Optics and Materials	4	40	60	100
4.	MPH-444	Nonlinear Fibre Optics	4	40	60	100
5.	MPH-445	Advanced Optics And Laser Technology	4	40	60	100
6.	MPH-446	Astrophysics	4	40	60	100
Practical						
1	MPH-413	Project work – Phase II	8	100	100	200
Total			**24**	**260**	**340**	**600**

SA: Sessional Assessment
UE: University Examination

Course Outline: M. Sc. Botany

Semester I

Course Code	Course Title	Credit	Internal Assessment Marks	University Exam Marks	Max. Marks
Core Courses					
Bot-150	Algae and Lichens: Structure and Diversity	04	40	60	100
Bot-151	Bryophytes and Pteridophytes: Structure and Diversity	04	40	60	100
Bot-152	Anatomy and Developmental Biology of Angiosperms	04	40	60	100
Bot-153	Cell Biology	02	20	30	50
Bot-154	Molecular Biology	02	20	30	50
Laboratory Courses					
Bot-160	Lab Course based on Bot-150, Bot-151 and Bot-152	06	75	75	150
Bot-161	Lab Course based on Bot-153 and Bot-154	02	25	25	50
	Total	**24**	**260**	**340**	**600**

Course Outline: M. Sc. Botany

Semester II

Course Code	Course Title	Credit	Internal Assessment Marks	University Exam. Marks	Max. Marks
Core Courses					
Bot-250	Gymnosperms: Structure and Diversity	02	20	30	50
Bot-251	Mycology and Plant Pathology	04	40	60	100
Bot-252	Plant Taxonomy	04	40	60	100
Bot-253	Bacteria and Viruses: Structure and Diversity	02	20	30	50
Open Choice Elective Courses. Students are required to opt any one the following courses					
Math- 201	Mathematical Tools for Real World Problems	04	40	60	100
IT.- 202	Soft Skills in Information Technology	04	40	60	100
Comp-203	Computer Applications and Operations	04	40	60	100
Bio-204	Fundamentals of Biotechnology	04	40	60	100
Zol- 207	Nutrition, Health and Hygiene	04	40	60	100
Arab- 208	Fundamentals of Arabic Language	04	40	60	100
Eng- 209	Applied English	04	40	60	100
Edu. 210	Higher Education	04	40	60	100
Eco-211	Principles of Banking	04	40	60	100
HT-212	Basics of Tourism and Travel Agency	04	40	60	100
HT-213	Tourism Resources of J&K	04	40	60	100
Mgt-214	Business Communication & Soft Skills	04	40	60	100
Edu-215	Instructional Technology	04	40	60	100
Laboratory Courses					

25/5/17

Bot-260	Lab Course based on Bot-250 and Bot-252	04	50	50	100
Bot-261	Lab Course based on Bot-251 and Bot-253	04	50	50	100
	Total	**24**	**260**	**340**	**600**

Course Outline: M. Sc. Botany

Semester III

Course Code	Course Title	Credit	Internal Assessment Marks	University Exam	Max. Marks
Core Courses					
Bot-350	Cytology and Cytogenetics	04	40	60	100
Bot-351	Reproductive Biology of Angiosperms	04	40	60	100
Bot-352	Plant Resources and Utilization	04	40	60	100
Bot-353	Biostatistics and Bioinformatics	02	20	30	50
Choice Based Complimentary Electives	Students are required to choose one				
Bot-354	Recombinant DNA Technology	02	20	30	50
Bot-355	Forest Ecology-I	02	20	30	50
Bot-356	Plant Biotechnology-I	02	20	30	50
Bot-357	Biodiversity and Conservation-I	02	20	30	50
Laboratory Courses					
Bot-360	Lab Course based on Bot-350, Bot-351 and Bot-352	06	75	75	150
Bot-361	Lab Course based on Bot-353 and Bot-354/355/356/357	02	25	25	50
	Total	**24**	**260**	**340**	**600**

COURSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-I

Course Code	Course Title (Core Courses)	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-141	Mathematical Foundation of Computer Science	4	3	40	60	100
MC-142	Digital Electronics	4	3	40	60	100
MC-143	Operating Systems	4	3	40	60	100
MC-144	Principles of Programming & Problem Solving using C	4	3	40	60	100
MC-171	Lab 1: PC Software	4	3	50	50	100
MC-172	Lab 2: C Programming	4	3	50	50	100
	Total Marks			**260**	**340**	**600**

IA – Internal Assessment
UE – University Examination

COURSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

(10)

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-II

Core Courses

Course Code	Course Title	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-241	Software Engineering	4	3	40	60	100
MC-242	Computer System Architecture	4	3	40	60	100
MC-243	Data and File Structures using C++	4	3	40	60	100
	Choice Based Open Elective	4	3	40	60	100
MC-271	Lab 3: C++	4	3	50	50	100
MC-272	Lab 4: Data and File Structures using C++	4	3	50	50	100
	Total Marks			260	340	600

Open Choice Electives

S. No.	Course Code	Course Title	Credits	Scheme of Examination			
				Duration	Marks		
1.	Math – 201	Mathematical Tools for Real World Problems ✓	4	3	40	60	100
2.	IT – 202	Soft Skills in Information Technology ✓					
3.	Comp – 203	Computer Applications & Operations					
4.	Bio – 204	Fundamentals of Biotechnology ✓					
5.	Bot – 205	Mysteries of Green Plants ✓					
6.	Bot – 206	Botany in Rural Development ✓					
7.	Zol – 207	Nutrition, Health and Hygiene ✓					
8.	Mar- 208	Fundamentals of Arabic Language ✓					
9.	Eng. 209	Applied English ✓					
10.	Edu – 210	Higher Education ✓					
11.	Eco – 211	Principles of Banking ✓					
12.	HT – 212	Basics of Tourism and Travel Agencies ✓					
13.	HT – 213	Tourism Resources of J&K ✓					
14.	Mgt – 214	Business Communication & Soft Skills ✓					
15.	Edu – 215	Instructional Technology ✓					

Note:

* Students will choose one of the above courses.

COURSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-III

Core Courses

Course Code	Course Title	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-341	Analysis & Design of Algorithm	4	3	40	60	100
MC-342	Data Communication & Computer Networks	4	3	40	60	100
MC-343	Relational Database Management System	4	3	40	60	100
MC-344	Java Programming	4	3	40	60	100
MC-371	Lab 5: Relational Database Management System	4	3	50	50	100
MC-372	Lab 6: Java Programming	4	3	50	50	100
Total Marks				**260**	**340**	**600**

IA – Internal Assessment
UE – University Examination

COURSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-IV

Core Courses

Course Code	Course Title (Core Courses)	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-441	Theory of Computation	4	3	40	60	100
MC-442	Dot Net Technologies using C#	4	3	40	60	100
MC-443	Minor Project	8	3	50	150	200
Choice Based Complimentary Elective **						
MC-444	Management Information System	4	3	40	60	100
MC-445	Operations Research					
MC-446	Wireless & Mobile Communication					
MC-447	Simulation and Modeling					
MC-448	Data Storage and Management					
MC-449	Object Oriented Analysis & Design					
MC-450	Computer Graphics					
MC-451	Software Testing					
MC-471	Lab 7: Dot Net Technologies using C#	4	3	50	50	100
Total Marks				**260**	**340**	**600**

* Students will have to choose one course from Choice Based Complimentary Elective epending upon the availability of faculty.

URSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-V

ore Courses

Course Code	Course Title (Core Courses)	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-541	Cryptography & Network Security	4	3	40	60	100
MC-542	Artificial Intelligence	4	3	40	60	100
MC-543	Web Technologies	4	3	40	60	100
Choice Based Complimentary Elective* **						
MC-544	Data Warehousing and Data Mining	4	3	40	60	100
MC-545	Parallel and Distributed Computing					
MC-546	Web Mining					
MC-547	Compiler Design					
MC-548	Systems Software					
MC-549	Pervasive Computing					
MC-550	Bio Informatics					
MC-551	Cloud Computing					
MC-552	Big Data Analytics	4	3	50	50	100
MC-571	Lab 8: Web Technology	4	3	50	50	100
MC-572	Lab 9: Linux/Unix					
Total Marks				**260**	**340**	**600**

*** Students will have to choose one course from Choice Based Complimentary Elective depending upon the availability of faculty.

COURSE SCHEME & SYLLABUS FOR MCA-M.Sc. COMPUTER SCIENCE

FOR THE YEAR

2016, 2017, 2018 & 2019

MCA - M.Sc. Computer Science – SEMESTER-VI

Course Code	Course Title (Core Courses)	Credits	Scheme of Examination			
			Duration	Marks		
			Hours	IA	UE	Total
MC-641	Major Project	24	--	200	400	**600**

The components and bifurcation of marks of the course code MC-641 in Semester VI shall be as follows:

Components	IA	UE
Project Work	-	100
Presentation	100	150
Viva Voce	100	150
Total	**200**	**400**

IA – Internal Assessment
UE – University Examination

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Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Syllabus First to Eighth Semester
B. Tech. Degree Course

Department of Computer Science & Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

18/03/13

Curriculum Structure – Computer Science & Engineering
(2012 – 2016)

Semester–I

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CSE-121	Communication Skills	3	40	60	100	3	1	0
CSE-122	Mathematics-I	3	40	60	100	3	1	0
CSE-123	Computer Fundamentals	3	40	60	100	3	1	0
CSE-124	Basic Electronics	3	40	60	100	3	1	0
CSE-125	Engineering Mechanics	3	40	60	100	3	1	0
CSE-126	Engineering Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Course

CSE-131	Computer Fundamentals	2	25	25	50	0	0	2
CSE-132	Basic Electronics	2	25	25	50	0	0	2
CSE-133	Engineering Mechanics	2	25	25	50	0	0	2
CSE-134	Workshop Practice	2	50		50	0	0	2
Total			**125**	**75**	**200**			
Total (Theory + Lab)			**365**	**435**	**800**			

Semester – II

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CSE-221	Fundamentals of Mech. Engg.	3	40	60	100	4	0	0
CSE-222	Mathematics-II	3	40	60	100	3	1	0
CSE-223	C Programming	3	40	60	100	3	1	0
CSE-224	Basic Electrical Engineering	3	40	60	100	3	1	0
CSE-225	Engineering Physics	3	40	60	100	3	1	0
CSE-226	Eng. Chemistry & Env. Sciences	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CSE-231	C Programming	2	25	25	50	0	0	2
CSE-232	Basic Electrical Engineering	2	25	25	50	0	0	2
CSE-233	Engineering Physics	2	25	25	50	0	0	2
CSE-234	Eng. Chemistry & Env. Sciences	2	25	25	50	0	0	2
	Total		**100**	**100**	**200**			
Total (Theory + Lab)			**340**	**460**	**800**			

Semester-III

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CSE-321	Mathematics-III	3	40	60	100	3	1	0
CSE-322	Data Structures with C	3	40	60	100	3	1	0
CSE-323	Object Oriented Programming	3	40	60	100	3	1	0
CSE-324	Signals & Systems	3	40	60	100	3	1	0
CSE-325	Digital Electronics	3	40	60	100	3	1	0
CSE-326	Database Management System	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CSE-331	Data Structures with C	2	25	25	50	0	0	2
CSE-332	Digital Electronics	2	25	25	50	0	0	2
CSE-333	Database Management System	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-IV

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CSE-421	Mathematics-IV	3	40	60	100	3	1	0
CSE-422	Microprocessor & Interfacing	3	40	60	100	3	1	0
CSE-423	Software Engineering	3	40	60	100	3	1	0
CSE-424	Operating Systems	3	40	60	100	3	1	0
CSE-425	Data Comm. & Computer Networks	3	40	60	100	3	1	0
CSE-426	Computer Graphics	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CSE-431	Microprocessor & Interfacing	2	25	25	50	0	0	2
CSE-432	Computer Graphics	2	25	25	50	0	0	2
CSE-433	Object Oriented Programming	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

18/03/13

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations in an Organization/Industry/Company. After the completion of training they have to prepare a detailed report of the training work which they have attended. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII university examination. The evaluation of Industrial Training shall be done during semester VII.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
CSE-721	Fundamentals of Digital Image Processing	3	40	60	100	4	0	0
CSE-722	Entrepreneurship Development Management	3	40	60	100	3	1	0
CSE-723	Computer Based Numerical Techniques	3	40	60	100	3	1	0
CSE-724	Major Project-Phase I	-	100	-	100	-	-	-
	Elective-I	3	40	60	100	3	1	0
	Elective-II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

CSE-731	Fundamentals of Digital Image Processing	2	25	25	50	0	0	2
CSE-732	Computer Based Numerical Technique	2	25	25	50	0	0	2
CSE-733	Industrial Training	-	50	-	50	0	0	2
Total			**100**	**50**	**150**			
Total (Theory + Lab)			**340**	**410**	**750**			

During semester VII every student shall be allotted a Major Project-Phase I under the supervision of an allotted mentor. Students are required to do preliminary exercise of survey of literature and preparation of a road map of the selected Project under the supervision of their allotted mentor. Major Project- Phase I is to be completed during semester VII and shall be evaluated internally as per university statutes by a committee consisting of:

i) Head of the Department
ii) One member nominated by Principal
iii) Coordinator(s)/Supervisor(s)/Mentor(s) of project

Elective Papers in VII semester:

- Students will be required to opt for two elective papers from CSE-741 to CSE-752.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Electives-I & II

CODE	SUBJECT	CODE	SUBJECT
CSE-741	Distributed Computing	CSE-746	Expert Systems
CSE-742	Grid Computing	CSE-747	Distributed Database System
CSE-743	Advanced Computer Architecture	CSE-748	Neural Networks
CSE-744	Compiler Design	CSE-749	Display System Engineering
CSE-745	Pattern Recognition	CSE-750	Optical Communication
CSE-746	Advanced Java	CSE-752	.Net Technologies

CSE-751

CSE-751 Advanced Java.

Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Syllabus First to Eighth Semester
B. Tech. Degree Course

Department of Information Technology & Engineering
College of Engineering and Technology
School of Mathematical Sciences & Engineering
Baba Ghulam Shah Badshah University
Rajouri (J&K)-185131

Curriculum Structure – Information Technology
(2012 – 2016)

Semester–I

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-121	Communication Skills	3	40	60	100	3	1	0
ITE-122	Mathematics-I	3	40	60	100	3	1	0
ITE-123	Computer Fundamentals	3	40	60	100	3	1	0
ITE-124	Basic Electronics	3	40	60	100	3	1	0
ITE-125	Engineering Mechanics	3	40	60	100	3	1	0
ITE-126	Engineering Drawing	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Course

ITE-131	Computer Fundamentals	2	25	25	50	0	0	2
ITE-132	Basic Electronics	2	25	25	50	0	0	2
ITE-133	Engineering Mechanics	2	25	25	50	0	0	2
ITE-134	Workshop Practice	2	50		50	0	0	2
Total			**125**	**75**	**200**			
Total (Theory + Lab)			**365**	**435**	**800**			

Semester – II

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-221	Fundamentals of Mech. Engg.	3	40	60	100	4	0	0
ITE-222	Mathematics-II	3	40	60	100	3	1	0
ITE-223	C Programming	3	40	60	100	3	1	0
ITE-224	Basic Electrical Engineering	3	40	60	100	3	1	0
ITE-225	Engineering Physics	3	40	60	100	3	1	0
ITE-226	Eng. Chemistry & Env. Sciences	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-231	C Programming	2	25	25	50	0	0	2
ITE-232	Basic Electrical Engineering	2	25	25	50	0	0	2
ITE-233	Engineering Physics	2	25	25	50	0	0	2
ITE-234	Eng. Chemistry & Env. Sciences	2	25	25	50	0	0	2
	Total		**100**	**100**	**200**			
Total (Theory + Lab)			**340**	**460**	**800**			

Semester-III

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-321	Mathematics-III	3	40	60	100	3	1	0
ITE-322	Data Structures Using C	3	40	60	100	3	1	0
ITE-323	Object Oriented Programming	3	40	60	100	3	1	0
ITE-324	Signals & Systems	3	40	60	100	3	1	0
ITE-325	Digital Electronics	3	40	60	100	3	1	0
ITE-326	Operating Systems	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-331	Data Structures Using C	2	25	25	50	0	0	2
ITE-332	Digital Electronics	2	25	25	50	0	0	2
ITE-333	Object Oriented Programming	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-IV

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-421	Mathematics-IV	3	40	60	100	3	1	0
ITE-422	Microprocessor & Interfacing	3	40	60	100	3	1	0
ITE-423	Analog Communication System	3	40	60	100	3	1	0
ITE-424	Data Base Management System	3	40	60	100	3	1	0
ITE-425	Design & Analysis of Algorithms	3	40	60	100	3	1	0
ITE-426	Principles of Marketing & Management	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-431	Microprocessor & Interfacing	2	25	25	50	0	0	2
ITE-432	Analog Communication System	2	25	25	50	0	0	2
ITE-433	Data Base Management System	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

15/03/13

Semester-V

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-521	Theory of Automata	3	40	60	100	3	1	0
ITE-522	Visual Programming	3	40	60	100	3	1	0
ITE-523	Software Engineering	3	40	60	100	3	1	0
ITE-524	Digital Communication System	3	40	60	100	3	1	0
ITE-525	Computer Graphics & Multimedia	3	40	60	100	3	1	0
ITE-526	Computer Organization & Architecture	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-531	Visual Programming	2	25	25	50	0	0	2
ITE-532	Digital Communication System	2	25	25	50	0	0	2
ITE-533	Computer Graphics & Multimedia	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

Semester-VI

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-621	Cryptography & Network Security	3	40	60	100	3	1	0
ITE-622	Mobile & Wireless Communication	3	40	60	100	3	1	0
ITE-623	Java Programming	3	40	60	100	3	1	0
ITE-624	Data Communication & Computer Networks	3	40	60	100	3	1	0
ITE-625	Management Information Systems	3	40	60	100	3	1	0
ITE-626	Internet & Web Technology	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-631	Java Programming	2	25	25	50	0	0	2
ITE-632	Internet & Web Technology	2	25	25	50	0	0	2
ITE-633	Mini Project	2	25	25	50	0	0	2
Total			**75**	**75**	**150**			
Total (Theory + Lab)			**315**	**435**	**750**			

15/03/13

At the end of semester VI students are required to attend an Industrial Training for 6 weeks duration, during summer vacations. After the completion of training every student is required to prepare a detailed report of the training work which he/she has attended in an Organization/Industry/Company. Industrial Training shall be an essential component of curriculum to fulfill the eligibility criteria for appearing in semester VII university examination.

Semester-VII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-721	UNIX/LINUX & Shell Programming	3	40	60	100	3	1	0
ITE-722	Entrepreneurship Development & Management	3	40	60	100	3	1	0
ITE-723	Computer Based Numerical Techniques using C	3	40	60	100	3	1	0
ITE-724	Major Project-Phase-1	-	100	-	100	-	-	-
	Elective-I	3	40	60	100	3	1	0
	Elective-II	3	40	60	100	3	1	0
Total			**240**	**360**	**600**			

Laboratory Courses

ITE-731	UNIX/LINUX & Shell Programming	2	25	25	50	0	0	2
ITE-732	Computer Based Numerical Techniques using C	2	25	25	50	0	0	2
ITE-733	Industrial Training	2	50	0	50	0	0	2
Total			**100**	**50**	**150**			
Total (Theory + Lab)			**340**	**410**	**750**			

- During semester VII every student shall be allotted a Major Project-Phase I under the supervision of an allotted mentor. Students are required to do preliminary exercise of survey of literature and preparation of a road map of the selected Project under the supervision of their allotted mentor. Major Project- Phase I is to be completed during semester VII and shall be evaluated internally as per university statutes by a committee consisting of:

  i) Head of the Department
  ii) One member nominated by Principal
  iii) Coordinator(s)/Supervisor(s)/Mentor(s) of project

Elective Papers in VII semester:

- Students will be required to opt for two elective papers from ITE-741 to ITE-752.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

15/03/13

Elective-I and Elective-II

CODE	SUBJECT	CODE	SUBJECT
ITE-741	Advanced Java	ITE-747	Data mining and Warehousing
ITE-742	Fundamentals of DIP	ITE-748	Simulation and Modeling
ITE-743	.Net Technologies	ITE-749	Real Time Operating System
ITE-744	System Software	ITE-750	Advanced Computer Architecture
ITE-745	Distributed Computing	ITE-751	Optical Communication
ITE-746	Artificial Intelligence	ITE-752	Compiler Design

Semester-VIII

Theory Courses

Course Code	Title	Scheme of Examination				Hrs./Week		
		Duration (hrs)	IA	UE	Total Marks	L	T	P
ITE-821	Major Project-Phase-2		250	200	450			
	Elective-III	3	40	60	100	3	1	0
	Elective-IV	3	40	60	100	3	1	0
Total			330	320	650			

Elective Papers in VIII semester:

- Students will be required to opt for two elective papers from ITE-841 to ITE-852.
- The choice of electives will rest with the students. However, in no case will the department run more than two subjects for one elective paper.

Electives-III & IV

CODE	SUBJECT	CODE	SUBJECT
ITE-841	Grid Computing	ITE-847	Bio Informatics
ITE-842	Distributed Databases	ITE-848	Wireless Networks
ITE-843	Disaster Management	ITE-849	Embedded Systems
ITE-844	Cloud Computing	ITE-850	Expert Systems
ITE-845	Pattern Recognition	ITE-851	Advanced Microprocessors & Microcontrollers
ITE-846	Neural Networks	ITE-852	Multimedia

➡ After completing the Major Project-Phase I in semester VII the students are required to complete the Major Project- Phase II during semester VIII. Depending upon the infrastructure, computing and other laboratory facilities the students shall be offered in house project on campus or they can complete their project work in any organization/industry outside the campus. Major Project- Phase II shall be evaluated as per university statues.

15/03/13

- For each theory course the assessment pattern will be as shown in table 1.

Table 1: Distribution of Weightage for theory courses of 100 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Cyclic Test 1	15	Written Examination	60
Cyclic Test 2	15		
Assignment 1	05		
Assignment 2	05		
Total	**40**		**60**

- For laboratory courses the assessment pattern will be as shown in table 2.

Table 2 Distribution of Weightage for laboratory courses of 50 marks.

Continuous Assessment		University Examination	
Component	**Weightage**	**Component**	**Weightage**
Continuous assessment of practical work, timely submission of lab records.	15	Lab experiment/procedure/ writing /tabulation/innovation as applicable	15
Test	10	Viva Voce	10
Total	**25**		**25**

Syllabus

M. Sc. MATHEMATICS

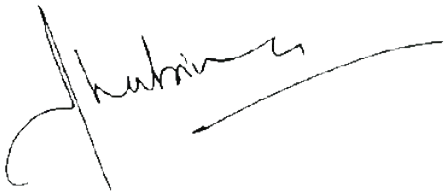
(REGULAR/EVENING)

BABAGHULAM SHAH BADSHAH UNIVERSITY
Rajouri -185131, (J&K), INDIA

SEMESTER I

Course Code	Course Title	No. of Credits	Distribution of Marks		
			SA	UE	Total
Core Courses					
MS- 101	Topology and its Applications	04	40	60	100
MS -102	Techniques in Differential Equations	04	40	60	100
MS -103	Real Analysis	04	40	60	100
MS -104	Applied Numerical Analysis	04	40	60	100
MS -105	Computer Fundamentals and C-Programming	04	40	60	100
MS -106	Lab Course on MS-104 and MS-105	04	50	50	100
	Total	**24**	**250**	**350**	**600**

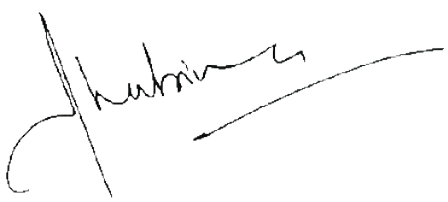
SA: Sessional Assessment
UE: University Examination



SEMESTER II

Course Code	Course Title	No. of Credits	Distribution of Marks		
			SA	UE	Total
Core Courses					
MS- 201	Numerical Linear Algebra	04	40	60	100
MS -202	Functional Analysis with Applications	04	40	60	100
MS -203	Abstract Algebra with Applications	04	40	60	100
MS -204	Complex Analysis with Applications	04	40	60	100
Choice based open elective courses(Students are required to opt any one of the following courses)					
IT. 202	Soft skills in Information Technology	04	40	60	100
Comp. 203	Computer Applications and Operations	04	40	60	100
Bio. 204	Fundamentals of Biotechnology	04	40	60	100
Bot. 205	Mysteries of Green Plants	04	40	60	100
Bot. 206	Botany in Rural Development	04	40	60	100
Zol. 207	Nutrition, Health and Hygiene	04	40	60	100
Arab. 208	Fundamentals of Arabic Language	04	40	60	100
Eng. 209	Fundamentals of English	04	40	60	100
Edu. 210	Higher Education	04	40	60	100
Eco. 211	Principles of Banking	04	40	60	100
HT. 212	Basics of Tourism and Travel Agencies	04	40	60	100
HT. 213	Tourism Resources of J and K	04	40	60	100
Mgt. 214	Business communication and soft skills	04	40	60	100
Edu-215	Instructional technology	04	40	60	100
Lab Course					
MS -205	MatLab	04	50	50	100
Total		**24**	**250**	**350**	**600**

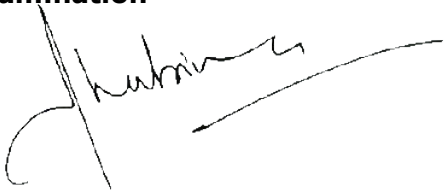
SA: Sessional Assessment
UE: University Examination



SEMESTER III

Course Code	Course Title	No. of Credits	Distribution of Marks		
Core courses			**SA**	**UE**	**Total**
MS-301	Advanced Topics in Topology	04	40	60	100
MS-302	Theory of Operators	04	40	60	100
MS-303	Calculus in $\mathbb{R}^n$	04	40	60	100
MS-304	Set Theory	02	20	30	50
MS-305	Lab course on LATEX	02	25	25	50
Choice based Complementary Electives Students are required to choose any two of the following courses					
MS-306	Differential Geometry	04	40	60	100
MS-307	Number Theory	04	40	60	100
MS-308	Module Theory	04	40	60	100
MS-309	Commutative Algebra	04	40	60	100
MS-310	Advanced Complex Analysis	04	40	60	100
MS-311	Abstract Measure Theory and Integration	04	40	60	100
Total		**24**	**245**	**355**	**600**

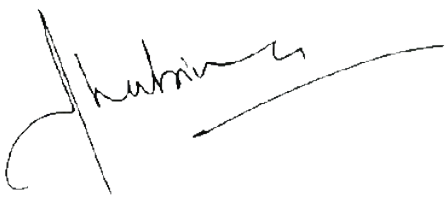
SA: Sessional Assessment
UE: University Examination



SEMESTER IV

Course Code	Course Title	No. of Credits	Distribution of Marks		
Core courses			**SA**	**UE**	**Total**
MS-401	Dissertation/ Major Project	08	50 (D=30; V=20)	150 (D=100; V=50)	200
MS-402	Technical Communication	02	20	30	50
MS-403	Lab course on SPSS	02	25	25	50
Choice based Complementary Electives The students are required to choose any three of the following courses					
MS-404	Complex Dynamics	04	40	60	100
MS-405	Banach Algebras	04	40	60	100
MS-406	Advanced Functional Analysis	04	40	60	100
MS-407	Tensor Analysis and Riemanian Geometry	04	40	60	100
MS-408	Algebraic Topology	04	40	60	100
MS-409	Theory of Fields	04	40	60	100
MS-410	Spaces of Analytic Functions	04	40	60	100
MS-411	Algebraic Geometry	04	40	60	100
MS-412	Theory of Relativity	04	40	60	100
	Total	**24**	**210**	**390**	**600**

SA: Sessional Assessment
UE: University Examination
D: Dissertation
V: Viva-Voce



Scheme for MBA Course Outline Hospitality & Tourism Management

Semester-First

Course Code	Course Title	Credit	Internal Assessment Marks	University Exam	Max. Marks
	Core Courses				
MBAHTM-101	Management Perspectives & Organisational Behaviour	4	40	60	100
MBAHTM-102	Managerial Economics	4	40	60	100
MBAHTM-103	Statistical Methods	4	40	60	100
MBAHTM-104	Basics of Hospitality Management	4	40	60	100
MBAHTM-105	Computer Applications in Hospitality & Tourism Industry.	4	40	60	100
MBAHTM-106	Communication Skills.	4	40	60	100
	Total	24	240	360	600

Semester-Second

ode	Course Title	Credit	Internal Assessment Marks	University Exam	Max. Marks
Based Open Elective Courses. Students are required to opt any one of the following Courses.					
-201	Mathematical Tools for Real World Problems.	4	40	60	100
-202	Soft Skills in Information Technology.	4	40	60	100
np-203	Computer Applications & Operations.	4	40	60	100
io- 204	Fundamentals of Biotechnology.	4	40	60	100
ot - 205	Mysteries of Green Plants.	4	40	60	100
Bot- 206	Botany in Rural Development.	4	40	60	100
Zoo-207	Nutrition, Health & Hygiene.	4	40	60	100
Arab-208	Fundamentals of Arabic Language.	4	40	60	100
Eng-209	Applied English.	4	40	60	100
Edu-210	Higher Education.	4	40	60	100
Eco-211	Principles of Banking.	4	40	60	100
HT-212	Basics of Tourism and Travel Agencies.	4	40	60	100
HT-213	Tourism Resources of Jammu & Kashmir.	4	40	60	100
Mgt-214	Business Communication and Soft Skills.	4	40	60	100
Edu-215	Instructional Technology.	4	40	60	100
Core Courses					
MBAHTM-220	Basics of Tourism.	4	40	60	100
MBAHTM-221	Marketing for Hospitality and Tourism.	4	40	60	100
MBAHTM-222	Financial Management and Accounting.	4	40	60	100
MBAHTM-223	Human Resource Management.	4	40	60	100
MBAHTM-224	Research Methodology and Paper Presentation Skills	4	40	60	100
	Total	**24**	**240**	**360**	**650**

Note: *The students after the examination of 2nd semester shall go for project training in different Hospitality & Tourism Unit for a period of six weeks. After completing the Project Training, students shall be evaluated on the basis of their project reports, presentations and viva-voce under Course code MBAHTM-302.Total marks will be 100 out of which 50 marks would be Project Report and 50 marks for presentation and Viva-voce in the ratio of 50: 50.*

Semester-Third

	Course Title	Credit	Internal Assessment Marks	University Exam	Max. Marks
	Core Courses				
1	Strategic Management.	4	40	60	100
02	Summer Training Report & Presentation.	4	100		100
03	Tourism Resources of Jammu & Kashmir.	4	40	60	100
304	Front Office.	4	40	60	100
ased Complimentary Elective Courses, Students are required to opt. any two of the , Courses.					
A-305	Basics of Event Management	4	40	60	100
M-306	Tour Guiding & Escorting Skills.	4	40	60	100
TM-307	Geography of Tourism and Destination Development.	4	40	60	100
TM-308	Adventure, Wildlife & Cultural Tourism.	4	40	60	100
TM-309	Viva Voce.	-	-	-	50
	Total	24	240	360	650

Semester-Fourth

Course Code	Course Title	Credit	Internal Assessment Marks	University Exam	Max. Marks
	Core Courses				
MBAHTM-401	Tourism Resources & Geography of India.	4	40	60	100
MBAHTM-402	Travel Agency & Tour Operations.	4	40	60	100
MBAHTM-403	Tour Policy, Planning and Development.	4	40	60	100
MBAHTM-404	Tourism Management in India.	4	40	60	100
Choice Based Complimentary Elective Courses. Students are required to opt any two of the following Courses.					
MBAHTM-405	Entrepreneurship Development in Hospitality & Tourism.	4	40	60	100
MBAHTM-406	Food & Beverage Management.	4	40	60	100
MBAHTM-407	Accommodation Management.	4	40	60	100
MBAHTM-408	Dimensions of International Tourism.	4	40	60	100
MBAHTM-409	Viva-Voce	.....	....	....	50
	Total	**24**	**240**	**360**	**650**

Director

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SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MBA

Summary MBA

Semester	Credit	Total Marks
First	24	600
Second	24	600
Third	28	700
Fourth	20	500
Total	96	2400

Semester I

Sr. No.	Course Code	Core Courses	Credit	Sessional Assessment Marks	University Exam Marks	Total Marks
1	MBA111	Management Process & Organizational Behavior	4	40	60	100
2	MBA 112	Accounting for Managers	4	40	60	100
3	MBA113	Quantitative Techniques for management Analysis decisions	4	40	60	100
4	MBA 114	Managerial Economics	4	40	60	100
5	MBA115	Marketing Management	4	40	60	100
6	MBA 116	Human Resource Management	4	40	60	100
Total			**24**	**240**	**360**	**600**

SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MBA

Semester II

Sr. No.	Course Code	Core Courses	Credit	Sessional Assessmet Marks	University Exam Marks	Total Marks
1	MBA 221	International Business	4	40	60	100
2	MBA 222	Financial Management	4	40	60	100
3	MBA 223	Business Law	4	40	60	100
4	MBA224	Operations Management	4	40	60	100
5	MBA 225	Research Methodology & Its Application	4	40	60	100

Open Choice Electives

Course Code	Course Title	Credits	Scheme of Examination			
			Duration	Marks		
Math – 201	Mathematical Tools for Real World Problems	4	3	40	60	100
IT – 202	Soft Skills in Information Technology					
Comp – 203	Computer Applications & Operations					
Bio – 204	Fundamentals of Biotechnology					
Bot – 205	Mysteries of Green Plants					
Bot – 206	Botany in Rural Development					
Zol – 207	Nutrition, Health and Hygiene					
Mar- 208	Fundamentals of Arabic Language					
Eng. 209	Applied English					
10. Edu – 210	Higher Education					
11. Eco – 211	Principles of Banking					
12. HT – 212	Basics of Tourism and Travel Agencies					
13. HT – 213	Tourism Resources of J&K					
14. Mgt – 214	Business Communication & Soft Skills					
15. Edu – 215	Instructional Technology					

SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MBA

Semester III

Course Code	Core Courses	Credit	Sessional Assessment Marks	University Exam Marks	Total Marks
MBA, 331	Strategic Management	4	40	60	100
MBA 332	Summer Training Project	4		100	100
oice Based Complementary Electives Courses (Students are required to opt any three for Major and any two for Minor Specialization out of the following courses)					
ıman Resource					
3	MBA H1	Strategic Human Resource Management	40	60	4	100
4	MBA H2	Organizational Change and Development	40	60	4	100
5	MBA H3	Industrial Relation and Labour Laws	40	60	4	100
6	MBA H4	Human Resource Development	40	60	4	100
7	MBA H5	Business Ethics And Enviornment	40	60	4	100
Finance						
8	MBA F1	Security Analysis	4	40	60	100
9	MBA F2	International Finance	4	40	60	100
10	MBA F3	Social Banking and Microfinance	4	40	60	100
11	MBA F4	Indian Financial System	4	40	60	100
12	MBA F5	Project Management	4	40	60	100
13	MBA F6	Banking and Insurance Management	4	40	60	100
Marketing						
14	MBA, M1	Advertising and Sales Promotion	40	60	4	100
15	MBA M2	Consumer Behavior &Marketing Strategy	40	60	4	100
16	MBA M3	Service Marketing	40	60	4	100
17	MBA M4	Rural Marketing	40	60	4	100

SCHOOL OF MANAGEMENT STUDIES
BABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MBA

18	MBA M5	Distribution Management	40	60	4	100

Note. MBA III semester students has to earn 12 credits for major specialization and 08 credits for minor specialization

SCHOOL OF MANAGEMENT STUDIES
ABA GHULAM SHAH BADSHAH UNIVERSITY, RAJOURI (J&K)
COURSE STRUCTURE MBA

Semester IV

Course Code	Core Courses	Credit	Sessional Assessment Marks	University Exam Marks	Total Marks
MBA 441	Entrepreneurship Development	4	40	60	100
MBA 442	Management Information System	4	40	60	100
ice Based Complementary Electives Courses (Students are required to opt any two for Major and any one for Minor Specialization out of the following courses)					
an Resourse					
MBA H6	Performance Management	4	40	60	100
MBA H7	Interpersonal and Group Processes	4	40	60	100
MBA H8	Cross Cultural Management	4	40	60	100
MBA H9	Participative Management	4	40	60	100
nance					
MBA F7	Portfolio Management	4	40	60	100
MBA F8	Financial Derivatives	4	40	60	100
MBA F9	Behavioural Finance	4	40	60	100
MBA F10	Mergers and Acquisitions	4	40	60	100
Marketing					
MBA M6	Strategic Brand Management	4	40	60	100
MBA M7	Retail Marketing	4	40	60	100
MBA M8	International Marketing	4	40	60	100
MBA M9	Digital Marketing	4	40	60	100

Note: MBA IV semester students have to earn minimum of 08 credits for major

Syllabus

M. Sc. MATHEMATICS

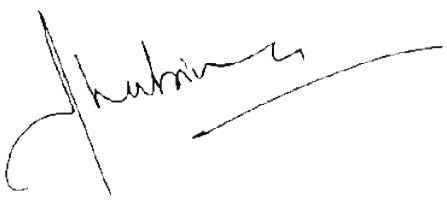
(Specialization: Applied Mathematics)

BABAGHULAM SHAH BADSHAH UNIVERSITY
Rajouri -185131, (J&K), INDIA

SEMESTER I

Course Code	Course Title	No. of Credits	Distribution of Marks		
			SA	UE	Total
Core Courses					
MS- 101	Topology and its Applications	04	40	60	100
MS -102	Techniques in Differential Equations	04	40	60	100
MS -103	Real Analysis	04	40	60	100
MS -104	Applied Numerical Analysis	04	40	60	100
MS -105	Computer Fundamentals and C-Programming	04	40	60	100
MS -106	Lab Course on MS-104 and MS-105	04	50	50	100
	Total	**24**	**250**	**350**	**600**

SA: Sessional Assessment
UE: University Examination



SEMESTER II

Course Code	Course Title	No. of Credits	Distribution of Marks		
			SA	UE	Total
Core Courses					
MS- 201	Numerical Linear Algebra	04	40	60	100
MS -202	Functional Analysis with Applications	04	40	60	100
MS -203	Abstract Algebra with Applications	04	40	60	100
MS -204	Complex Analysis with Applications	04	40	60	100
Choice based open elective courses(Students are required to opt any one of the following courses)					
IT. 202	Soft skills in Information Technology	04	40	60	100
Comp. 203	Computer Applications and Operations	04	40	60	100
Bio. 204	Fundamentals of Biotechnology	04	40	60	100
Bot. 205	Mysteries of Green Plants	04	40	60	100
Bot. 206	Botany in Rural Development	04	40	60	100
Zol. 207	Nutrition, Health and Hygiene	04	40	60	100
Arab. 208	Fundamentals of Arabic Language	04	40	60	100
Eng. 209	Fundamentals of English	04	40	60	100
Edu. 210	Higher Education	04	40	60	100
Eco. 211	Principles of Banking	04	40	60	100
HT. 212	Basics of Tourism and Travel Agencies	04	40	60	100
HT. 213	Tourism Resources of J and K	04	40	60	100
Mgt. 214	Business communication and soft skills	04	40	60	100
Edu-215	Instructional technology	04	40	60	100
Lab Course					
MS -205	MatLab	04	50	50	100
Total		**24**	**250**	**350**	**600**

SA: Sessional Assessment
UE: University Examination

SEMESTER III

Course Code	Course Title	No. of Credits	Distribution of Marks		
Core Courses			**SA**	**UE**	**Total**
MS-316	Computational methods for ODE and PDE	04	40	60	100
MS-317	Applied Multivariable Calculus	04	40	60	100
MS-318	Applied Harmonic Analysis	04	40	60	100
MS-319	LATEX and Lab course on MS-316	04	50	50	100
Choice based Complementary Electives Students are required to choose any two of the following courses					
MS-320	Mathematical Finance	04	40	60	100
MS-321	Graph and Network Theory	04	40	60	100
MS-322	Modeling and Simulation	04	40	60	100
MS-323	Applied Probability and Random Processes	04	40	60	100
MS-324	Mathematical Programming	04	40	60	100
MS-325	Modeling of Real World Problems by Variational Inequalities	04	40	60	100
Total		**24**	**250**	**350**	**600**

SA: Sessional Assessment
UE: University Examination

SEMESTER IV

Course Code	Course Title	No. of Credits	Distribution of Marks		
Core courses			**SA**	**UE**	**Total**
MS-416	Dissertation/ Major Project	08	50 (D=30; V=20)	150 (D=100; V=50)	200
MS-417	Technical Communication	02	20	30	50
MS-418	Lab course on SPSS	02	25	25	50
Choice based Complementary Electives The students are required to choose any three of the following courses					
MS-419	Wavelets and Applications	04	40	60	100
MS-420	Mathematics of Insurance	04	40	60	100
MS-421	Fluid Dynamics	04	40	60	100
MS-422	Algorithmic optimization	04	40	60	100
MS-423	Integral Equations and Applications	04	40	60	100
MS-424	Bio Mathematics	04	40	60	100
MS-425	Finite Fields and Coding Theory	04	40	60	100
MS-426	Applied Functional Analysis	04	40	60	100
MS-427	Dynamical Systems	04	40	60	100
	Total	**24**	**210**	**390**	**600**

SA: Sessional Assessment
UE: University Examination
D: Dissertation
V: Viva-Voce