

PSYCHOLOGY

SCHEME OF STUDIES OF BS PSYCHOLOGY (SESSION- 2011& ONWARDS)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
1.	1st	English-I	PY – 311	3 (3,0)	
2.		Pakistan Studies	PY – 312	2 (2,0)	
3.		Mathematics – I	PY – 313	3 (3,0)	
4.		Statistics – I	PY – 314	3 (3,0)	
5.		Sociology – I	PY – 315	3 (3,0)	
6.		Introduction to Psychology	PY – 316	4 (3,1)	
Total Credit Hours (Theory, Labs)				18 (17, 1)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
7.	2nd	Islamic Studies	PY – 321	2 (2,0)	
8.		English-II	PY – 322	3 (3,0)	
9.		Mathematics-II	PY – 323	3 (3,0)	
10.		Biology-I	PY – 324	3 (2,1)	
11.		Economics-I	PY – 325	3 (3,0)	
12.		History and Schools of Psychology	PY – 326	3 (3,0)	
Total Credit Hours (Theory, Labs)				17 (16, 1)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
13.	3rd	English-III	PY – 431	3 (3,0)	
14.		Introduction to Computer	PY – 432	3 (3,0)	
15.		Statistics-II	PY – 433	3 (3,0)	PY-314
16.		Sociology-II	PY – 434	3 (3,0)	PY-315
17.		Experimental Psychology	PY – 435	4 (3,1)	
18.		Personality Theories – I	PY – 436	3 (3,0)	
Total Credit Hours (Theory, Labs)				19 (18, 1)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
19.	4th	Introduction to Management	PY – 441	3 (3,0)	
20.		Economics-II	PY – 442	3 (3,0)	PY-325
21.		Biology-II	PY – 443	3 (2,1)	PY-324
22.		Introduction to Social Psychology	PY – 444	3 (3,0)	
23.		Personality Theories-II	PY – 445	4 (4,0)	PY-436
Total Credit Hours (Theory, Labs)				16 (15, 1)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE

24.	5th	Mental Health and Psycho-Pathology-I	PY – 551	3 (3,0)	
25.		Neurological Basis of Behavior	PY – 552	3 (3,0)	
26.		Psychological Testing-I	PY – 553	3 (3,0)	
27.		Research Methods-I	PY – 554	4 (4,0)	
28.		Elementary Statistics	PY – 555	3 (3,0)	
Total Credit Hours (Theory, Labs)				16 (16, 0)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
29.	6th	Mental Health and Psycho-Pathology-II	PY – 561	3 (3,0)	PY-551
30.		Developmental Psychology	PY – 562	3 (3,0)	
31.		Psychological Testing-II	PY – 563	3 (3,0)	PY-553
32.		Research Methods-II	PY – 564	3 (3,0)	PY-554
33.		Applied Statistics	PY – 565	3 (3,0)	PY-555
34.		Advance Social Psychology	PY – 566	3 (3,0)	PY-444
Total Credit Hours (Theory, Labs)				18 (18, 0)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
35.	7th	Positive Psychology	PY – 671	3 (3,0)	
36.		Educational Psychology	PY – 672	3 (3,0)	
37.		Muslim Psychology	PY – 673	4 (4,0)	
38.		Psychology of Mass Media & Communication	PY – 674	3 (3,0)	
39.		Ethics in Psychology	PY – 675	3 (3,0)	
40.		Internship	PY – 676	2 (0,2)	
Total Credit Hours (Theory, Labs)				18 (16, 2)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
41.	8th	Cross Cultural Psychology	PY – 681	3 (3,0)	
42.		Cognitive Psychology	PY – 682	3 (3,0)	
43.		Therapies in Clinical Psychology	PY – 683	3 (3,0)	
44.		Counseling Psychology	PY - 684	3 (3,0)	
45.		Research Project	PY – 689	4 (0,4)	
Total Credit Hours (Theory, Labs)				16 (12, 4)	
Total Credit Hours of Program: 138 (Theory, Labs): (128, 10)					

BIO-INFORMATICS

SCHEME OF STUDIES OF BS (BIO-INFORMATICS) SESSION- 2010 & ONWARDS

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
1.	1st	English Comprehension	BI – 311	3 (3,0)	
2.		Islamic Study	BI – 312	2 (2,0)	
3.		Basic Mathematics	BI – 313	4 (4,0)	
4.		Introduction to Computer	BI – 314	4 (3,1)	
5.		Cellular Biology	BI – 315	3 (2,1)	
Total Credit Hours (Theory, Labs)				16 (14,2)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
7.	2nd	Introduction to Computer Programming	BI – 321	4 (3,1)	BI – 313
8.		Biochemistry-I	BI – 322	4 (3,1)	
9.		Multivariable Calculus	BI – 323	3 (3,0)	
10.		Technical Report Writing	BI – 324	3 (3,0)	BI – 311
11.		Pak Studies	BI – 325	2 (2,0)	
12.		Molecular Biology	BI – 326	4 (3,1)	BI – 322
Total Credit Hours (Theory, Labs)				20 (17,3)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
12.	3rd	Data Structure & Algorithms-I	BI – 431	4 (3,1)	BI – 321
13.		Biochemistry-II	BI – 432	4 (3,1)	BI – 322
14.		Linear Algebra & Differential Equation	BI – 433	3 (3,0)	
15.		Communication Skills	BI – 434	3 (3,0)	BI – 311
16.		Essential of Genetics	BI – 435	3 (2,1)	BI – 322
Total Credit Hours (Theory, Labs)				17 (14 , 3)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
17.	4th	Object Oriented Programming	BI – 441	4 (3,1)	BI – 321
18.		Introduction to Bioinformatics	BI – 442	4 (3,1)	BI – 314
19.		Microbial Genetics	BI – 443	3 (2,1)	
20.		Ethical & Legal Issues in Bioinformatics	BI – 444	3 (2,1)	
21.		Microbiology	BI – 445	3 (2,1)	
Total Credit Hours (Theory, Labs)				17 (12,5)	

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
22.	5 th	Computational Mathematics	BI – 551	3 (3,0)	BI – 323
23.		Biostatistics	BI – 552	3 (2,1)	
24.		Database System – I	BI – 553	4 (3,1)	
25.		Genomics	BI – 554	3 (3,0)	BI – 322, BI – 325
26.		Bioinformatics Methods	BI – 555	4 (3,1)	
Total Credit Hours (Theory, Labs)				17 (14 , 3)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
27.	6 th	Modeling & Simulation	BI – 561	3 (2,1)	BI – 321
28.		Introduction to Computer Graphics	BI – 562	4 (3,1)	BI – 321
29.		Proteomics	BI – 563	3 (3,0)	BI – 322, BI – 325
30.		Operating System	BI – 564	4 (3,1)	
31.		Applied Bioinformatics	BI – 565	4 (3,1)	BI – 555
Total Credit Hours (Theory, Labs)				18 (14 , 4)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
32.	7 th	Molecular Methods	BI – 671	4 (0,4)	
33.		Biological Database Management System	BI – 672	4 (3,1)	
34.		Bio Ethics & Safety	BI – 673	4 (3,1)	
35.		Immunology	BI – 674	4 (3,1)	
Total Credit Hours (Theory, Labs)				16 (9 , 6)	
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS	PREREQUISITE
36.	8 th	Artificial Intelligence	BI – 681	4 (4,0)	BI – 321
37.		Bioinformatics Software Development	BI – 682	3 (2,1)	
38.		Special Topics in Bioinformatics	BI – 683	3 (2,1)	BI – 555
39.		Research Project	BI – 689	6 (0,6)	
Total Credit Hours (Theory, Labs)				16 (7 , 9)	
Total Credit Hours of Program: 137 (Theory, Labs): (101,36)					

ECONOMICS

SCHEME OF STUDIES OF BS ECONOMICS (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	English-I	EC-311	3
2.		Micro Economics-I	EC-312	3
3.		Pakistan Studies	EC-313	2
4.		Mathematics-I	EC-314	3
5.		Computer Application	EC-315	3
6.		Introduction to Sociology	EC-316	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
7.	2 nd	Islamic Studies/Ethics	EC-321	2
8.		English-II	EC-322	3
9.		Macro Economics-I	EC-323	3
10.		Mathematics-II	EC-324	3
11.		Human Resource Development	EC-325	3
12.		Introduction to Psychology	EC-326	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
13.	3 rd	English-III	EC – 431	3
14.		Micro Economics-II	EC – 432	3
15.		Development Economics	EC – 433	3
16.		Statistics-I	EC – 434	3
17.		Introduction to Political Science	EC – 435	3
18.		Public Finance	EC – 436	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
19.	4 th	Introduction to Management	EC – 441	3
20.		Macro Economics-II	EC – 442	3
21.		Agriculture Economics	EC – 443	3
22.		Statistics-II	EC – 444	3
23.		Introduction to International Relations	EC – 445	3
24.		Monetary Policy	EC – 446	3
Total Credit Hours				18

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
25.	5 th	Monetary Economics	EC-551	3
26.		Econometrics-I	EC-552	3
27.		Rural Development	EC-553	3
28.		Gender & Development	EC-554	3
29.		Fiscal Policy	EC-555	3
30.		Operational Research	EC-556	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
31.	6 th	Managerial Economics	EC-561	3
32.		Econometrics-II	EC-562	3
33.		International Trade Theory-I	EC-563	3
34.		Development Policy	EC-564	4
35.		Comparative Economic System	EC-565	3
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
36.	7 th	International Trade Theory-II	EC – 671	3
37.		Research Methodology	EC – 672	3
38.		International Finance	EC – 673	3
39.		History of Economic Thought	EC – 674	3
40.		Financial Institutions & Markets	EC – 675	4
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
41.	8 th	Applied Economics	EC – 681	3
42.		Islamic Economics	EC – 682	3
43.		Project Appraisal and Investment Decisions	EC – 683	3
44.		Major Issues in Pakistan Economy	EC – 684	3
45.		Research Project/Two Optional Courses from	EC – 689	6
46.		the list given below with its Course Code		(3+3)
Total Credit Hours				18

ENGLISH LANGUAGE AND LITERATURE

SCHEME OF STUDIES OF BS ENGLISH 4-YEAR (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	English-I (Language in Use)	EG -311	3
2.		Pakistan Studies	EG -312	2
3.		Introduction to Psychology	EG -313	3
4.		Introduction to Sociology	EG -314	3
5.		Introduction to English Literature I: Poetry & Drama	EG -315	3
6.		Introduction to Linguistics	EG -316	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
7.	2 nd	English-II	EG -321	3
8.		Islamic Studies/Ethics	EG -322	2
9.		Introduction to Human Rights	EG -323	3
10.		Human Resource Management	EG -324	3
11.		History of English Literature (Medieval to Romantics)	EG -325	3
12.		Phonetics & Phonology	EG -326	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
13.	3 rd	English-III	EG -431	3
14.		Introduction to Computers	EG -432	3
15.		Introduction to Economics	EG -433	3
16.		Introduction to Political Science	EG -434	3
17.		Introduction to English Literature-II (Novel, Short Story & Prose)	EG -435	3
18.		Morphology & Syntax- I	EG -436	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
19.	4 th	Advance Academic Reading and Writing	EG -441	3
20.		Human Rights & Citizenship	EG -442	3
21.		Novel (18 th & 19 th Century)	EG -443	3
22.		Research Methodology	EG -444	3
23.		History of English Literature II (19 th Century Realism up to Contemporary Times)	EG -445	3
24.		Semantics	EG -446	3
Total Credit Hours				18



**SHAHEED BENAZIR BHUTTO WOMEN UNIVERSITY
PESHAWAR
DEPARTMENT OF ENGLISH LANGUAGE & LITERATURE**

SCHEME OF STUDIES OF BS ENGLISH 4-YEAR (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
25.	5 th	Visionary Discourse	EG -551	3
26.		Literary Criticism	EG -552	3
27.		Poetry (14 th to 18 th Century)	EG -553	3
28.		Morphology & Syntax-II	EG -554	3
29.		Sociolinguistics	EG -555	3
30.		Pedagogical Grammar	EG -556	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
31.	6 th	Literary Criticism and theory	EG -561	3
32.		Classics in Drama	EG -562	3
33.		19 th Century Poetry	EG -563	3
34.		Lexical Studies	EG -564	3
35.		Discourse Analysis	EG -565	3
36.		Psycholinguistics	EG -566	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
LITERATURE				
37.	7 th	20 th Century Literature (Poetry & Drama)	EG – 671	3
38.		American Literature	EG – 672	3
39.		South Asian literature	EG – 673	3
40.		Translation Theory & Literary Studies	EG – 674	3
41.		American Drama	EG – 675	3
42.		Pakistani Literature	EG – 676	3
Total Credit Hours				18
LINGUISTICS				
43.	7 th	Language Teaching Methodologies	EG – 671-1	3
44.		Pragmatics	EG – 672-2	3
45.		Second Language Acquisition	EG – 673-3	3
46.		Research Methods in Linguistics	EG – 674-4	3
47.		Translation Studies	EG – 675-5	3
48.		Media Discourse Analysis	EG – 676-6	3
Total Credit Hours				18



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PESHAWAR
DEPARTMENT OF ENGLISH LANGUAGE & LITERATURE**

SCHEME OF STUDIES OF BS ENGLISH 4-YEAR (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
LITERATURE				
49.	8th	20th Century Fiction & Nonfiction	EG – 681	3
50.		Teaching of Literature	EG – 682	3
51.		Literary Stylistics	EG – 683	3
52.		Literary Discourse & Journalistic Writing	EG – 684	3
53.		Emerging Forms of Literature	EG – 685	3
54.		Research Project/One Optional Course from the list given below with its Course Code	EG – 686	3
Total Credit Hours				18
LINGUISTICS				
55.	8th	Syllabus Designing & Testing	EG – 681-1	3
56.		Stylistics	EG – 682-2	3
57.		Language, Culture & Identity	EG – 683-3	3
58.		Genre Analysis	EG – 684-4	3
59.		English for Specific Purposes	EG – 685-5	3
60.		Research Project/One Optional Course from the list given below with its Course Code	EG – 686-6	3
Total Credit Hours				18

Enlightenment Through Knowledge

MATHEMATICS

SCHEME OF STUDIES OF BS MATHEMATICS (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	English-I	MT-311	3
2.		Pakistan Studies	MT-312	2
3.		Calculus-I	MT-313	3
4.		Discrete Structures	MT-314	3
5.		Introduction to Statistics	MT-315	3
6.		Introduction to Computers	MT-316	4
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
7.	2 nd	English-II	MT-321	3
8.		Islamic Studies/Ethics	MT-322	2
9.		Calculus-II	MT-323	3
10.		Number Theory	MT-324	3
11.		Electricity and Magnetism-I	MT-325	3
12.		Introduction to Probability Distributions	MT-326	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
13.	3 rd	Communication Skills for Mathematicians	MT-431	3
14.		Programming Languages for Mathematicians	MT-432	3
15.		Calculus-III	MT-433	3
16.		Basic Statistical Inference	MT-434	3
17.		Electricity and Magnetism-II	MT-435	3
18.		Introduction to Economics	MT-436	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
19.	4 th	Technical Report Writing	MT-441	3
20.		Introduction to Sociology	MT-442	3
21.		Introduction to Psychology	MT-443	3
22.		Algebra-I	MT-444	3
23.		Computing Tools for Mathematicians	MT-445	3
24.		Probability Theory	MT-446	3
Total Credit Hours				18

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
25.	5 th	Algebra-II	MT-551	3
26.		Vector & Tensor Analysis	MT-552	3
27.		Mathematical Statistics	MT-553	3
28.		Numerical Analysis	MT-554	3
29.		Ordinary Differential Equations	MT-555	3
30.		Real Analysis-I	MT-556	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
31.	6 th	Algebra-III	MT-561	3
32.		Classical Mechanics	MT-562	3
33.		Complex Analysis	MT-563	3
34.		Mathematical Spaces	MT-564	3
35.		Partial Differential Equations	MT-565	3
36.		Real Analysis-II	MT-566	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
37.	7 th	Functional Analysis	MT-671	3
38.		History and Philosophy of Mathematics-I	MT-672	3
39.		Group Theory-I	MT-673	3
40.		Software Engineering-I	MT-674	3
41.		Modeling & Simulation	MT-675	4
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
42.	8 th	Software Engineering-II	MT-681	3
43.		Optimization Theory	MT-682	3
44.		History and Philosophy of Mathematics-II	MT-683	3
45.		Group Theory-II	MT-684	3
46.		Research Project/Two Optional Courses from the list given below with its Course Code	MT-689	6
47.			(3+3)	
Total Credit Hours				18

STATISTICS

SCHEME OF STUDIES OF BS STATISTICS (SESSION- 2012)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	English-I	ST-311	2
2.		Fundamentals of Computers	ST-312	3
3.		Calculus-I	ST-313	3
4.		Mechanic -I	ST-314	3
5.		Pakistan Studies	ST-315	2
6.		Introduction to Statistics	ST-316	3
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
7.	2 nd	Islamic Studies/Ethics	ST -321	2
8.		English-II	ST-322	3
9.		Mechanic -II	ST-323	3
10.		Calculus-II	ST-324	3
11.		Introduction to Probability Distributions	ST-325	3
12.		Electricity and Magnetism-I	ST-326	3
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
13.	3 rd	English-III	ST – 431	3
14.		Calculus-III	ST – 432	3
15.		Computer Programming	ST – 433	3
16.		Numerical Computing/Numerical Methods	ST – 434	3
17.		Electricity and Magnetism-II	ST – 435	3
18.		Basic Statistical Inference	ST – 436	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
19.	4 th	Differential Equations	ST – 441	3
20.		Statistical Packages	ST – 442	3
21.		Linear Algebra	ST – 443	3
22.		Introduction to Regression Analysis & Experimental Design	ST – 444	3
23.		Applied Statistics	ST – 445	3
24.		Communication Skills	ST – 446	3
Total Credit Hours				18

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
25.	5 th	Probability & probability Distribution-I	ST-551	3
26.		Sampling Technique-I	ST-552	3
27.		Design & Analysis of Experiment-I	ST-553	3
28.		Regression Analysis	ST-554	3
29.		Statistical Quality Control	ST-555	3
30.		Nonparametric Methods	ST-556	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
31.	6 th	Probability & probability Distribution-II	ST-561	3
32.		Sampling Technique-II	ST-562	4
33.		Design & Analysis of Experiment-II	ST-563	3
34.		Econometrics	ST-564	3
35.		Population Studies	ST-565	3
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
36.	7 th	Statistical Inference-1	ST – 671	3
37.		Applied Multivariate Analysis	ST – 672	3
38.		Survey and Research	ST – 673	3
39.		Operation Research	ST – 674	3
40.		Decision Theory	ST – 675	4
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
41.	8 th	Time Series and Forecasting	ST – 681	3
42.		Numerical Methods	ST – 682	3
43.		Stochastic Process	ST – 683	3
44.		Categorical Data Analysis	ST – 684	3
45.		Research Project/Two Optional Courses from the list given below with its Course Code	ST – 689	6
46.			(3+3)	
Total Credit Hours				18

COMPUTER SCIENCE

SCHEME OF STUDIES OF BS(CS) SESSION (2011 & ONWARDS)

SEMESTER-I		
Course Code	Course Title	Credit Hours
CS-311	English-I	3 (3,0)
CS-312	Pakistan Studies	2 (2,0)
CS-313	Programming Fundamentals	3 (2,1)
CS-314	Calculus and Analytical Geometry	3 (3,0)
CS-315	Basic Electronics	3 (2,1)
CS-316	Introduction to Information and Communication Technology	3 (2,1)
Total Credit Hours		17
SEMESTER-II		
Course Code	Course Title	Credit Hours
CS-321	English-II	3 (3,0)
CS-322	Islamic Studies.	2 (2,0)
CS-323	Object Oriented Programming	4 (3,1)
CS-324	Linear Algebra	3 (3,0)
CS-325	Computer Communication and Networks	3 (3,0)
CS-326	Physics	3 (2,1)
Total Credit Hours		18
SEMESTER-III		
Course Code	Course Title	Credit Hours
CS-431	Data Structure and Algorithms	3(2,1)
CS-432	Digital Logic Design	3(2,1)
CS-433	Probability and Statistics	3(3,0)
CS-434	Technical and Business Writing	3(3,0)
CS-435	Discrete Structures	3(3,0)
CS-436	Data Communication	3(3,0)
Total Credit Hours		18
SEMESTER-IV		
Course Code	Course Title	Credit Hours
CS-441	Computer Organization and Assembly Language	3(3,0)
CS-442	Multivariate Calculus	3(2,1)
CS-443	Operating System	3(2,1)
CS-444	Computer Graphics	3(2,1)
CS-445	Economics	3(3,0)
CS-446	Marketing	3(3,0)
Total Credit Hours		18
SEMESTER-V		
Course Code	Course Title	Credit Hours
CS-551	Database System	3(2,1)
CS-552	Theory of Automation and Formal Languages	3(3,0)
CS-553	Differential Equations	3(3,0)
CS-554	Telecommunication	3(3,0)
CS-555	Financial Accounting	3(3,0)
CS-556	Human Resource Management	3(3,0)
Total Credit Hours		18
SEMESTER-VI		

Course Code	Course Title	Credit Hours
CS-561	Introduction To Software Development	3(3,0)
CS-562	Computer Architecture	3(2,1)
CS-563	Human Computer Interaction	3(2,1)
CS-564	Psychology	3(2,1)
Elective (any two)		(3+3)
CS-565	Software Engineering	3(3,0)
CS-566	Digital Signal Processing	3(2,1)
CS-567	Data and Network Security	3(3,0)
CS-568	Simulation and Modeling	3(3,0)
CS-569	E-Commerce Application and Technologies	3(2,1)
Total Credit Hours		18
SEMESTER-VII		
Course Code	Course Title	Credit Hours
CS-671	Numerical Computing	3(2,1)
CS-672	Analysis of Algorithm	3(2,1)
CS-673	Compiler Construction	3(3,0)
CS-674	Professional Practices	4(3,1)
Elective (any one)		(3)
CS-675	Advance Software Engineering	3(3,0)
CS-676	Digital Image Processing	3(2,1)
CS-677	Distributed Database System	3(2,1)
Total Credit Hours		16
SEMESTER-VIII		
Course Code	Course Title	Credit Hours
CS-689	Research Project	6(0,6)
CS-681	Artificial Intelligence	4(3,1)
Elective (any two)		(3+3)
CS-682	Computer Vision	3(3,0)
CS-683	Data ware housing	3(2,1)
CS-684	Artificial Neural Network	3(3,0)
CS-685	Wireless Networks	3(2,1)
CS-686	Expert Systems	3(3,0)
Total Credit Hours		16

MANAGEMENT SCIENCES

SCHEME OF STUDIES OF BBA SESSION (2012 & ONWARDS)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	Freshman English-I	BA – 311	3
2.		Language –I (Arabic/Chinese/French)	BA – 312	3
3.		Introduction to Computing	BA – 313	3
4.		Contemporary World	BA – 314	3
5.		Pakistan Studies	BA – 315	3
6.		Islamic Studies	BA – 316	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
7.	2 nd	Freshman English II	BA – 321	3
8.		Language –II (Arabic/Chinese/French)	BA – 322	3
9.		Business Mathematics	BA – 323	3
10.		Human Psychology	BA – 324	3
11.		Introduction to Management	BA – 325	3
12.		Microeconomics	BA – 326	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
13.	3 rd	Oral Communication	BA – 431	3
14.		Business Statistics	BA – 432	3
15.		Macro Economics	BA – 433	3
16.		Financial Accounting I	BA – 434	3
17.		Introduction to HRM	BA – 435	3
18.		Sociology	BA – 436	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
19.	4 th	Business Communication	BA – 441	3
20.		Principles of Marketing	BA – 442	3
21.		Environmental Sciences	BA – 443	3
22.		Financial Accounting II	BA – 444	3
23.		Pakistan Economics	BA – 445	3
24.		Business Finance	BA – 446	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
25.	5 th	Cost Accounting	BA – 551	3
26.		Marketing Management	BA – 552	3
27.		Logic	BA – 553	3
28.		Financial Management	BA – 554	3
29.		Business Law	BA – 555	3
30.		Specialization I	BA – 556	3
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
31.		Business Ethics	BA – 561	3
32.		Organizational Behaviour	BA – 562	3

33.	6 th	Consumer Behaviour	BA – 563	3
34.		MIS	BA – 564	3
35.		Specialization-II	BA – 565	4
Total Credit Hours				16
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
36.	7 th	Business Research & Report Writing	BA – 671	3
37.		Operations Management	BA – 672	3
38.		Entrepreneurship	BA – 673	3
39.		Specialization-III	BA – 674	4
40.		Elective-I	BA – 675	4
Total Credit Hours				17
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
41.	8 th	Business Policy	BA – 681	3
42.		International Business Management	BA – 682	3
43.		Specialization IV	BA – 683	4
44.		Research Project/ Two Optional Courses	BA – 689	6
Total Credit Hours				16

LIST OF ELECTIVES (MANAGEMENT)		
S.NO	COURSE TITLE	CREDIT HOURS
1.	Total Quality Management	4
2.	Corporate Social Responsibility	4
3.	Corporate Strategy	4
4.	Decision Support System	4
5.	E-Commerce	4
6.	Leadership	4
7.	Managerial Economic	4
LIST OF ELECTIVES (MARKETING)		
1.	E-Business	4
2.	Sales and Selling	4
3.	Advertising & Promotion	4
4.	Online Marketing	4
5.	Supply Chain Management	4
LIST OF ELECTIVES (FINANCE)		
1.	Financial Markets and Institutions	4
2.	Corporate Finance	4
3.	Investment and Portfolio Management	4

HOME ECONOMICS

SCHEME OF STUDIES OF HOME ECONOMICS BS 4 YEAR (SESSION- 2012 ONWARDS)

S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
1.	1 st	English-I	HE-311	2 (2,0)
2.		Pakistan Studies	HE-312	2 (2,0)
3.		Statistics – I	HE-313	3 (3,0)
4.		Chemistry	HE-314	3 (2,1)
5.		Introduction to Home Economics	HE-315	2 (2,0)
6.		Introduction to Arts & Design – I	HE-316	3 (2,1)
7.		Clothing & Consumer Education	HE-317	3 (2,1)
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
8.	2 nd	English-II	HE-321	2 (2,0)
9.		Islamic Studies	HE-322	2 (2,0)
10.		Mathematics-I	HE-323	3(3,0)
11.		Introduction to Physics	HE-324	3 (2,1)
12.		Introduction to Psychology	HE-325	2(2,0)
13.		Introduction to Arts & Design – II	HE-326	3(2,1)
14.		Advanced Clothing	HE-327	3(2,1)
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
15.	3 rd	English-III	HE -431	3(3,0)
16.		Introduction to Computer	HE -432	3(2,1)
17.		Fundamentals of Economics	HE -433	3(3,0)
18.		Life Span development	HE -434	3(2,1)
19.		Home Management & Housing-I	HE -435	3(2,1)
20.		Fundamentals of Food & Nutrition	HE -436	3(2,1)
Total Credit Hours				18
S.NO	SEMESTER	COURSE TITLE	COURSE CODE	CREDIT HOURS
21.	4 th	Introduction to Management	HE -441	3(3,0)
22.		Bio-Chemistry	HE -442	3(2,1)
23.		Introduction to Sociology	HE -443	3(3,0)
24.		Family and Community Development	HE -444	3(2,1)
25.		Home Management & Housing-II	HE -445	3(2,1)
26.		Meal Management	HE -446	3(2,1)
Total Credit Hours				18

GEOLOGY

SCHEME OF STUDIES OF BS GEOLOGY 4-YEAR (SESSION- 2013 ONWARDS)

Semester-I	Course	Credit Hour (CH)	Total CH
GE-311	English-I	3	3
GE-312	Pakistan Studies	2	2
GE-313	Mathematics-I	3	3
GE-314	Physics-I	2+1	3
GE-315	Chemistry-I	2+1	3
GE-316	General Geology	2+1	3
Total			17

Semester-II	Course	Credit Hour (CH)	Total CH
GE-321	English-II	3	3
GE-322	Islamic Studies/Ethics	2	2
GE-323	Mathematics II	3	3
GE-324	Physics-II	2+1	3
GE-325	Chemistry-II	2+1	3
GE-326	Geomorphology	2+1	3
Total			17

Semester-III	Course	Credit Hour (CH)	Total CH
GE-431	Communication Skills	3	3
GE-432	Introduction to Computer	2+1	3
GE-433	Physics-III	2+1	3
GE-434	Chemistry-III	2+1	3
GE-435	Paleontology	2+1	3
GE-436	Stratigraphy	2+1	3
Total			18

Semester-IV	Course	Credit Hour (CH)	Total CH
GE-441	Tech. Report Writing	3	3
GE-442	Physics-IV	2+1	3
GE-443	Chemistry-IV	2+1	3
GE-444	Crystallography, Optical Mineralogy & Petrography	2+1	3
GE-445	Geological Fieldwork-I	2	2
GE-446	Structural Geology	2+1	3
Total			17

Semester V	Course	Credit Hour (CH)	Total CH
GE-551	Geo-tectonics	2+1	3
GE-552	Sedimentology	2+1	3
GE-553	Geophysics	2+1	3
GE-554	Mineralogy	2+1	3
GE-555	Igneous Petrology	2+1	3
GE-556	Metamorphic Petrology	2+1	3
Total			18

Semester VI	Course	Credit Hour (CH)	Total CH
GE-561	Sequence Stratigraphy	2+1	3
GE-562	Geochemistry	2+1	3
GE-563	Petroleum Geology	2+1	3
GE-564	Field Geology	2	2
GE-565	Economic Geology	2+1	3
GE-566	Geological Fieldwork – II	2	2
Total			16

Semester VII	Course	Credit Hour (CH)	Total CH
GE-671	Elective course	2+1	3
GE-672	Elective course	2+1	3
GE-673	Geology of Pakistan	3	3
GE-674	Environmental Geology	3	3
GE-675	Introduction to GIS & RS	2+1	3
GE-676	Hydrogeology	2+1	3
Total			18

Semester VIII	Course	Credit Hour (CH)	Total CH
GE-681	Elective course	2+1	3
GE-682	Elective course	2+1	3
GE-683	Elective course	2+1	3
GE-684	Engineering Geology	2+1	3
GE-689	Research Project/Two Optional Courses from the list given below with its Course Code	6/ (3+3)	6/ (3+3)
Total			18

Note: Internship is recommended in public/private sector organizations during/after the last four semesters, whenever possible. The allocation of the thesis topic and acquisition of data with the consultation of concerned supervisor shall start from beginning of VII semester.

LIST OF GROUPS AND ELECTIVE COURSES

Groups	Elective Course	Credit Hour (CH)
Group-I Mineralogy and Petrology	Geochemistry	3
	Igneous Petrogenesis	3
	Metamorphic Petrology	3
	Sedimentary Petrology	3
	Mineralogy	3
Group-II Paleontology and Stratigraphy	Stratigraphy	3
	Micropaleontology	3
	Invertebrate Paleontology	3
	Vertebrate Paleontology	3
	Palynology and Paleobotany	3
Group-III Economic Geology	Ore Deposits	3
	Mineral Exploration	3
	Coal Geology	3
	Mining Geology	3
	Metageny and Plate Tectonics	3
	Fundamentals Gemology	3
	Descriptive Gemology	3
	Mineral Exploration	3
	Mineral Deposits of Pakistan	3
	Mineral Economics	3
Group-IV Engineering Geology	Rock Mechanics	3
	Soil Mechanics	3
	Seismotectonics	3
	Engineering Geology	3
Group-V Petroleum Geosciences	Petroleum Geology	3
	Sequence Stratigraphy	3
	Petroleum Engineering	3
	Reservoir Geology	3
	Organic Geochemistry	3
	Petroleum Geology of Pakistan	3

LIST OF GROUPS AND ELECTIVE COURSES

Group-VI Applied Geophysics	Seismic Stratigraphy	3
	Earthquake Seismology	3
	Geomagnetism and Paleomagnetism	3
	Radiometric Methods	3
	Electrical methods and Bore-Hole Geophysics	3
	Geophysical Data Processing	3
	Gravity and Magnetic Methods	3
Group-VII Geochemistry	Thermodynamics	3
	Geochemical Exploration	3
	Stable Isotope Geochemistry	3
	Radio Isotope Geochemistry	3
	Low Temperature Geochemistry	3
	High Temperature Geochemistry	3
Group-VIII Sedimentology	Clastic Sedimentology	3
	Carbonate Sedimentology	3
	Sedimentary Petrology	3
	Basin Analysis	3
	Quaternary Geology	3
	Clay Mineralogy	3
Group-IX Hydrogeology	Hydrology	3
	Groundwater Investigations	3
	Groundwater Engineering	3
	Hydrochemistry and ground water pollution	3
Group-X Industrial Mineralogy	Industrial Mineralogy-I	3
	Industrial Mineralogy-II	3
	Instrumental Techniques	3
Group-XI Marine Geology	Marine Geology	3
	Oceanography	3
	Marine Geochemistry	3
	Geology of Arabian Sea	3
	Plate Tectonics	3
Group-XII Environmental Geosciences	Environmental Geology	3
	Soil and Water Resources	3
	Environmental Hazards	3
	Hydrological Systems and Environment	3
	Environmental Impact Assessment and Management	3
Group-XII Structure, Tectonics and Neotectonics	Structural Geology	3
	Metamorphic Structures	3
	Applied Structural Techniques	3
	Tectonics of Pakistan	3
	Neotectonics	3