CS-1A

Day/Period	I	п	ш	1:15-1:45	īV	v
Monday	English Composition and Comprehension 1 Muhammad Ammar English Composition and Comprehension 1 Junaid Shahid	Introduction to Information Technology - Lab Muiz Qadir	on and Communication		English Composition and C	Comprehensi on - Lab
Tuesday	Programming Fundamentals 1 Rizwan ul Haq		English Composition and Comprehension - Lab 1 Sadia Ashfaq		English Composition and Comprehension - Lab 1 Sadia Ashfaq	Digital Logic Design 1 Mirza Waqar Baig
Wednesday	Digital Logic Design - Lab 1 Muhammad Arslan		Islamic Studies/Ethics 1 Rizwanullah	L U N C H	English Composition and Comprehension 1 Muhammad Ammar	
Thursday	Programming Fundamentals - Lab Mughees Ismail		Linear Algebra 1 Amjad Hussain		Linear Algebra 1 Amjad Hussain	
Friday		Programming Fundamentals 1 Rizwan ul Haq	Islamic Studies/Ethics 1 Rizwanullah		English Composition and Comprehension 1 Junaid Shahid	Digital Logic Design 1 Mirza Waqar Baig

CS-1B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Programming Fundamentals 1 Rizwan ul Haq	English Composition and Comprehension - Lab 1 Farah Iqbal	English Composition and Comprehension - Lab 1 Farah Iqbal English Composition and Comprehension 1 Muhammad Ammar		Digital Logic Design - Lab Mujahid Hussain	1
Tuesday	Islamic Studies/Ethics 1 Rizwanullah	Digital Logic Design 1 Muhammad Sajid Iqbal	Introduction to Information and Communication Technology - Lab 1 Umar Naseer		Introduction to Information and Communication Technology - Lab 1 Umar Naseer	English Composition and Comprehension 1 Junaid Shahid
Wednesday	Linear Algebra 1 Amjad Hussain	Programming Fundamenta Pariwish Touseef	ıls - Iab 1	L U N C H		
Thursday	English Composition and Comprehension - Lab 1 Muhammad Iqbal	English Composition and Comprehension - Lab 1 Muhammad Iqbal English Composition and Comprehension 1 Junaid Shahid	Linear Algebra 1 Amjad Hussain			Digital Logic Design 1 Muhammad Sajid Iqbal
Friday	Programming Fundamentals 1 Rizwan ul Haq	Islamic Studies/Ethics 1 Rizwanullah	English Composition and Comprehension 1 Muhammad Ammar			

CS-1C

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension - Lab 1 Rida Akram		English Composition and Comprehension - Lab 1 Junaid Shahid		English Composition and Comprehension - Lab 1 Junaid Shahid	Digital Logic Design 1 Dr. Adil Zulfiqar
Tuesday	Digital Logic Design - Lab 1 Mujahid Hussain		Islamic Studies/Ethics 1 Zia Ahmad		Programming Fundamentals 1 Dr. Rabi a Maqsood	English Composition and Comprehension 1 Junaid Shahid
Wednesday	Introduction to Information and Communication Technology - Lab 1 Aqsa Younas			L U N C H		Islamic Studies/Ethics 1 Zia Ahmad
Thursday	Linear Algebra Digital Logic Design 1 Amjad Hussain Dr. Adil Zulfiqar				Programming Fundamenta Ayesha Liaqat	lls - Lab
Friday	English Composition and Comprehension 1 Junaid Shahid English Composition and Comprehension 1 Muhammad Ammar	English Composition and Comprehension 1 Muhammad Ammar	Linear Algebra 1 Amjad Hussain		Programming Fundamentals 1 Dr. Rabi a Maqsood	

CS-1D

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension 1 Farah Iqbal English Composition and Comprehension 1 Sadia Ashfaq		English Composition and Comprehension - Lab 1 Rida Akram		English Composition and Comprehension - Lab 1 Rida Akram	
Tuesday	Introduction to Information Technology - Lab	on and Communication	Islamic Studies/Ethics 1 Zia Ahmad		English Composition and Comprehension 1 Farah Iqbal	Programming Fundamentals 1 Dr. Rabi a Maqsood
Wednesday	English Composition and Comprehension - Lab Amna Farooq		English Composition and Comprehension 1 Sadia Ashfaq	L U N C H	Programming Fundamentals 1 Dr. Rabia Maqsood	
Thursday	Calculus and Analytical Geometry 1 Dr.Mushtaq Ahmad	Applied Physics 1 Waheed Ahmad	Calculus and Analytical Geometry 1 Dr.Mushtaq Ahmad		Programming Fundamenta Muhammad Azeem Iftikha	1
Friday	Islamic Studies/Ethics 1 Zia Ahmad				Applied Physics 1 Waheed Ahmad	

CS-1E

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension Introduction to Information Technology - Lab 1 Muhammad Iqbal Muiz Qadir		on and Communication		English Composition and C	Comprehensi on - Lab
Tuesday	Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad		Programming Fundamentals 1 Dr. Danish Shehzad		Programming Fundamenta Mughees Ismail	ıls - Lab
Wednesday		Applied Physics 1 Waheed Ahmad	Pakistan Studies 1 Asif Naveed	L U N C H		
Thursday	Pakistan Studies 1 Asif Naveed	English Composition and Comprehension - Lab Mah Rukh			English Composition and Comprehension 1 Farah Iqbal	Programming Fundamentals 1 Dr. Danish Shehzad
Friday		English Composition and Comprehension 1 Muhammad Iqbal			English Composition and Comprehension 1 Farah Iqbal	Applied Physics 1 Waheed Ahmad

CS-1F

Day/Peri od	I	п	ш	1:15-1:45	īv	v
Monday	Pakistan Studies 1 Asif Naveed	English Composition and Comprehension 1 Muhammad Iqbal			English Composition and C Ehtasham-Ul-Haq	Comprehensi on - Lab
Tuesday		Pakistan Studies 1 Asif Naveed	English Composition and Comprehension 1 Muhammad Iqbal		English Composition and Comprehension - Lab 1 Mah Rukh English Composition and Comprehension 1 Sadia Ashfaq	English Composition and Comprehension - Lab 1 Mah Rukh
Wednesday	Introduction to Information and Communication Technology - Lab 1 Muhammad Haseeb Arshad		Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad	L U N C H		Applied Physics 1 Waheed Ahmad
Thursday			Programming Fundamentals - Lab 1 Umar Naseer		Programming Fundamentals - Lab 1 Umar Naseer	Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad
Friday	Programming Fundamentals 1 Saqib Hayat	English Composition and Comprehension 1 Sadia Ashfaq	Programming Fundamentals 1 Saqib Hayat			Applied Physics 1 Waheed Ahmad

CS-3A

Day/Peri od	I	п	ш	1:15-1:45	IV	v
Monday	Finance & Accounting 1 Agha Mureed Ahmad Khan	Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari Data Structures 1 Muhammad Husnain	Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari		Object Oriented Programmi Muhammad Hannan Faroo	1
Tuesday	Applied Physics 1 Muhammad Mohsin Hameed Computer Organization and Assembly Language 1 Abdul Qadeer Bilal	Applied Physics 1 Muhammad Mohsin Hameed	Data Structures - Lab 1 Saba Aslam		Data Structures - Lab 1 Saba Aslam	Data Structures 1 Muhammad Husnain Linear Algebra 1 Ghilmana Sarmad
Wednesday	Digital Logic Design 1 Muhammad Irfan Ishaq	Discrete Structures 1 Dr. Muhammad Ahmad Object Oriented Programming 1 Shoaib Saleem	Computer Organization and Assembly Language 1 Abdul Qadeer Bilal	L U N C H	Differential Equations 1 Arfan Shahzad	
Thursday		Discrete Structures 1 Dr. Muhammad Ahmad			Calculus and Analytical Geometry 1 Bushra Niaz Finance & Accounting 1 Agha Mureed Ahmad Khan	Digital Logic Design 1 Muhammad Irfan Ishaq
Friday	Object Oriented Programming 1 Shoaib Saleem	Calculus and Analytical Geometry 1 Bushra Niaz	Differential Equations 1 Arfan Shahzad			Linear Algebra 1 Ghilmana Sarmad

CS-3B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Object Oriented Programmi Muhammad Hannan Faroo	1	Discrete Structures 1 Dr. Muhammad Ahmad		Computer Orgnaization an Ali Raza	d Assembly Language - Lab 1
Tuesday	Computer Organization and Assembly Language 1 Abdul Qadeer Bilal		Computer Organization and Assembly Language 1 Abdul Qadeer Bilal		Data Structures - Lab Muhammad Hannan Faroo	rd T
Wednesday	Differential Equations 1 Arfan Shahzad	Differential Equations 1 Arfan Shahzad Object Oriented Programming 1 Dr Usman Habib		L U N C H		Fundamentals of Management 1 Muhammad Tayyeb Riaz
Thursday		Fundamentals of Management 1 Muhammad Tayyeb Ri az				Discrete Structures 1 Dr. Muhammad Ahmad
Friday			Object Oriented Programming 1 Dr Usman Habib			

CS-3C

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday						
Tuesday		Data Structures 1 Dr. Hashim Yasin	Differential Equations 1 Arfan Shahzad		Computer Orgnaization an	d Assembly Language - Lab 1
Wednesday	Data Structures 1 Dr. Hashim Yasin			L U N C H	Marketing Management Syed Zeeshan Haider	1
Thursday	Data Structures - Lab Mughees Ismail					
Friday					Differential Equations 1 Arfan Shahzad	

CS-3D

Day/Period	I	П	ш	1:15-1:45	IV	v
Monday	Differential Equations 1 Muhammad Waqas Javed					Marketing Management 1 Syed Zeeshan Haider
Tuesday	Data Structures 1 Muhammad Usman Joyia		Marketing Management 1 Syed Zeeshan Haider			
Wednesday	Discrete Structures 1 Usman Ghous		Data Structures - Lab 1 Saba Aslam	L U N C H	Data Structures - Lab 1 Saba Aslam	
Thursday	Computer Orgnaization and	l Assembly Language - Lab 1				Differential Equations 1 Muhammad Waqas Javed
Friday	Data Structures 1 Muhammad Usman Joyia				Discrete Structures 1 Usman Ghous	

CS-3E

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday			Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari		Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari	
Tuesday		Differential Equations 1 Hayat Ali				
Wednesday				L U N C H	Finance & Accounting 1 Agha Mureed Ahmad Khan	
Thursday					Differential Equations 1 Hayat Ali	
Friday			Finance & Accounting 1 Agha Mureed Ahmad Khan			

CS-5A

Day/Period	ī	п	ш	1:15-1:45	IV	v
Monday	Software Design and Analysis 1 Dr. Muhammad Bilal		Computer Networks - Lab 1 Ayesha Liaqat		Computer Networks - Lab 1 Ayesha Liaqat	
Tuesday	Theory of Automata 1 Anmol Bilal	Software Design and Analysis 1 Dr. Muhammad Bilal	Web Programming 1 Muhammad Shahrose Khan		Probability and Statistics 1 Haris Khurram	
Wednesday		Web Programming 1 Muhammad Shahrose Khan	Theory of Automata 1 Anmol Bilal	L U N C H		
Thursday						Computer Networks 1 Masood Habi b
Friday		Probability and Statistics 1 Haris Khurram	Computer Networks 1 Masood Habib			

CS-5B

Day/Period	ī	п	ш	1:15-1:45	IV	v
Monday		Theory of Automata 1 Anmol Bilal	Web Programming 1 Muhammad Shahrose Khan		Web Programming 1 Muhammad Shahrose Khan	
Tuesday			Marketing Management 1 Hafiz M.Zeeshan Raza		Theory of Automata 1 Anmol Bilal	
Wednesday			Computer Networks - Lab 1 Ayesha Liaqat	L U N C H	Computer Networks - Lab 1 Ayesha Liaqat	Computer Networks 1 Dr. Bilal Khan
Thursday			Software Design and Analysis 1 Dr. Muhammad Bilal			Software Design and Analysis 1 Dr. Muhammad Bilal
Friday	Marketing Management 1 Hafiz M.Zeeshan Raza				Computer Networks 1 Dr. Bilal Khan	

CS-5C

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday	Software Design and Analysis 1 Dr. Uzair Iqbal		Probability and Statistics 1 Haris Khurram			
Tuesday	Computer Networks - Lab Sumaira Mustafa	1				
Wednesday		Theory of Automata 1 Numan Shafi	Probability and Statistics 1 Haris Khurram	L U N C H	Computer Networks 1 Dr. Bilal Khan	
Thursday						Advanced Programming 1 Awais Azam
Friday	Theory of Automata 1 Numan Shafi	Computer Networks 1 Dr. Bilal Khan	Software Design and Analysis 1 Dr. Uzair Iqbal		Advanced Programming 1 Awais Azam	

CS-5D

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday			Operating System 1 Usman Ghous			Discrete Structures 1 Usman Ghous
Tuesday	Operating System 1 Usman Ghous	Theory of Automata 1 Numan Shafi			Database Systems - Lab Saqib Hayat	1
Wednesday	Database Systems 1 Saqib Hayat	Design and Analysis of Algorithms 1 Shoaib Saleem	Psychology 1 Aisha Bano	L U N C H	Database Systems 1 Saqib Hayat	Design and Analysis of Algorithms 1 Shoaib Saleem
Thursday	Theory of Automata 1 Numan Shafi				Operating Systems - Lab Muhammad Haseeb Arshad	1
Friday	Psychology 1 Aisha Bano				Discrete Structures 1 Usman Ghous	

CS-5E

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday			Theory of Automata 1 Numan Shafi		Database Systems 1 Aliza Saeed	
Tuesday	Database Systems - Lab 1 Muhammad Shahrose Khan					Design and Analysis of Algorithms 1 Shoaib Saleem
Wednesday			Database Systems 1 Aliza Saeed	L U N C H		
Thursday		Operating Systems - Lab Muhammad Yousaf	1		Theory of Automata 1 Numan Shafi	Psychology 1 Aisha Bano
Friday					Psychology 1 Aisha Bano	Design and Analysis of Algorithms 1 Shoaib Saleem

CS-7A

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday	Software Engineering 1 Awais Azam				Artificial Intelligence 1 Dr. Shahnawaz Qureshi	Data Science 1 Adeel Ashraf Cheema
Tuesday	Software Engineering 1 Awais Azam		Data Mining 1 Dr. Rabia Maqsood			
Wednesday			Professional Practices in IT 1 Rizwan ul Haq	L U N C H		Information Security 1 Dr. Danish Shehzad
Thursday	Data Mining 1 Dr. Rabia Maqsood		Artificial Intelligence - Lab 1 Saba Aslam		Artificial Intelligence - Lab 1 Saba Aslam	
Friday	Artificial Intelligence 1 Dr. Shahnawaz Qureshi	Information Security 1 Dr. Danish Shehzad	Data Science 1 Adeel Ashraf Cheema		Professional Practices in IT 1 Rizwan ul Haq	

CS-7B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday		Information Security 1 Dr. Danish Shehzad			Data Mining 1 Nasreen Akhtar	
Tuesday	Data Science 1 Adeel Ashraf Cheema				Software Engineering 1 Awais Azam	
Wednesday			Data Mining 1 Nasreen Akhtar	L U N C H	Software Engineering 1 Awais Azam	Professional Practices in IT 1 Masood Habib
Thursday	Professional Practices in IT 1 Masood Habib					
Friday			Data Science 1 Adeel Ashraf Cheema		Information Security 1 Dr. Danish Shehzad	

CS-7C

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Information Security 1 Dr. Irfan ul Haq					Applied Machine Learning 1 Dr. Hashim Yasin
Tuesday						
Wednesday		Applied Machine Learning 1 Dr. Hashim Yasin		L U N C H		
Thursday	Software for Mobile Devices	s - Lab 1	Information Security 1 Dr. Irfan ul Haq			Professional Practices in IT 1 Masood Habib
Friday					Professional Practices in IT 1 Masood Habib	

CS-7D

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday	Applied Machine Learning 1 Dr. Hashim Yasin		Applied Machine Learning 1 Dr. Hashim Yasin			Professional Practices in IT 1 Tehreem Aslam
Tuesday			Software for Mobile Devices - Lab 1 Tahir Farooq		Software for Mobile Devices - Lab 1 Tahir Farooq	
Wednesday				L U N C H	Information Security 1 Dr. Muhammad Umar Aftab	Professional Practices in IT 1 Tehreem Aslam
Thursday						
Friday			Information Security 1 Dr. Muhammad Umar Aftab			

CS-7E

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday			Information Security 1 Dr. Muhammad Umar Aftab		Fundamentals of Software Project Management 1 Dr. Muhammad Bilal	Software Testing 1 Dr. Uzair Iqbal
Tuesday			Information Security 1 Dr. Muhammad Umar Aftab		Fundamentals of Software Project Management 1 Dr. Muhammad Bilal	
Wednesday				L U N C H	Software Testing 1 Dr. Uzair Iqbal	
Thursday		Professional Practices in IT 1 Tehreem Aslam				Professional Practices in IT 1 Tehreem Aslam
Friday						

CS-7F

Day/Period	ī	п	ш	1:15-1:45	IV	v
Monday			Software Testing 1 Dr. Uzair Iqbal			
Tuesday						
Wednesday				L U N C H		
Thursday		Software Testing 1 Dr. Uzair Iqbal			Remote Sensing and GIS 1 Dr M. Shahzad Sarfraz	
Friday			Remote Sensing and GIS 1 Dr M. Shahzad Sarfraz			

CS-9A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday						
Tuesday	Software for Mobile Devices No-Teacher	:-Lab 1				
Wednesday				L U N C H		Computer Architecture 1 Muhammad Usman Joyia
Thursday	Computer Architecture 1 Muhammad Usman Joyia					
Friday						

SE-1A

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension - Lab Muhammad Ammar		English Composition and Comprehension - Lab 1 Ehtasham-Ul-Haq English Composition and Comprehension 1 Sadia Ashfaq		English Composition and Comprehension - Lab 1 Ehtasham-Ul-Haq	
Tuesday	1		Pakistan Studies 1 Asma Yaqoob		Programming Fundamentals 1 Sumaira Mustafa	Pakistan Studies 1 Asma Yaqoob
Wednesday	Programming Fundamentals - Lab Sumaira Mustafa		English Composition and Comprehension 1 Sadia Ashfaq	L U N C H	English Composition and Comprehension 1 Farah Iqbal	
Thursday	Introduction to Information and Communication Technology - Lab 1 Umar Naseer				English Composition and Comprehension 1 Farah Iqbal	
Friday	Applied Physics Waheed Ahmad	1			Programming Fundamentals 1 Sumaira Mustafa	

SE-1B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Pakistan Studies 1 Zainab Javeed	Introduction to Information Technology - Lab Muhammad Haseeb Arshad	1			Applied Physics 1 Dr. Arslan Ahmed Amin
Tuesday	English Composition and Comprehension 1 Rida Akram		Calculus and Analytical Geometry 1 Bushra Ni az		Programming Fundamenta Aliza Saeed	ıls-Lab
Wednesday	Programming Fundamentals 1 Aliza Saeed	English Composition and C	Comprehension - Lab 1	L U N C H	Applied Physics 1 Dr. Arslan Ahmed Amin	
Thursday	English Composition and C	Comprehension - Lab 1			Programming Fundamentals 1 Aliza Saeed	
Friday	English Composition and Comprehension 1 Muhammad Iqbal		Pakistan Studies 1 Zainab Javeed		Calculus and Analytical Geometry 1 Bushra Niaz	English Composition and Comprehension 1 Rida Akram English Composition and Comprehension 1 Muhammad Iqbal

SE-3A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Human Computer Interaction 1 Dr. Shahnawaz Qureshi				Marketing Management 1 Hafiz M.Zeeshan Raza	
Tuesday		Data Structures 1 Muhammad Usman Joyia	Software Requirement Engineering 1 Pariwish Touseef		Data Structures - Lab 1 Aqsa Younas	Data Structures - Lab 1 Aqsa Younas Object Oriented Programming 1 Dr Usman Habib
Wednesday			Object Oriented Programming - Lab 1 Muhammad Yousaf	L U N C H	Object Oriented Programming - Lab 1 Muhammad Yousaf	Software Requirement Engineering 1 Pariwish Touseef
Thursday	Human Computer Interaction 1 Dr. Shahnawaz Qureshi	Marketing Management 1 Hafiz M.Zeeshan Raza	Data Structures 1 Muhammad Usman Joyia		Object Oriented Programming 1 Dr Usman Habib	
Friday	Linear Algebra Ghilmana Sarmad	1				

SE-3B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday		Data Structures - Lab Asif Ameer	1			
Tuesday		Linear Algebra 1 Chilmana Sarmad	Human Computer Interaction 1 Dr. Shahnawaz Qureshi		Data Structures 1 Asif Ameer	
Wednesday				L U N C H	Human Computer Interaction 1 Dr. Shahnawaz Qureshi	Finance & Accounting 1 Muhammad Nasif
Thursday		Finance & Accounting 1 Muhammad Nasif				
Friday		Linear Algebra 1 Ghilmana Sarmad	Data Structures 1 Asif Ameer		Software Requirement Engi Pariwish Touseef	ineering

SE-5A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Database Systems - Lab Nasreen Akhtar	1	Operating Systems 1 Muhammad Husnain		Software Construction and Muhammad Azeem Iftikha	1
Tuesday	Software Quality Engineering 1 Tehreem Aslam	Operation Research 1 Dr. Muhammad Imran Babar	Technical and Business Writing 1 Muhammad Nouman Iftikhar		Software Construction and Development 1 Dr. Affan Rauf	Software Quality Engineering 1 Tehreem Aslam
Wednesday	Software Construction and Development 1 Dr. Affan Rauf	Operating Systems - Lab Muhammad Yousaf	1	L U N C H		
Thursday	Database Systems 1 Nasreen Akhtar	Operation Research 1 Dr. Muhammad Imran Babar			Probability and Statistics 1 Haris Khurram	
Friday		Operating Systems 1 Muhammad Husnain	Technical and Business Writing 1 Muhammad Nouman Iftikhar		Database Systems 1 Nasreen Akhtar	Probability and Statistics 1 Haris Khurram

SE-5B

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday					Probability and Statistics 1 Haris Khurram	Software Construction and Development 1 Dr. Affan Rauf
Tuesday		Software Quality Engineering 1 Abdul Qadeer Bilal			Operation Research 1 Dr. Muhammad Imran Babar	Probability and Statistics 1 Haris Khurram
Wednesday		Software Quality Engineering 1 Abdul Qadeer Bilal		L U N C H	Technical and Business Writing 1 Muhammad Nouman Iftikhar	Software Construction and Development 1 Dr. Affan Rauf
Thursday			Technical and Business Writing 1 Muhammad Nouman Iftikhar		Software Construction and Muhammad Azeem Iftikha	1
Friday		Operation Research 1 Dr. Muhammad Imran Babar				