

### **3-2 Study and Examination on Design Criteria**

#### **(1) Selection of the VCR Format**

The VCR format becomes a major determinant of the video grade. To ensure the grade of the broadcasting level, requested in this project are the high cost-performance 1/2" VCRs of broadcasting standard and the beta-cam SP format. There is also the M-II format of the same grade. While the beta-cam SP format is the main format today in the Japanese broadcasting industry, ever since development of digital VCRs in the recent years, it is gradually being replaced. In this sense, it can be said a format one generation ago. In Pakistan, the PTV and ETV which are national TV stations as well as the one private broadcasting station have introduced beta-cam SP and this is the main format.

The IET studio comprises an independent production facility. Because technically, formats beta-cam SP or better can fully ensure the video grade for such studio, except for the recording VCR used in the final stage of post-production necessary in supplying video sources to ETV, it can be said that there is no necessity to limit the format. However, since all of Pakistan's broadcasting stations are operating based on the beta-cam SP format, when consideration is given to the advantages of more effective studio operation after execution of this project such as mutual technical cooperation with ETV, support in the area of maintenance and leasing of source images in the area of production, it is desirable that the system entirely be unified with the beta-cam SP format and this is judged to be in meeting with the country's present state without any prejudice.

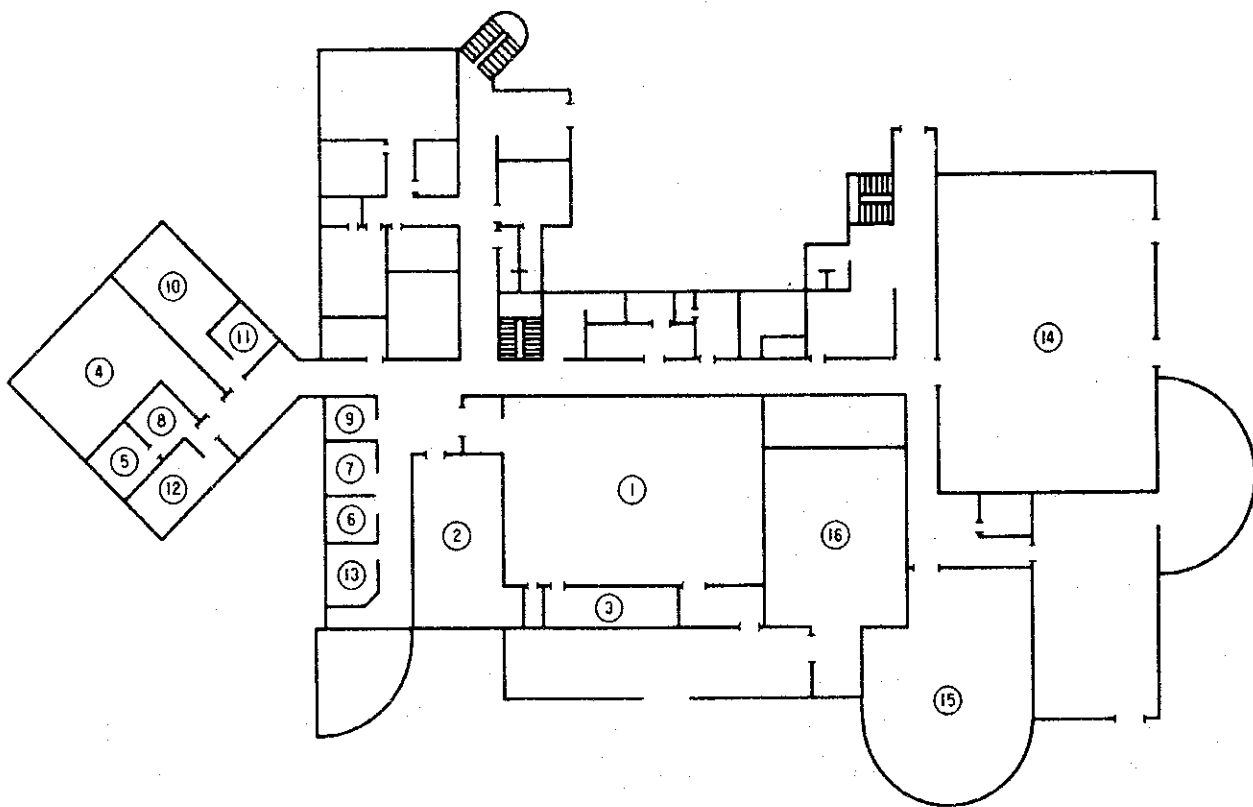
#### **(2) Specifications of TV Cameras**

The Request had initially planned to use portable cameras as main studio cameras. However, during the field survey, the request was changed to that for specifications of a full-scale studio camera. This will mean rise in the camera grade by one rank which will require grade increase of the lens, pedestals and other related equipment. However, when consideration is given to the fact that while this studio is an independent studio for producing educational software, the programmes are produced for the objective of supplying them to broadcasting stations for transmission, it is necessary to ensure the compatibility with the video grade of the programmes produced by the stations. Also, since the studio camera excels in handling and stability, it is an appropriate choice when examined from the technical standpoint.

### 3-3 Basic Plan

#### 3-3-1 Site and Layout Plan

The IET building where the equipment will be installed is shown on the Fig. 3.1, and location of the major equipment is identified in the Table 3.1. The layout plan of the equipment, except for the outdoor coverage car and the field production car, is as shown on the Fig. 3.2.



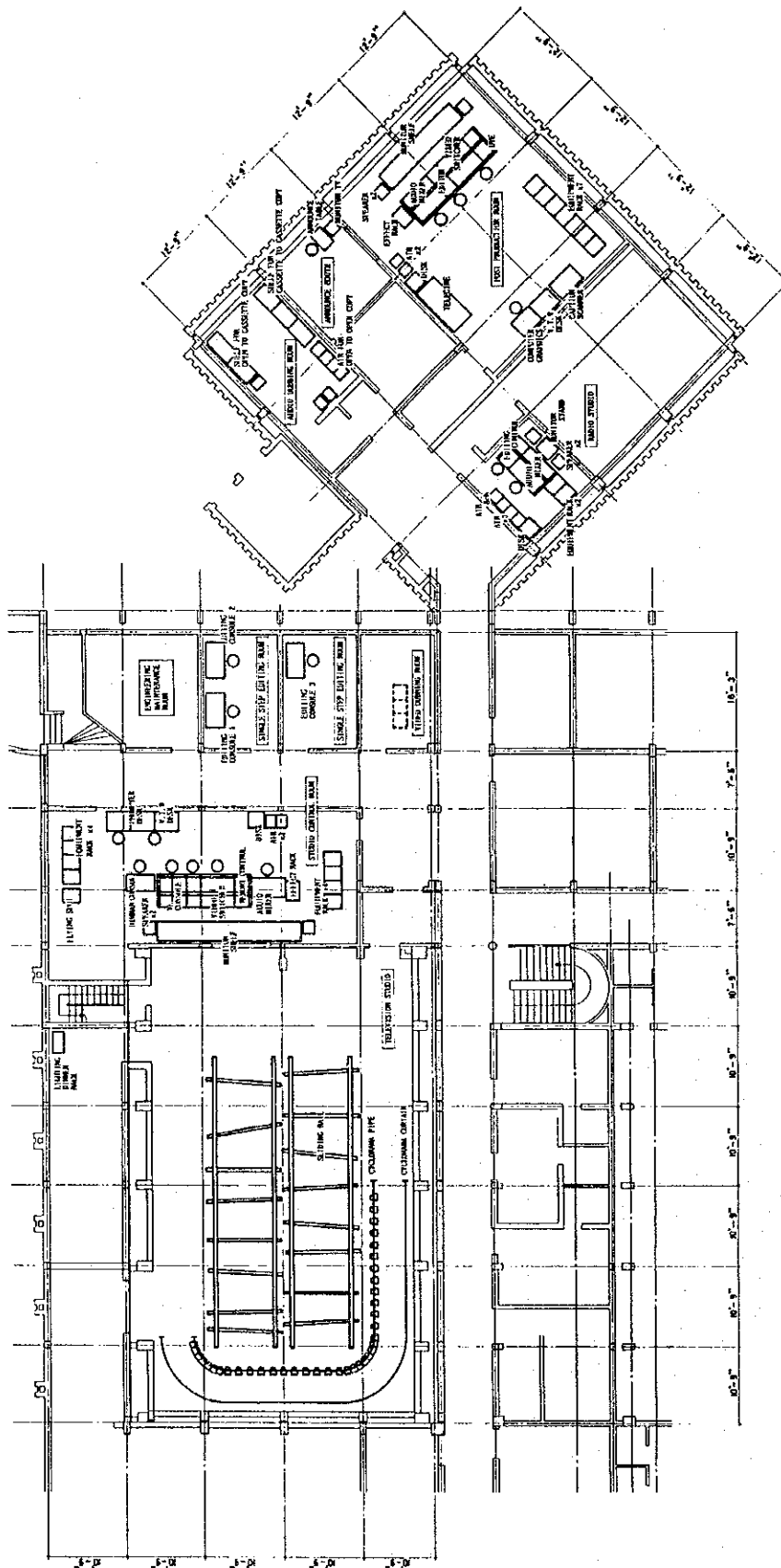
**Fig. 3. 1 Layout of the IET Building**

**Table 3. 1 Location of the Major Equipment**

	Room	Area(m <sup>2</sup> )	Major Equipment
1	Studio A	203.2	Studio Camera, Monitors, Mic. Boom Stand, Lighting Equipment, Curtain, etc.
2	Central Apparatus Room	69.8	Flying Spot Scanner, Character Generator, Video Production Equipment, Audio Production Equipment, VCRs, Monitors, Rack & Console, Sync Signal Generator, Pulse Distribution Amplifier, etc.
3	Dinner Room (CAMERA STORE)	29.3	Dimmers, Dimmers*
4	Post Production Studio	71.2	VCRs, Editor, Video Production Equipment, Audio Production Equipment, Monitors, Telecine Chain, Rack & Console, etc.
5	Announce Booth	6.7	Announcer Desk, Mic. & Stand, VCRs, Monitors, etc.
6	Editing Room 1	13.9	Editing Control Unit (Single Step)
7	Editing Room 2	13.9	Editing Control Unit (Single Step)
8	Editing Room 3	6.7	Editing Control Unit (Single Step)
9	Video Dubbing Room	14.6	Video Duplicator*
10	Radio Studio	40.5	Mic. & Stand, Studio Monitors, etc.
11	Radio Control Room	27.6	Audio Mixer, Multitrack Tape Recorder, Audio Production Equipment**, Studio Monitors, etc.
12	Audio Dubbing Room	20.1	High Speed Duplicator**, etc.
13	Maintenance Room	14.2	Measuring Equipment, Tools**
14	Auditorium	285.7	Video Projector, Audio System
15	Council Hall		Video Projector, Conference System, Mic.
16	Studio Band Control Room	104.0	Studio Cameras*, Video/Audio Production Equipment*, Monitors*, Lighting Equipment*

\* Denotes the existing equipment.

\*\* Denotes the use of existing and new equipment in parallel or in joint.



### **3-3-2 Equipment Plan**

From the viewpoint of the study and consideration on the request mentioned in the clause 2-2, and in consideration also of design policy and examination on design criteria as above, the equipment plan is formulated as follows;

The block diagrams related to the equipment above are shown on the Fig. 3.3 to 3.12 system-wise;

## LIST OF EQUIPMENT

			Q'ty
<b>A. TV STUDIO</b>			
A.1	Colour Camera Chain with CCU		4 sets
A.1.1	Three-Chip CCD (Studio Grade Cameras)		4 sets
A.1.2	200mm Lens 14x		4 sets
A.1.3	Cam Head & Pedestal		4 sets
A.1.4	Camera Cable		4 sets
A.1.5	Test Chart Set		4 sets
A.1.6	Teleprompter		2 sets
A.1.7	CCU		4 sets
A.2	Flyingspot Scanner (2 channels)		2 sets
A.3	Character Generator (English)		1 set
A.4	Video Production Equipment		1 set
A.4.1	Video Production Switcher		1 set
A	Production Switcher		1
B	Mix-Keyer		2
C	Downstream Keyer		1
D	BB/BC Generator		1
E	Title Key Generator		1
F	Wipe Pattern Generator		2
G	Chroma-key Generator		1
H	Tally Logic Panel		1
I	D.V.M.E. & Frame Store		1 set
A.4.2	Colour Stabilizing Amplifier		1 set
A.4.3	Video/Pulse Distributing Equipment		1 set
A.4.4	Video/Pulse Delay Line		1 set
A.4.5	Cabinet Rack Assembly		1 set
A.4.6	PD/Switcher Console		1 set
A.4.7	VE Console		1 set
A.5	Audio Production Equipment		1 lot
A.5.1	Audio Mixing Console (with Graphic Equalizer)		1 set
A.5.2	Compact Disc Reproducer		1 set
A.5.3	Disc Reproducer		1 set
A.5.4	Tape Recorder/Reproducer (1/4" Reel to Reel 4 channel)		2 sets
A.5.5	Cassette Tape Recorder/Reproducer		2 sets
A.5.6	Microphone & Cable		1 lot
	Gun Microphone with Parabolic Reflector		2
	Condenser Mic		2
	Condenser Mic Switchable		2
	Condenser Mic Lavalier		6
	Dynamic Mic Uni-Directional		6
	Printed Ribbon		
	Mic Bi-Directional		2
A.5.7	Microphone Stands		1 lot
	Telescopic Mic Stand		4
	Goose-Neck Mic Stand		4
	Boom Stand (Studio Booms)		2
	Boom Stand (Big)		4
A.5.8	Reverberation Unit		1 set

## LIST OF EQUIPMENT

			Q'ty
A.6	VCR 1/2" Broadcast Standard		
	A.6.1	VCR with Time Code & TBC	3 sets
	A.6.2	Waveform Monitor	1 set
	A.6.3	Vectorscope	1 set
	A.6.4	Colour Picture Monitor with Speaker	2 sets
	A.6.5	Bulk Tape Eraser	1 set
A.7	Monitoring Equipment		
	A.7.1	Video Production Monitor	
	A	14-inch Colour Picture Monitor	11 sets
	B	20-inch Colour Picture Monitor	1 set
	C	Monitor Shelf	1 set
	A.7.2	V. E. Monitor	
	A	9-inch Colour Picture Monitor	1 set
	B	Waveform Monitor	1 set
	C	Vectorscope	1 set
	D	14-inch Colour Master Monitor	1 set
	A.7.3	Studio Floor Monitor	
	A	20-inch Colour Picture Monitor	1 set
	B	Audio Monitor Speaker with Amplifier	1 set
	C	Carriage	1 set
	A.7.4	Audio Monitor for Control Room	
	A	Audio Monitor Speaker with Amplifier	1 set
	A.7.5	Ceiling Speaker for Studio Floor(TB)	1 set
	A.7.6	Motorized/manual Curtains Props System for Studio	1 set
	A.7.7	Cue Sign System(optical)	1 set
A.8	Studio Intercom Equipment		1 set
A.9	Lighting Equipment		1 lot
	A.9.1	Lighting Control System, Electric Dimmer with Memory Lighting Control	1 set
	A.9.2	Lantern & Ancillary Equipment	1 set
	A	1kW Spot Light	6
	B	Standard 2kW Fresnel Spot Light	25
	C	2kW Spot Light (LPS 20A)	3
	D	Profile Spot Light (1kW)	6
	E	2kW Solo (CSI) Follow Spot Light with Stand	2
	F	1kW Floor Light with Stand (LPS-10A)	4
	G	Cyclorama/Back Light (1kW Upper & Lower Horizon)	8
	H	Soft Light 1.25kW (SF 25F)	15
	I	Spare Lamps for above lights	12 each
	J	Light Effects Projector including Spiral/Matt Effects Machine, 3-Objective Lenses Disc Plate/Disc Matt/Endless films for various effects such as Dark Clouds-Light Clouds Thunder, Snow, Heavy Snow, Rain, Heavy Rain Cherry Blossom, Flames and Running Water	1 lot

## LIST OF EQUIPMENT

		Q'ty
<b>B. CENTRAL APPARATUS ROOM</b>		
B.1	Sync Signal Generator	2 sets
B.2	Television Generator	1 set
B.3	Automatic/Manual Change Over Unit	1 set
B.4	Video Distribution Amplifier	6 lot
B.5	Audio Distribution Amplifier	5 lot
B.6	Pulse Distribution Amplifier	6 lot
B.7	Video/Pulse Delay Unit	3 lot
B.8	Rack Assembly	1 set
B.9	Master/Slave Clock System & Logo Generator	1 set
B.10	Telecine Chain	
B.10.1	Three CCD Colour Camera	1 set
B.10.2	Optical Multiplexer	1 set
B.10.3	16mm Film Projector	1 set
B.10.4	35mm Slide Projector	1 set
B.10.5	12-inch Picture Monitor	1 set
B.10.6	Waveform Monitor	1 set
B.10.7	Trans Video 16mm/35mm	2 sets
B.11	Signal Distribution System (RF and Base Band)	1 set
B.12	Room to Room Communication (40 Rooms)	1 set
B.13	System Converter	
B.13.1	System Converter (2-way)	1 set
B.13.2	1/2" Broadcast Standard VTR (NTSC) (Player & Recorder)	1 set
B.13.3	Routing Switcher	1 set
B.13.4	Multi-system Picture Monitor (9-inch Colour)	2 sets
B.13.5	Multi-system VHS VCR	2 sets
B.13.6	Rack Assembly	1 set
B.14	VHF Communication System (2RX/TX)	1 set
B.15	Satellite Receiver with 6 Video Monitors	1 set
B.16	Video Colour Printer	1 set
<b>C. EDITING ROOM (SINGLE STEP)</b>		
C.1	Automatic Editing Control Unit	3 sets
C.2	1/2" Broadcast Standard VCR with Time Code & TBC	6 sets
C.3	14-inch Picture Monitor with Audio Speaker	6 sets
C.4	Console	3 sets
C.5	Pairs of Headphone	3 sets
<b>D. POST PRODUCTION STUDIO</b>		
D.1	VCRs	
D.1.1	1/2" Broadcast Standard VCR (for A/B Roll Editing)	3 sets
D.1.2	3/4" High Band U-matic VCR	1 set
D.1.3	TBC for 3/4" VCR	1 set
D.1.4	Time Code Generator/Reader	1 set
D.1.5	TBC Remote Controller	4 sets
D.2	Editor	
D.2.1	Automatic Editing Control Unit	1 set
D.2.2	VCR Interface	4 sets
D.2.3	Switcher Interface	1 set



## LIST OF EQUIPMENT

			Q'ty
	D.2.4	Mixer Interface	1 set
	D.2.5	CRT Display	1 set
	D.2.6	Editing Console	1 set
D.3	Video Production		
	D.3.1	Video Production Switcher	1 set
	A	Production Switcher	1
	B	Mix Keyer	2
	C	Downstream Keyer	1
	D	BB/BC Generator	1
	E	Title Key Generator	2
	F	Wipe Pattern Generator	2
	G	Chroma Keyer	1
	D.3.2	Digital Video Effect	1 set
	D.3.3	Video Processing Amplifier	1 set
	D.3.4	Video/Pulse Distribution Amplifier	6 lot
	D.3.5	Video/Pulse Delay	3 lot
	D.3.6	Control Console	1 set
	D.3.7	Caption Scanner	1 set
	D.3.8	Video Typewriter	1 set
	D.3.9	Computer Graphic/Animator	1 set
D.4	Audio Production		
	D.4.1	Audio Mixer (16 channels)	1 set
	D.4.2	Compact Disc Player	1 set
	D.4.3	Disc Player	1 set
	D.4.4	Tape Recorder/Reproducer (1/4" Reel to Reel)	2 sets
	D.4.5	Cassette Tape Recorder/Reproducer	2 sets
	D.4.6	Control Console	1 set
	D.4.7	Effector	
	A	Digital Reverberator	1
	B	Graphic Equalizer	1
	C	Rack	1
D.5	Monitor Equipment		
	D.5.1	20-inch Colour Master Monitor	1 set
	D.5.2	20-inch Colour Picture Monitor	1 set
	D.5.3	14-inch Colour Picture Monitor	12 sets
	D.5.4	Waveform Monitor	1 set
	D.5.5	Vector Scope	1 set
	D.5.6	Audio Monitor Speaker with Amplifier	2 sets
	D.5.7	Monitor Switcher	1 set
	D.5.8	Monitor Shelf	1 set
D.6	Rack Assembly		3 sets
<b>E. OUTDOOR COVERAGE EQUIPMENT</b>			
E.1	VCR in Camera		
	E.1.1	Three-Chip CCD Portable Camera	2 sets
	E.1.2	Dockable 1/2" Broadcast SP VCR	2 sets
	E.1.3	Zoom Lens 14x or 20x	2 sets
	E.1.4	Tripod/Dolly	2 sets
	E.1.5	Rechargeable Battery Pack	6 sets
	E.1.6	Battery Charger	2 sets
	E.1.7	AC Adaptor	2 sets

## LIST OF EQUIPMENT

			Q'ty
	E.1.8	Carrying Case	2 sets
E.2	Audio Equipment		
	E.2.1	Portable Audio Mixer	2 sets
	E.2.2	Portable Tape Recorder	2 sets
	E.2.3	AC Power Adaptor for Item E.2.1, E.2.2	4 sets
	E.2.4	Shot-Gun Type Microphone	2 sets
	E.2.5	Uni-directional Microphone	2 sets
	E.2.6	Wireless Microphone	2 sets
	E.2.7	Headphone	2 sets
	E.2.8	Hand Microphone Boom	2 sets
E.3	Monitor Equipment		
	E.3.1	9-inch Portable Colour Picture Monitor	3 sets
	E.3.2	Portable Waveform Monitor	2 sets
	E.3.3	Rechargeable Battery Pack	10 sets
	E.3.4	Battery Charger	2 sets
	E.3.5	VCR Play Back Adaptor	2 sets
E.4	Portable Lighting Kit		2 sets
E.5	Outdoor Coverage Car (Diesel Engine)		1 No.
E.6	Portable Dimmer (4 channels)		1 set
<b>F. MEASURING EQUIPMENT &amp; TOOLS</b>			
F.1	F.1.1	Oscilloscope with Cart	1 set
	F.1.2	Vectorscope with Cart	1 set
	F.1.2B	Combined Wave Form/Vector Monitor (Portable Unit)	1
	F.1.3	PAL TV Signal Generator with Sweep/Marker Generator	1 set
	F.1.4	Audio Distortion Meter	1 set
	F.1.5	Video Attenuator	1 set
	F.1.6	Audio Attenuator	1 set
	F.1.7	Illumination Meter	1 set
	F.1.8	Colour Meter	3 sets
	F.1.9	Electronic Voltmeter	2 sets
	F.1.10	Megger	1 set
	F.1.11	Digital ICs Tester	1 set
	F.1.12	Digital Circuit Tester	2 sets
	F.1.13	Am-meter	1 set
	F.1.14	Volt Meter	1 set
	F.1.15	Pal Measuring Set	1 set
	F.1.16	Earth Meter	1 set
	F.1.17	Stop Watch	12 sets
	F.1.18	Test Tape Set for 1/2" VCR	5 sets
	F.1.19	Test Tape Set for 3/4" VCR	2 sets
	F.1.20	Audio Test Tape Set for Open Reel Tape	2 sets
	F.1.21	Audio Test Tape Set for Cassette Tape	2 sets
	F.1.22	Variable Power Supply for AC	1 set
	F.1.23	Variable Power Supply for DC	1 set
	F.1.24	V.I.T.S Inserter	1 set
	F.1.25	Frequency Counter	1 set
	F.1.26	Digital Logic Pulser Probe	2 sets
	F.1.27	EHT Probe	1 set
F.1.28	Degaussing Coil	2 sets	

## LIST OF EQUIPMENT

			Q'ty
F.2	Tools		
	F.2.1	Hand Tool Set	3 sets
	F.2.2	Special Jig & Tools for Maintenance	2 sets
<b>G. INSTALLATION MATERIALS</b>			1 lot
	All necessary Material & Hardware for Installation of Equipment/System/Project including the facility of smoke detector & fire alarm system for studio & master control room		
<b>H. POWER SUPPLY</b>			
H.1	Distribution Board		3 sets
H.2	Isolation Transformer		2 sets
H.3	AVR		3 sets
<b>I. PRESENTATION EQUIPMENT</b>			
I.1	Colour Video Projection (100-inch Screen) (1 set LCD Single Beam Type) (1 set 3 CRT Type)		2 sets
I.2	20-inch Colour Picture Monitor		6 sets
I.3	40-inch Colour Picture Monitor		1 set
I.4	VHS VCR		9 sets
I.5	Optical Presentation Pannel		1 sets
I.6	Electronic Print Board		4 sets
<b>J. ELECTRONIC FIELD PRODUCTION CAR</b>			
J.1	Colour Camera Chain		
	J.1.1	Three-Chip CCD Portable Camera	3 sets
	J.1.2	Zoom Lens (14x2 Nos.), (33x1 No.)	3 sets
	J.1.3	Tripod Dolly	3 sets
	J.1.4	Camera Control Units	3 sets
	J.1.5	Test Chart Set	3 sets
	J.1.6	Intercom	1 lot
J.2	Video Production Equipment		
	J.2.1	Production Switcher with Digital Effects Unit	1 set
	J.2.2	Sync Generator	1 set
	J.2.3	Video Type-writer	1 set
J.3	Audio Production Equipment		
	J.3.1	Audio Mixing Console (8 Channels)	1 set
	J.3.2	Tape Recorder/Reproducer	1 set
	J.3.3	Cassette Tape Reorder/Reproducer	1 set
	J.3.4	Microphones & Cables	1 set
	J.3.5	Microphone Stands	1 set
J.4	VCR 1/2" Broadcast Standard		
	J.4.1	1/2" VCR with Time Code & TBC	2 sets
	J.4.2	Waveform Monitor	1 set
	J.4.3	Vectorscope	1 set
	J.4.4	Colour Picture Monitor with Speaker	1 set
J.5	Monitoring Equipment		
	J.5.1	Colour Video Monitor	8 sets
	J.5.2	Audio Monitor	1 set
J.6	Modified Vehicle		1 set

## LIST OF EQUIPMENT

			Q'ty
<b>K. OTHER EQUIPMENT FOR EDUCATIONAL USE</b>			
K.1	Test Run Tape		
	K.1.1	For 1/2" VCR 90 min	100 pcs
		For 1/2" VCR 60 min	100 pcs
		For 1/2" VCR 30 min	100 pcs
	K.1.2	For 1-inch Audio Tape	100 pcs
	K.1.3	1/4" Audio Tape	150 pcs
	K.1.4	Cassette Tape	150 pcs
K.2	Microscope with Camera Attachment		1 set
K.3	PA System for Auditorium		1 set
K.4	Conference System (25 Delegate/1 Master Unit)		1 set
K.5	Duplication Master		
	K.5.1	1/2" VCR	1 set
	K.5.2	3/4" VCR	1 set
	K.5.3	Interface for above units	2 sets
K.6	Microcamera		1 set
K.7	Script Processing Equipment		3 sets
	K.7.1	Urdu Script	1 No.
	K.7.2	English	2 Nos.
	K.7.3	Heavy Duty Photocopying Machine	1 No.
<b>L. RADIO/DUBBING STUDIO</b>			
L.1	Audio Mixer (12 Channels)		1 set
L.2	Multitrack Tape Recorder (8 Tracks)		1 set
L.3	Compac Disk Reproducer		2 sets
L.4	Tape Recorder/Reproducer		3 sets
L.5	Disk Reproducer		1 set
L.6	Cassette Tape Recorder/Reproducer		2 sets
L.7	Sync Lock System		1 set
L.8	Effector		
	L.8.1	Digital Reverberator	1 set
	L.8.2	Digital Processor	1 set
	L.8.3	Digital Delay	1 set
	L.8.4	Graphic Equalizer	1 set
	L.8.5	Rack	1 set
	L.8.6	Compressor/Limiter	1 set
L.9	Monitor Speaker with Amplifier		2 sets
L.10	Studio Monitor Speaker with Amplifier		2 sets
L.11	Microphone & Stand		
	L.11.1	Condenser Mic	2 sets
	L.11.2	Condenser Mic Switchable	2 sets
	L.11.3	Condenser Mic Lavalier	6 sets
	L.11.4	Dynamic Mic Uni-Directional	6 sets
	L.11.5	Printed Ribbon Mic (Bi-Directional)	2 sets
	L.11.6	Telescopic Mic Stand	4 sets
	L.11.7	Goose-Neck Mic Stand	4 sets
	L.11.8	Boom Stand (Small)	4 sets
	L.11.9	Audio Cable & Connectors/Patch Panel	1 lot
L.12	Announcer Cough Box		1 set
L.13	Announcer Desk		1 set
L.14	Headphone Box		1 set
L.15	Headphone		12 Nos.

## **LIST OF EQUIPMENT**

		<b>Q'ty</b>
L.16	1/2" VCR	1 set
L.17	14-inch Colour Picture Monitor	1 set
L.18	High Speed Duplicator	1 set
L.18.1	1/4" Spool to Spool Copier 1 x 5	1 set
L.18.2	1/4" Spool to Cassette Copier 1 x 25	1 set
L.18.3	Cassette to Cassette Copier 1 x 50	1 set
<b>M. SPARE PARTS</b>		1 lot
Recommended spare parts for 2 years operation.		

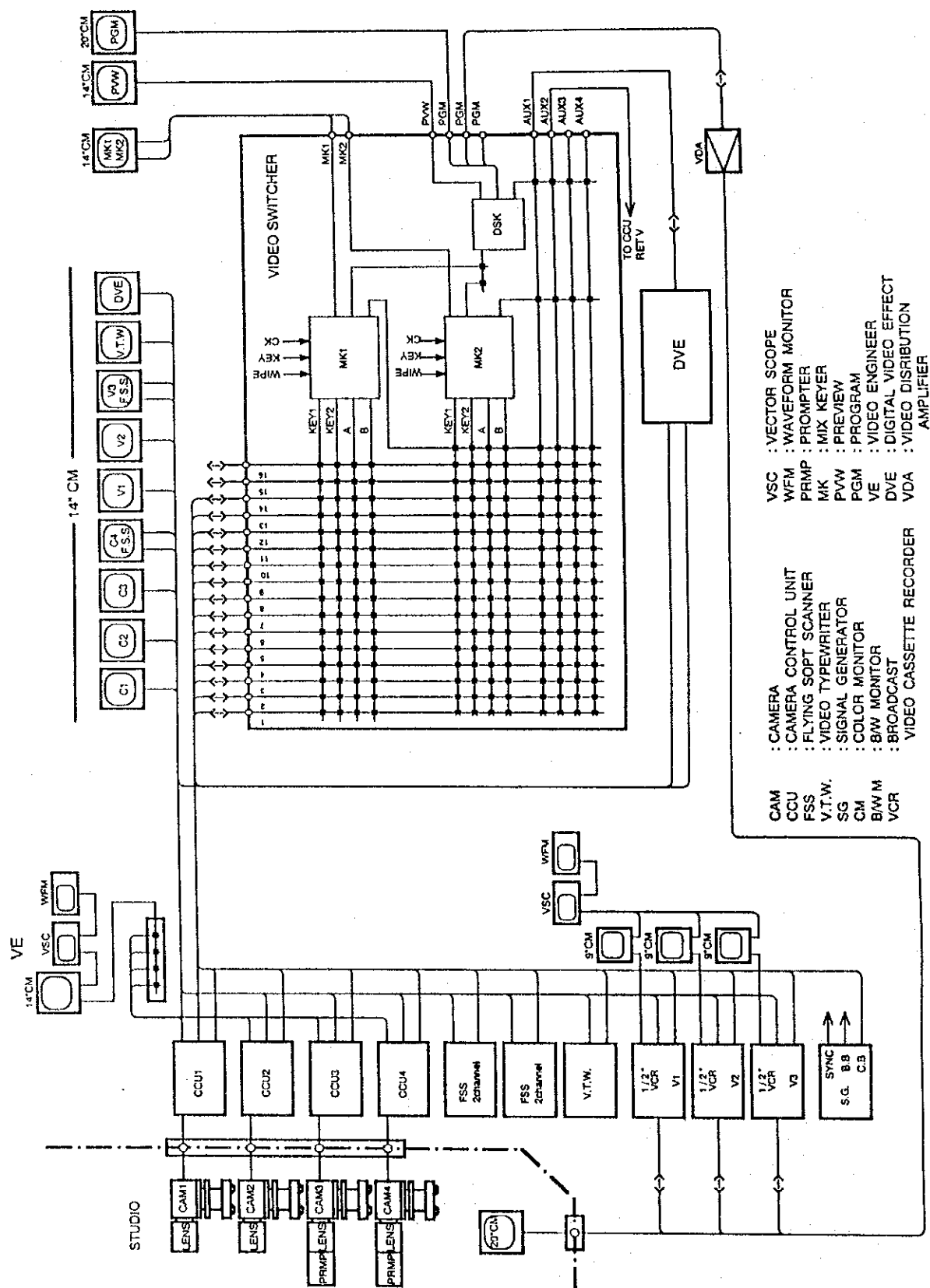


Fig. 3.3 TV Studio - Video Block Diagram



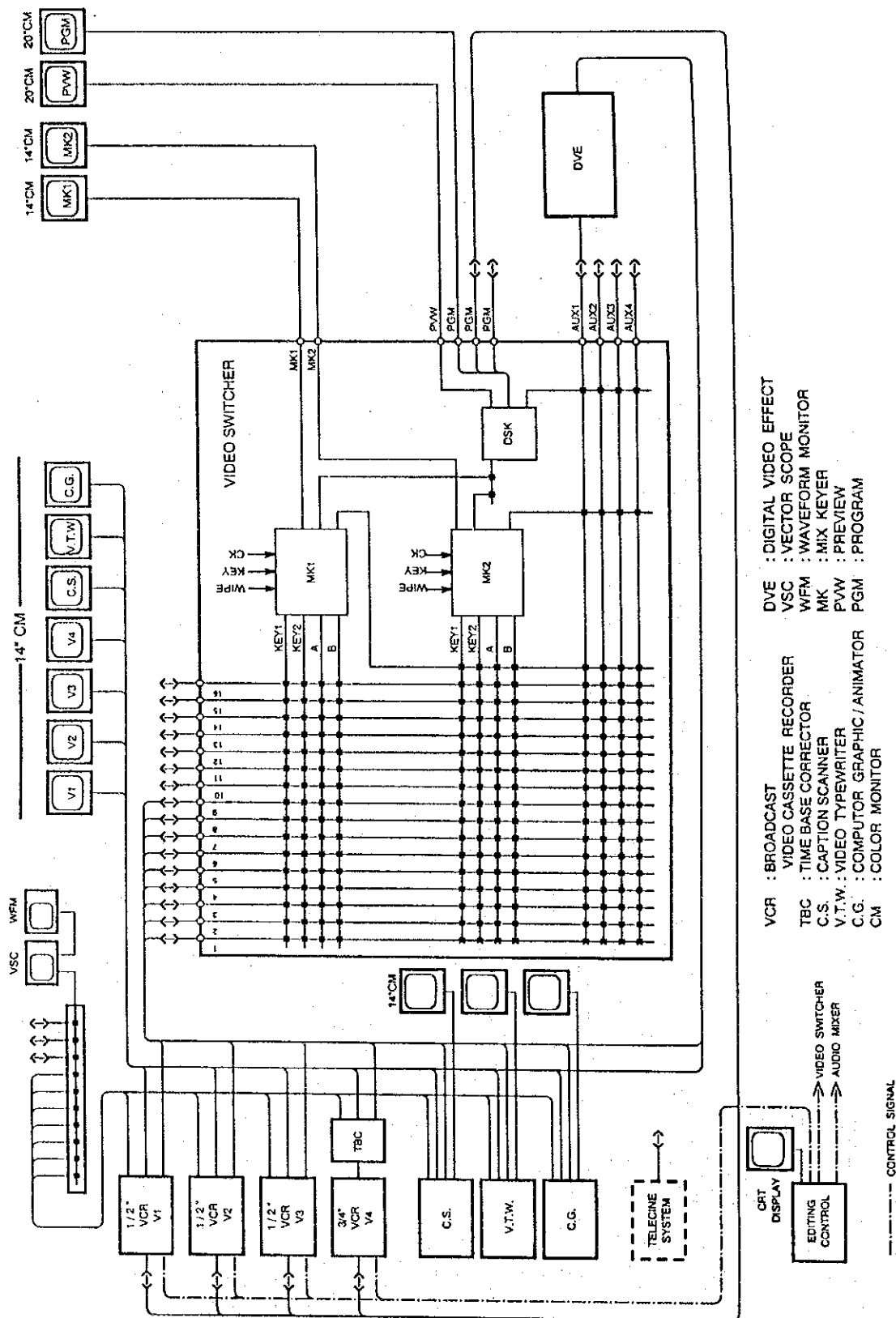


Fig. 3.5 Post Production Studio – Video Block Diagram



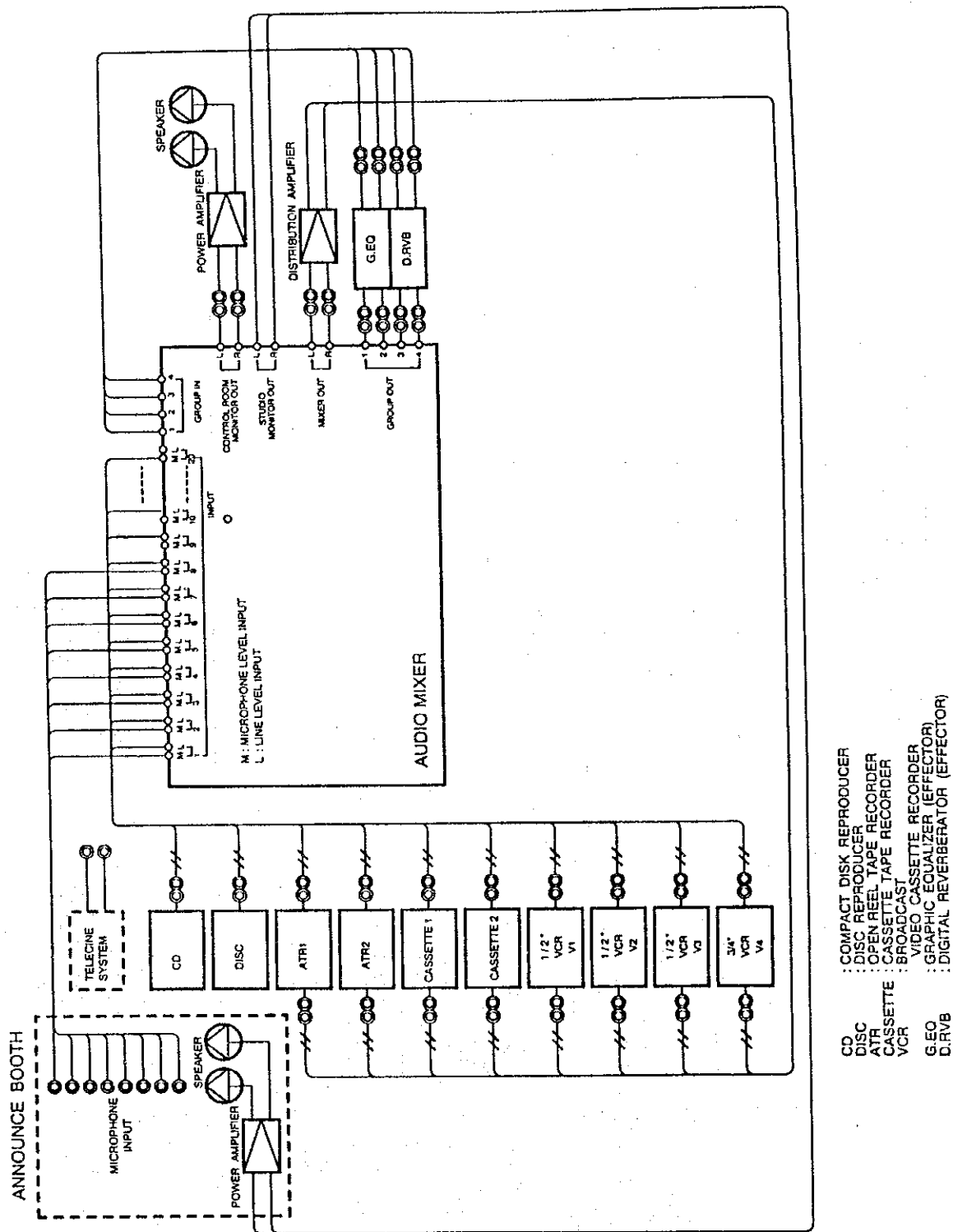


Fig. 3.6 Post Production Studio – Audio Block Diagram

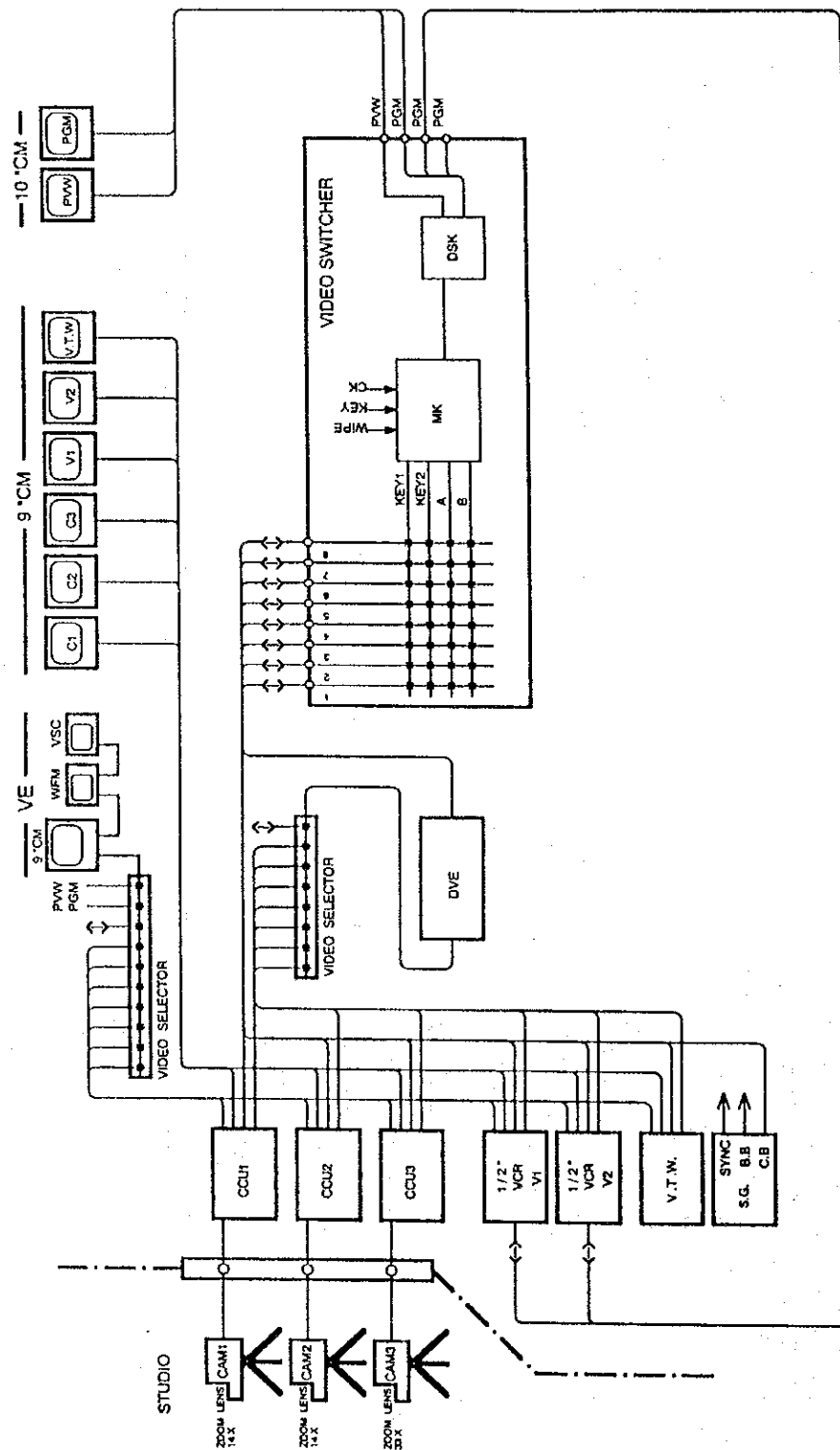
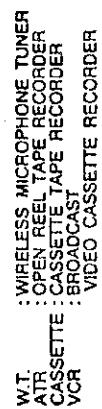
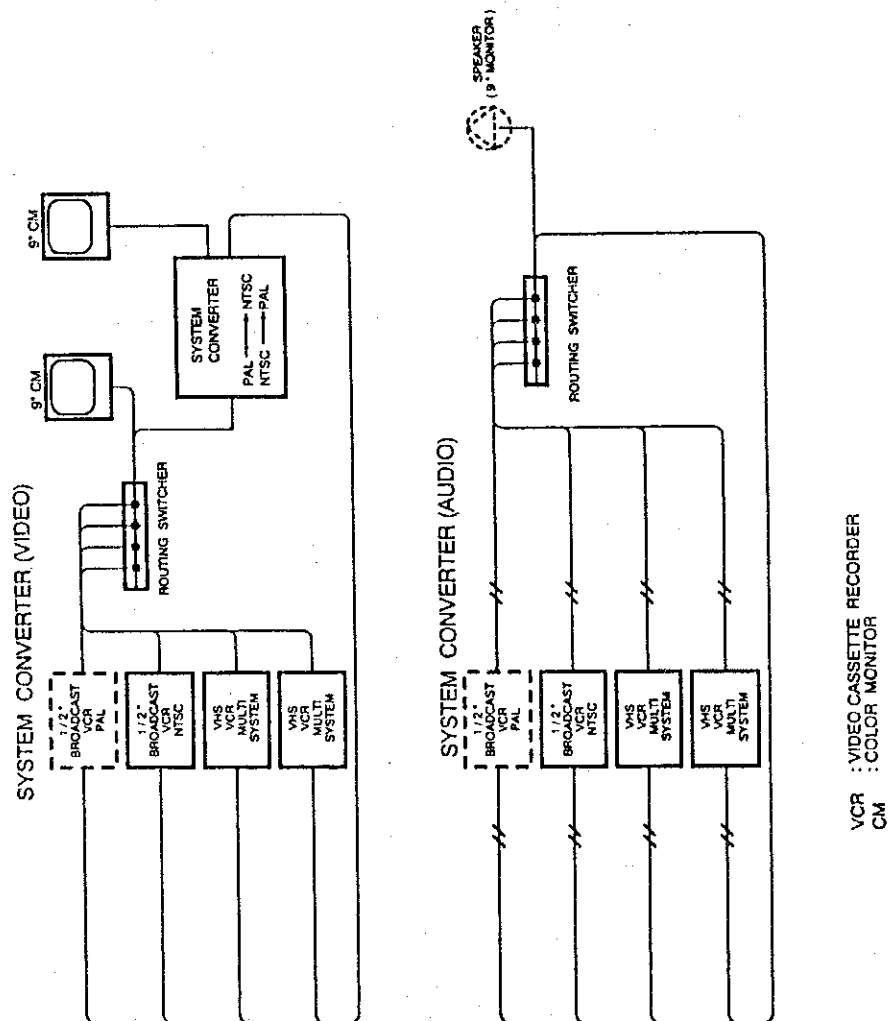


Fig. 3.7 Electronic Field Production Car - Video Block Diagram



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**Fig. 3.10 System Converter Block Diagram**

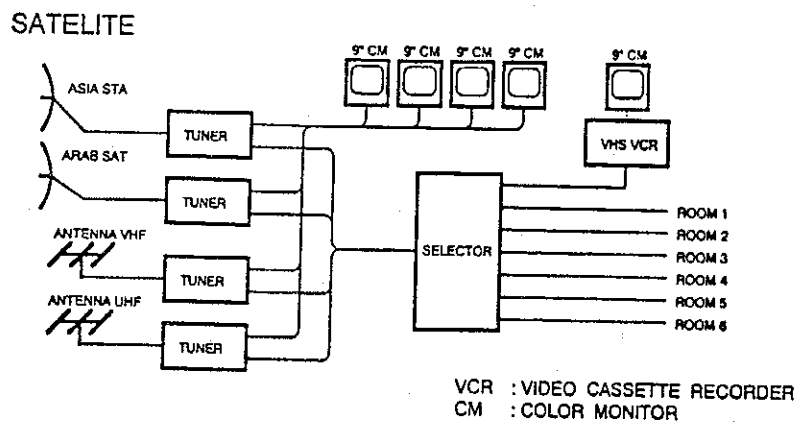


Fig. 3. 11 Satellite Block Diagram

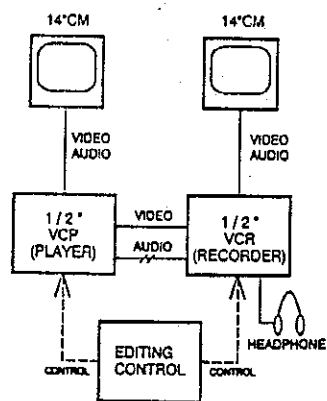


Fig. 3. 12 Single Step Editing Block Diagram

### 3-4 Implementation Plan

#### 3-4-1 Implementation Method

This project is meant to provide equipment to AIOU/IET through the grant aid assistance of the Government of Japan. The AIOU which is the project's executing agency is to sign a contract with a Japanese consultant and have it assist the AIOU and the IET to carry out such works as detailed design, preparation of tender documents, tender evaluation and supervision of the execution of the works for installation of the equipment. The AIOU will also sign contracts with a Japanese contractor, and the contractor is expected to supply and install the equipment and provide guidance on their operation and maintenance. The installation is to be carried out by utilising the local labour force under guidance by electricians or other engineers and technicians of the contractor from opening of the packages to installation of the equipment on the designated locations, and the subsequent wiring, etc. which require certain skill, are to be carried out by the electricians of the contractor. The adjustment, test runs and guidance on operation and maintenance are to be carried out by electronics engineers. The implementation system at the time of execution is as shown in the diagram below.

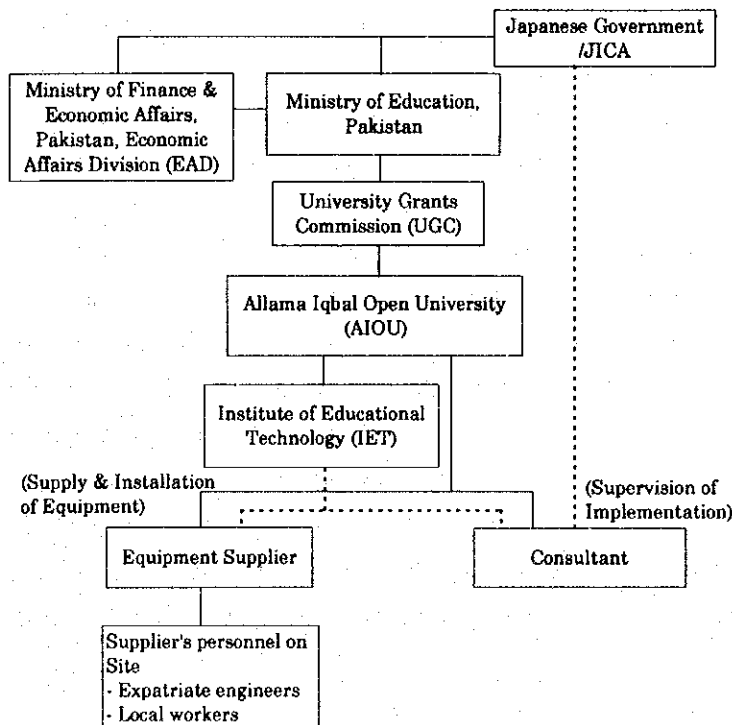


Fig. 3. 13 Project Implementation System

### **3-4-2 Points to be Considered during Implementation**

This project is basically designed to replace existing equipment. The works for moving the existing equipment are to be carried out by the Pakistan side and the budget for this is also to be appropriated by the Pakistan side. However, the IET is currently producing video teaching aids, etc. and its operations will be suspended from the time of start of removal of the existing equipment to transfer of the provided equipment.

It is therefore necessary to give consideration to minimise the disadvantages and inconveniences caused to the Pakistan side due to the suspension of operations.

When it is necessary to connect the provided equipment with a part of the existing equipment, such things as influence of the connection cords must mainly be adjusted on the site. For this reason, it will be necessary for the contractor to carry out the installation and adjustment with such a system that it can fully cope on the site.

### **3-4-3 Plan for Supervision of Implementation**

Based on the system and policy of the Government of Japan on its grant aid assistance as well as on the agreement on the consultancy services, and based on the purport of the basic design, the consultant shall accomplish this project until completion by organising a project team regarding detailed design and the supervision on the tendering phase and implementation phase. In the phase of detailed design, a team of consultant's representatives will assist the Pakistan side to prepare technical specifications and other tender documents. In the phase of tendering, the consultant will assist the Pakistan side in every procedure related to the tender including tender call, delivery of documents, evaluation of the tender, and conclusion of the equipment supply contract with the successful tenderer. In the phase of project implementation, it is necessary to correctly and smoothly promote the execution by having engineers be present at the time of the pre-shipment inspection at the factory or warehouse, installation and taking-over on site. It will also be necessary for the consultant to make adjustments so that the processes of the works for moving the existing equipment carried out by the Pakistan side and the works by the contractor to install the provided equipment should not interfere with each other. During installation, acceptance and taking-over, consultant's representatives will be assigned to supervise the contractor's work on site.



### **3-4-4 Equipment Procurement Plan**

#### **(1) Procurement Method**

At present, only Japanese makers are manufacturing 1/2" component VCRs. Regarding other major equipment also, Japanese products have most of the market share. However, there are also areas such as of pedestals, audio speakers and computer graphics equipment in which US and European products are very excellent. At any rate, there are no makers which are manufacturing all of the requested equipment. When using third-country products such as US or European, required will be engineering of capturing everything as a system such as by adjusting the interface between equipment. Therefore, even if some US or European products are to be included, it is assumed that the entire equipment will be procured in Japan as a system. The following items of equipment however are to be procured locally.

##### **A) Satellite broadcast reception antenna and tuner**

These items of equipment become necessary when using the satellite broadcast programmes of ASIASAT and ARABSAT which can be received in Pakistan as source materials. Required are products satisfying the local standards.

##### **B) Scripting equipment**

Since the main personal computer is not going to be connected with the system of the main requested equipment, it is not necessary that it be procured in Japan. The computers manufactured and sold in Japan come with keyboards, ROMs, etc., designed for the Japanese language but this function is not needed in this project. Although not produced locally, when consideration is given to the possibility of later upgrades such as in terms of hard disk capacity, desirable is to procure these items of equipment through local dealers. Regarding software also, those in the Urdu or other local languages can only locally be procured. Regarding copiers, daily maintenance is particularly important. Although they are not locally produced, it is desirable to procure them through local dealers and receive the maintenance service locally.

When the above items of equipment are locally procured, import duties, provincial tax (Octroi) and federal government tax of a total of around 35-40%

will be levied (the tax rates change every year). It is required that these taxes need to be exempted when the contractor procures these items in Pakistan.

## (2) Transportation Method

The container transport system should be used in ocean and local inland transport in reducing the transportation period and protecting the cargo. While the cargo should be landed at Karachi port, it is convenient to clear the customs at the dry port in the city of Rawalpindi adjacent to Islamabad. This is also desirable in reducing the time taken in clearing the customs.

## 3-4-5 Implementation Schedule

The implementation schedule of this project is as shown in Fig. 3.14;

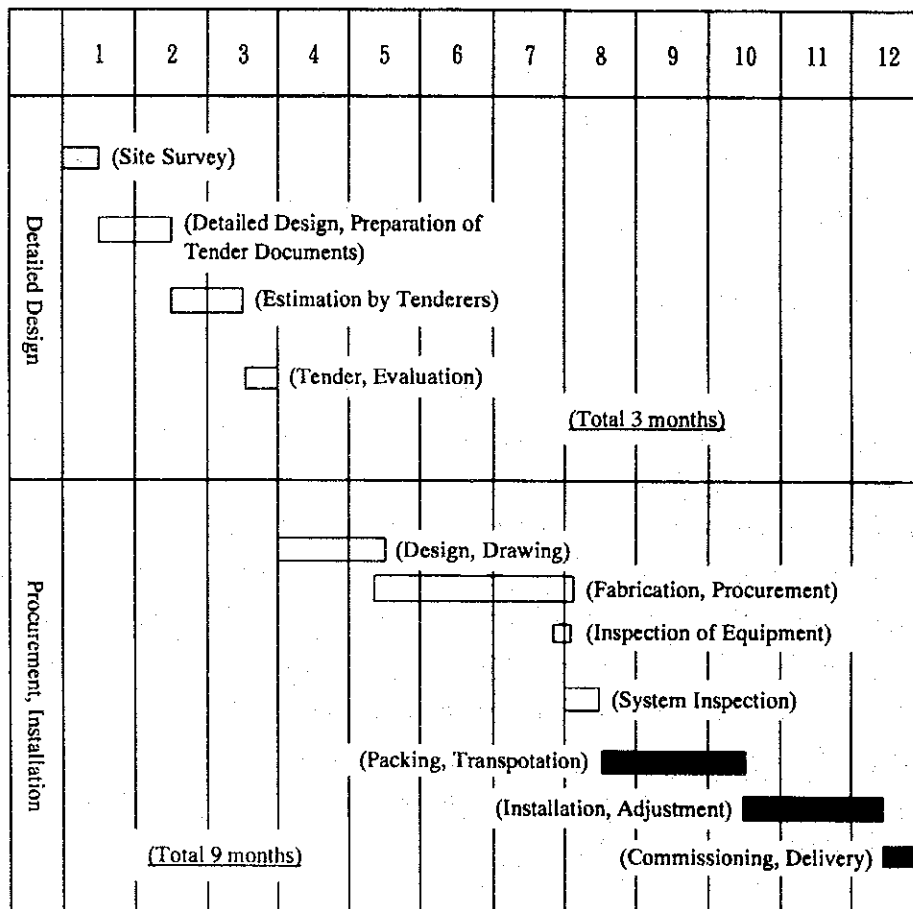


Fig. 3.14 Implementation Schedule

### **3-4-6 Scope of Works**

(1) Pakistan side: (To take up the following wherever necessary.)

- 1) Interior works of the building and relocation works for the existing equipment;
- 2) Electric works for receiving, transforming and distribution of electric power (excluding distribution boards, isolation transformers and AVRs);
- 3) Electric lighting works (excluding studio lighting equipment and portable lighting kit);
- 4) Telephone and communication facility works (excluding studio intercom and VHF communication system);
- 5) Procurement of fixtures and furnishings (excluding racks and console specially designed for the project-related equipment);
- 6) To ensure prompt unloading, exempt taxes, and take necessary measures for custom's clearance at port of disembarkation and inland transportation in Pakistan of the equipment provided under the grant aid, and bear all expenses for going through formalities;
- 7) To exempt Japanese nationals (both physical and juridical) from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;
- 8) To bear commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement;
- 9) To accord Japanese nationals whose services may be required in connection with the supply of products and services under the verified contract such facilities as may be necessary for their entry into Pakistan and stay therein for the performance of their work;
- 10) To maintain and use properly the equipment purchased under the grant aid;

11) To bear all the expenses other than those to be borne by the grant aid, necessary for the execution of the project;

12) To take measures of permission and sanction necessary for execution of the project.

(2) Japanese side:

- 1) Procurement of equipment and materials, and transportation and installation related thereto;
- 2) Electrical wiring work from the installed equipment to the plug socket (however, the plug socket is supposed to be installed close to the equipment installed and the wiring work from the power source to the plug socket shall be done by the Pakistan side);
- 3) Execution of test operation and adjustment of equipment, guidance on operation and maintenance;
- 4) Consulting services including preparation of tender documents, management of tendering and supervision of project implementation.

### **3-4-7 Costs for the Pakistan Side**

The costs of the works to be borne by the Pakistan side will be about 2 million rupees in total. The works include the following:

- Removal of partitions in the studio control room;
- Removal of existing equipment;
- Lighting and control works for sub studio;
- Civil and other related works for the main and sub studios.

Breakdown of the costs are as shown in the Appendix-6.

## **CHAPTER 4 PROJECT EVALUATION AND CONCLUSION**



## **Chapter 4 Project Evaluation and Conclusion**

### **4-1 Project Evaluation**

The Government of Pakistan recognises the necessity of concentrating its energies on education of the people as a fundamental human right, as well as the development of human resources as the basis of economic development. From the standpoint that it is important to spread basic education among the people in order to solve problems in the education sector represented by low literacy rate, low participation rate, high dropout rate, etc., the Government has placed emphasis especially on the promotion of universal primary education in the formal education sector and, to supplement this, has decided adult education such as literacy education, women's education, teacher education, functional education, etc. in the non-formal sector as important tasks of its educational development programme. Also, the Government realises that the role of education sector to accomplish indirectly in social development by raising the overall level of education is extremely significant.

Under the circumstances, the following effects can be expected if this project is implemented by a grant aid of Japan. Namely, it will be possible to improve overall living standards as well as to expand opportunities to participate in the society by providing basic literacy education to adults who are not able to read. Living standards of farmers, who occupy the largest segment of the population, will be improved by disseminating the knowledge related to new agricultural technologies, mechanised agriculture, diversification of farm produce, distribution system, etc., and, in addition, the effect can be expected to push up the overall GNP of Pakistan through the increase of productivity in the farming sector. Social effects such as improvement of the status of women, expansion of opportunities to participate in the society, decrease of infant mortality rate, etc., can be expected by conducting education on population, health and hygiene, homemaking skills (sewing, food processing, etc.), and household management as well as providing the opportunity for general elementary and secondary education to a great many women of all ages who are exclusively engaged in domestic labour in rural areas. It is possible to improve production technology and enhance awareness of labour health and hygiene of juvenile labourers who are engaged in work without attending school, illiterate adults and labourers who have no experience in attending school or have dropped out, by conducting basic education on vocational skills utilising audio-visual teaching materials in their local language. Thus not only an effect in the aspect of social security but also the economic effects due to production expansion can be expected. Especially, it is possible to improve teaching methods and strengthen leadership of teachers and contribute to the increase of the participation rate and decrease of dropout rate by

providing an opportunity for teacher training to uncertified teachers who have been employed in order to cope with the lack of teachers for primary education or teachers who have not received regular training for teaching. Also, the expansion of educational opportunities for women can be expected especially by bringing licensed female teachers to maturity. Furthermore, it is possible to provide the feeling of satisfaction of being prepared to get a job and lifetime education by means of general education(intermediate, bachelor, master, etc.), and to meet the broad needs of the nation.

AIOU, the only university conducting distance education in Pakistan as a means to promote these various kinds of education, assumes a very important role. If this project which provides its IET with the equipment to produce audio-visual teaching materials is implemented, the concrete effects shown in Table 4.1 can be expected.



**Table 4.1 Effects to be Obtained by Implementation of the Project and Degree of Improvement of the Status Quo**

Status Quo and Points at Issue	Measures in the Project	Effects of the Project and Degree of Improvement
1) Both literacy rate and participation rate of primary school are very low in Pakistan, with 36.8% and 70.8% respectively. The expansion of educational opportunities for all the nation as a fundamental human right is the most urgent task.	To expand production capacity of audio-visual educational programmes for distance education pertaining to literacy education, women's education, teacher education, etc. of AIOU and IET.	It is possible to disseminate basic education as a fundamental human right by providing educational opportunities, on a nation-wide scale, to those considered weak by society such as school-age child labourers, women in rural areas and adults who never attended school.
2) No effort has been made to equalise educational opportunities geographically as evidenced in the small number of and regionally unevenly distributed educational facilities and so on. There has been no progress, therefore, in the expansion of human resources to support well balanced economic development in regions.	To provide IET with production equipment for teaching materials having technical compatibility with broadcasting equipment of ETV so that the latter will be able to broadcast audio-visual teaching materials all over the country through its nation-wide transmission network.	It is possible to expand educational opportunities also in remote areas and outlying regions by utilising facilities of broadcast and relay stations which have been provided under the separate coverage of grant aid assistance of Japan and have 95% population coverage.
3) Fifteen years have elapsed since the installation of IET's existing equipment and it is outdated and superannuated. From the viewpoint of video technology, grade of these equipment is 4 to 5 generations older. Thus the grade of video image is low and economic efficiency of operation is poor.	To provide IET with equipment to meet the demands of the times and cope with comparatively new technology from the viewpoint of easy maintenance and ready availability of spare parts, etc.	By the introduction of equipment with less maintenance problems and high operational capability, it is possible to continuously provide high quality teaching materials and expect direct beneficial effects such as to attract the desire for further study of about 140,000 students currently enrolled with the AIOU.
4) IET's production equipment for video educational programmes was provided as studio equipment on a pilot scale by the technical cooperation of UNDP and there is a limitation in the production capacity of audio-visual teaching materials.	To provide the IET with types and quantity of equipment to be able to sufficiently produce audio-visual teaching materials which are planned in compliance with the needs of society towards the distance education.	Production capacity of video programmes will be increased from 50 a year to about 100 and audio programmes from 100 to about 400, and the expansion of educational opportunities for all segments of the population is expected.

## 4-2 Conclusion

AIOU's educational activities are largely divided into teacher training , functional training , general education , special programmes , and AIOU implements them on a nation-wide scale utilising various media. Beneficiaries of these various kinds of education are adults who have never attended school (both men and women), those considered weak by society such as juvenile labourers and uncertified teachers, etc., and the number of direct beneficiaries are about 140,000 enrolled students. However, those who will benefit can be expected on a nation-wide scale if the ripple effect on the formal education sector by teachers who received teacher training, especially the expansion of educational opportunities of women due to the increase of female teachers, and the spread of educational effects to children through the education of the housewives are taken into consideration. Also, these educational activities will, as mentioned before, contribute to the improvement of living standards and social stability as well as securing of educational opportunities as a fundamental human right of the people.

Also, it is obvious from the preceding chapters that the condition of maintenance and management of the production equipment of teaching aids being used in IET at present is considerably good even after 15 years of its initial installation; that the technical capability of IET engineering staff is reliable; that there is a plan to newly increase sufficient technical staff as a measure when the equipment of the project is installed; and that AIOU has ample budgetary background to appropriate sufficient budget to operate, maintain and manage this project.

Furthermore, this project has high priority in the long and medium - term national development plans of Pakistan such as Perspective Plan (1993-2008), Eighth Five Year Plan (1993-1998), etc. and its implementation is concretely desired in the long-term National Education Policy (1992- 2002). It is obvious that the project will greatly contribute to the achievement of the targets of the educational sector in the country.

Although the profitability of this project is not high, some production fee income can be expected by receiving contracts from the Ministry of Education for the production of educational programmes for formal education sector. Also, tuition from students is a comparatively high self-earned income source for AIOU. However, these incomes are basically being appropriated for the operational cost of AIOU/IET, maintenance and management expenses of equipment, etc. Also, implementation of this project does not have any adverse effects on the environment. The term of implementation of this project is

estimated as 12 months after the Exchange of Notes.

Judging synthetically from the above, it is considered to be appropriate to implement this project to renew the equipment of AIOU/IET which is exclusively undertaking the production of audio-visual teaching aids for distance education in Pakistan with a grant aid assistance of the Government of Japan.

#### **4-3 Proposals**

The appropriateness of implementing this project with a grant aid is confirmed since great effects are expected as mentioned above by the implementation of the project and, at the same time, it will contribute widely to the improvement of the basic human needs of the people of Pakistan. Also, it is considered that there will be no problem in the operation and management of the project since the related organisations on the Pakistan side has sufficient manpower and budgetary resources. However, if the following points are improved and provided, the project will be implemented more smoothly and effectively.

##### **(1) Tasks**

Among audio-visual aids to be produced by the IET using projected equipment, video programmes will be broadcast all over the country through ETV and audio programmes through PBC. Since the production equipment to be used for video programmes in the IET is of a new grade by four to five generations from the viewpoint of video technology, ETV's assistance to IET in terms of latest technology on equipment operation, maintenance, management, etc. is indispensable. Also, it is desirable to further increase the transmission hours for broadcasting of educational programmes in the future in conformity with the educational policy. In this point, it will be necessary for the Ministry of Education, which is the supervisory ministry of this project, assumes the responsibility to co-ordinate closely with ETV and the Ministry of Information and Broadcasting, which is the supervisory ministry of ETV.

Further, when this project is implemented, renewal of the technology of IET personnel is considered indispensable. On the other hand, it is necessary to improve the delivery system of teaching materials at AIOU headquarters, and, in addition, to reinforce the regional service network in a parallel manner and to try to expand the educational opportunities of students. In these points, the self-help endeavour of the Pakistan side is imperative.

## (2) Proposals

### 1) Technical Training

As is described in the clause 2-4, it is desirable to provide training to renew the technical skills of the IET staff in the relevant facilities of the manufacturers supplying the equipment in accordance with this project.

### 2) Reinforcement of Regional Services

From the results of a hearing conducted at a regional campus in the city of Peshawar visited for an on-site survey, it was observed that the regional services in relation with the distance education has not necessarily been achieved to the full extent at the local level. In the case of distance education, reinforcement of the function of campuses, offices and study centres which are placed in each area in the country is considered to be indispensable for its expansion, since it is a form of education where the teaching side approaches to the place of daily life of students as close as possible, which is different from formal education where students to be taught attend a certain school. It is proposed, therefore, that the following plans to reinforce the regional service network are formulated by the Pakistan side in order to make the project more effective.

#### A) Provision of equipment and programmes in regional study centres

The current situation of educational equipment in regional campuses, regional offices and study centres varies and it cannot be said that sufficient equipment and audio-visual teaching aids have been provided. Necessary equipment and teaching aids are provided to all schoolrooms where students are directly taught by a tutor.

#### B) Provision of mobile audio-visual schoolrooms

Regional study centres are newly opened or closed depending on the number of students and contents of study courses. From the viewpoint of providing equal educational opportunities to the whole nation, one audio-visual car (vehicle for mobile education mounting monitors, VCRs, audio equipment,

etc.), is distributed to each regional campus in each province.

## APPENDICES

## Appendix-1    **Members of the Basic Design Study Team**

Mr. Senichi Kimura	Team Leader Deputy Director, Second Basic Design Study Div., Grant Aid Study and Design Dept. Japan International Cooperation Agency
Miss Reiko Akezumi	Project Coordination Second Basic Design Study Div., Grant Aid Study and Design Dept. Japan International Cooperation Agency
Mr. Mutsuharu Nakajima	Grant Aid Programme Grant Aid Div., Economic Cooperation Bureau Ministry of Foreign Affairs
Prof. Toshio Kobayashi	Distance Education Planning National Institute of Multimedia Education (NIME) Ministry of Education, Culture and Science
Mr. Wataru Shiga	Project Manager of the Consultants UNICO International Corporation
Mr. Shuhei Kubota	Production Equipment Planning UNICO International Corporation
Mr. Katsuhiko Higuchi	Studio Facilities Planning Cost Estimation UNICO International Corporation





## Appendix-2 Schedule of Field Survey

(December 11 - 31, 1994)

December

1. 11 Sun. Lv. Tokyo  
(Messrs. Kimura and Kobayashi, Miss Akezumi,  
Messrs. Shiga, Kubota and Higuchi)  
Ar. Lahore
2. 12 Mon. Lv. Lahore Ar. Islamabad  
Schedule Meeting at JICA Pakistan Office  
Courtesy call on the Japanese Embassy  
Courtesy call on EAD  
Courtesy call on MOE
3. 13 Tue. Courtesy call on AIOU/IET, and Survey of Facilities  
Courtesy call on UGC  
Courtesy call on the British Embassy, and Interview
4. 14 Wed. Meeting with IET  
(Explanation along an Inception Report, Discussion)  
Courtesy call on the British Council, and Interview
5. 15 Thu. Lv. Islamabad Ar. Peshawar  
Survey of AIOU Regional Office, Interview
6. 16 Fri. Lv. Peshawar Ar. Islamabad
7. 17 Sat. Meeting with IET  
(Explanation along the Inception Report, Discussion)  
Mr. Nakajima joins the party.
8. 18 Sun. Mr. Nakajima reports his arrival to the Japanese Embassy and JICA.  
Courtesy call on EAD and MOE  
Other members Meeting with IET  
(Discussion continued.)
9. 19 Mon. Meeting with IET  
(Discussion continued.)

- |     |    |      |   |   |
|-----|----|------|---|---|
| 10. | 20 | Tue. | Meeting with IET for Minutes of Discussions   |   |
| 11. | 21 | Wed. | Signing the Minutes of Discussions by AIOU<br>Signing the Minutes of Discussions by MOE |   |
| 12. | 22 | Thu. | Government Officials<br>Lv. Islamabad   | Consultants<br>Meeting with IET for<br>specifications for Equipment<br>Field Survey |
| 13. | 23 | Fri. | Government Officials<br>Ar. Tokyo   | Data Arrangement<br>Internal Meeting  |
| 14. | 34 | Sat. | Consultants<br>Meeting with IET for specifications for Equipment                        |   |
| 15. | 25 | Sun. | Data Arrangement  |   |
| 16. | 26 | Mon. | Meeting with IET for specifications for Equipment<br>Field Survey                       |   |
| 17. | 27 | Tue. | Meeting with IET for specifications for Equipment<br>Field Survey                       |   |
| 18. | 28 | Wed. | Reporting meeting results to Japanese Embassy and JICA.                                 |   |
| 19. | 29 | Thu. | Lv. Islamabad Ar. Karachi   |   |
| 20. | 30 | Fri. | Lv. Karachi Via Bangkok   |   |
| 21. | 31 | Sat. | Ar. Tokyo   |   |

### Appendix-3 List of Interviewed Personnel

#### The Ministry of Education

Dr. Abdul Aziz Khan	Joint Educational Adviser
Mr. A. D. Khan	Deputy Educational Adviser
Mr. Bashir Ahmad Chaudhry	Assistant Educational Adviser

#### The Economic Affairs Division

Mr. Shahid Humayun	Deputy Secretary
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#### University Grants Commission

Mr. Saeed Ullah Shah	Adviser (Finance & Planning)
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#### Allama Iqbal Open University (AIOU)

Prof. Javed Iqbal Syed	Vice-chancellor
------------------------	-----------------

#### Institute of Educational Technology (IET) of AIOU

Mr. Amar Jaleel Kazi	Director
Mr. Javed M. Kasuri	Deputy Director
Mr. Abid Khwaja	Deputy Director, Programmer
Mr. Mehmood Ali	Chief Engineer
Dr. Naiem Ud Din	Senior Engineer
Dr. Ejaz A. Qureshi	Television Engineer
Mr. Mubarik Munir	Associate Engineer
Mr. Mohammad Haroon	Chief Designer, Head Art & Design Dept.

#### AIOU Regional Office, Peshawar

Mr. Sayed Hussain Shah	Regional Director
Mr. Mian Hidayat Ullah	Assistant Regional Director
Miss AfLab Khattak	Tutor
Miss Safidu Ban	Tutor
Mr. Mohammad Zahin	Tutor
Mr. Nadar Khan	Teacher (Tutor)
Mr. Shad Khan	Teacher (Tutor)
Mr. Mohd. Darreesh	Teacher (Tutor)
Miss Rukhsana Nazneen	Lecturer (Tutor)

#### The British Embassy

Mr. Jonathan Lingham	First Secretary (Development)
----------------------	-------------------------------

The British Council

Mr. Michael Ward

Director, Development and Training Services

The Japanese Embassy

Mr. Tatsuaki Iwata

Minister

Mr. Mitsuyoshi Nakata

The Second Secretary

JICA Pakistan Office

Mr. Akira Murata

Resident Representative

Mr. Noriaki Nishimiya

Deputy Resident Representative

Mr. Mahmood A. Jilani

Chief Programme Officer

#### Appendix-4 Minutes of Discussions

**Minutes of Discussions  
on  
the Basic Design Study of the Project  
for Strengthening of Equipment  
at the Institute of Educational Technology (IET)  
of Allama Iqbal Open University (AIU)  
in  
the Islamic Republic of Pakistan**

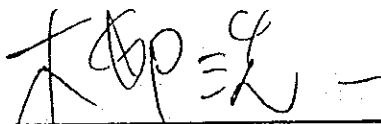
In response to a request from the Government of the Islamic Republic of Pakistan, the Government of Japan has decided to conduct a Basic Design Study on the Project for Strengthening of Equipment at the Institute of Educational Technology (IET) in the Allama Iqbal Open University (AIU) (hereinafter referred to as "the Project" ), and entrusted the study to Japan International Cooperation Agency (JICA).

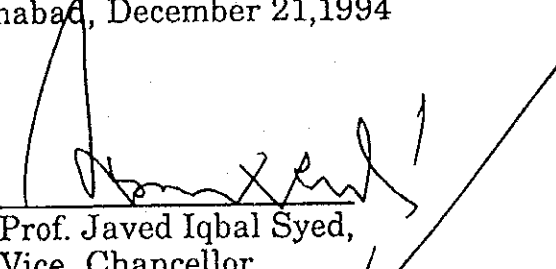
JICA sent to Pakistan a Basic Design Study Team headed by Mr. KIMURA Senichi, Deputy Director, Second Basic Design Study Division, Grant Aid Study and Design Department, JICA, and is scheduled to stay in the country from December 11 to December 31, 1994.

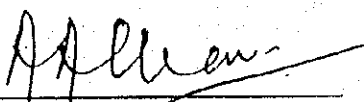
The team held discussions with the officials concerned of the Government of Pakistan and conducted a field survey at the study area.

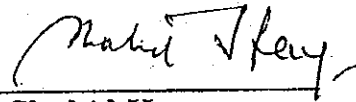
As a result of discussions and field survey, both parties confirmed the main items described on the attached sheets.

Islamabad, December 21, 1994

  
Mr. KIMURA Senichi,  
Leader,  
Basic Design Study Team, JICA

  
Prof. Javed Iqbal Syed,  
Vice Chancellor,  
AIU, Pakistan

  
Dr. Abdul Aziz Khan,  
Joint Educational Advisor,  
Ministry of Education,  
Pakistan

  
Mr. Shahid Humayun,  
Deputy Secretary,  
Economic Affairs Division,  
Pakistan

## ATTACHMENT

### 1. OBJECTIVE OF THE PROJECT

The objective of the Project is to facilitate programme production activities of IET, AIOU by upgrading the studio and/or audio-visual equipment of IET in order to enhance the quality of distance education implemented by AIOU.

### 2. PROJECT IMPLEMENTING AGENCY

Ministry of Education is to be the overall Responsible Agency and the Allama Iqbal Open University (AIOU) is to be the Executing Agency for the Project.

### 3. PROJECT SITE

The Project location site is in IET in the main campus of AIOU, Islamabad, Pakistan.

### 4. ITEMS REQUESTED BY PAKISTANI SIDE

The items with priorities requested by Pakistani side for the Project have been confirmed as shown in Annex 1.

Both sides have agreed, however, that the details of each item will be examined and finalized by further studies in Japan on the basis of the scope of the Project as well as the scheme of Japan's Grant Aid Programme.

### 5. JAPAN'S GRANT AID SYSTEM

Pakistani side has understood the system of Japan's Grant Aid Programme explained by the team as shown in Annex 2.

### 6. NECESSARY MEASURES TO BE TAKEN BY PAKISTANI SIDE

Pakistani Side will take necessary measures described in Annex 3 for the smooth implementation of the Project on condition that the Grant Aid by the Government of Japan is extended to the Project.

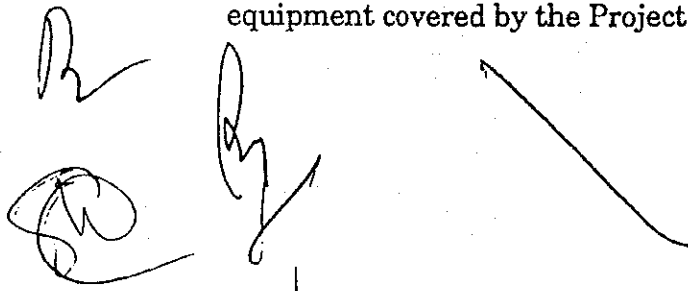
### 7. FURTHER SCHEDULE OF THE STUDY

- 1) The Consultants Team will proceed to further study in Pakistan until December 31, 1994.
- 2) Based on the agreement of Minutes of Discussions and technical examination of the study results, JICA will complete the final report and send it to Pakistani side by May, 1995.

#### 8. OTHERS

Both sides have confirmed following items;

- 1) Equipment of which main purpose is transmission of broadcasting signals will not be included.
- 2) Equipment which requires construction of major new building or extension work of IET existing building will not be included.
- 3) Equipment of which significant construction work is necessary for the installation will not be included.
- 4) Since the programmes produced by the IET are broadcast through the Pakistan Television Corporation (PTV) for the effective implementation of distance education, it is assured that Ministry of Education and AIOU would take necessary coordination with PTV so as to utilize the equipment covered by the Project in full extent.

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# Annex 1 ITEMS REQUESTED BY PAKISTANI SIDE

	Facility	Purpose	Equipment	Pr'ty
A	TV Studio	Replacement	Color Camera Chain	A
			Flyingspot Scanner	A
			Character Generator	A
			Video Production Equipment	A
			Audio Production Equipment	A
			Video Cassette Recorder	A
			Monitoring Equipment	A
			Studio Intercom Equipment	A
			Lighting Equipment	A
B	Central Apparatus Room	Replacement	Sync Signal Generator	A
			Television Generator	B
			Automatic Change Over Unit	A
			Video Distribution Amplifier	A
			Audio Distribution Amplifier	A
			Pulse Distribution Amplifier	A
			Video/Pulse Delay Unit	A
			Rack Assembly	A
			Master Clock and Slave Clock	B
			Telecine Chain	A
			Signal Distribution System	A
			Room to Room Communication	A
			System Converter	A
			VHF Communication System	B
			Satellite Broadcast Receiver Set	C -
			Video Color Printer	B
C	Editing Equipment	Replacement	Automatic Editing Control Unit	A
			Video Cassette Recorder with Time Code & TBC	A
			14" Picture Monitor w/Audio Speaker	A
			Console	A
			Head Set	B
D	Post Production Studio	New Acquisition	Video Cassette Recorders	A
			Editor	A
			Video Production Equipment	A
			Audio Production Equipment	A
			Monitor Equipment	A
			Rack Assembly	A
E	Outdoor Coverage	Replacement	Video Cassette Recorder in Camera	A
			Audio Equipment	A
			Monitor Equipment	A
			Portable Lighting Kit	A
			Outdoor Coverage Car	A
			Portable Dimmer	B



	Facility	Purpose	Equipment	Pr'ty
F	Measuring Equip't & Tools	New Acquisition	Measuring Equipment	A
			Tools	B
G	Installation Materials	Replacement	Installation Materials	A
H	Power Supply	Replacement	Distribution Board	A
			Isolation Transformer	A
			AVR	A
I	Presentation Equipment	New Acquisition	Color Video Projector	A
			20" Color Picture Monitor	B
			40" Color Picture Monitor	B
			VHS Video Cassette Recorder	A
			Optical Presentation Panel	A
			Electronic Print Board	B
J	Electronic Field Production Car	New Acquisition	Color Camera Chain	A
			Video Production Equipment	A
			Audio Production Equipment	A
			Video Cassette Recorder	A
			Monitoring Equipment	A
			Modified Vehicle	A
K	Others	New Acquisition	Test Run Tape	A
			Microscope w/Camera Attachment	A
			PA System	A
			Conference System	B
			Duplication Master	A
			Microcamera	A
			Script Processing Equipment	A
				A
L	Radio/Dubbing Studio	New Acquisition	Audio Mixer	A
			Multitrack Tape Recorder	A
			Compact Disc Reproducer	A
			Tape Recorder/Reproducer	A
			Disk Reproducer	A
			Cassette Tape Recorder/Reproducer	A
			Sync Lock System	A
			Effector	A
			Monitor Speaker w/Amplifier	A
			Studio Monitor Speaker w/Amp.	A
			Microphone & Stand	A
			Announcer Cough Box	A
			Announcer Desk	A
			Headphone Box	A
			Headphone	A
			1/2" Video Cassette Recorder	B
			Color Picture Monitor	B
			High Speed Cassette Duplicator	A
M	Spare Parts	New Acquisition	Spare Parts	A

## Annex 2

### Japan's Grant Aid Scheme

#### 1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

#### 2. Basic Design Study

##### 1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the requested project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.

- d) Preparation of a basic design of the Project
- e) Estimation of costs of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

## 2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consultant firm(s). JICA selects (a) firms(s) based on proposals submitted by interested firms. The firm(s) selected carry (ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.

## 3. Japan's Grant Aid Scheme

### 1) What is Grant Aid ?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

### 2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

- 3) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consultant firm(s) and (a) contractor(s) and final payment to them must be completed. However in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

- 4) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be provided.

When the two Governments deem it necessary, the Grant Aid may be used for the provision of the products or services of a third country.

However the prime contractors, namely, consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

- 5) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

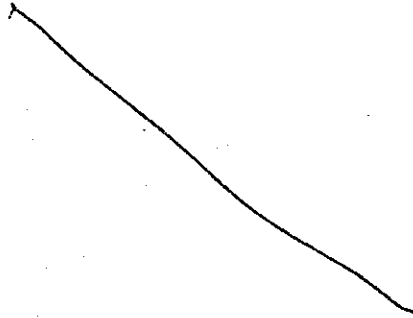
- 6) Undertakings required of the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products provided under the Grant Aid.
- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.
- (6) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.
- 7) "Proper Use"
- The recipient country is required to maintain and use the facilities constructed and equipment provided under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.
- 8) "Re-export"
- The products provided under the Grant Aid should not be re-exported from the recipient country.

9) Banking Arrangements (B/A)

- a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an authorization to pay issued by the Government of the recipient country or its designated authority.



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### Annex 3 NECESSARY MEASURES TO BE TAKEN BY PAKISTANI SIDE

Following items of work related to the realization of the Project shall be executed by the Pakistan side whenever required.

- 1) Civil work for the building contemplated to install the requested equipment, interior work of the building and the relocation work of the existing equipment and facilities
- 2) Electric work for receiving, transforming and distribution of electric power (except for Distribution Board, Isolation Transformer and AVR for Power Supply)
- 3) Electric lighting work (except Lighting Equipment for TV Studio and Portable Lighting Kit for Outdoor Coverage Equipment)
- 4) Air conditioning work, if necessary
- 5) Telephone and communication facility work (except Studio Intercom Equipment for TV Studio and VHF Communication System for Central Apparatus Room)
- 6) Utensils and furniture (except special furniture for Studio)
- 7) To ensure prompt unloading, exempt taxes, and take necessary measures for custom's clearance at port of disembarkation and inland transportation in Pakistan of the equipment provided under the grant aid, and bear all expenses for going through formalities.
- 8) To exempt Japanese nationals (physical and juridical) from customs duties, internal taxes and other fiscal

levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts.

- 9) To bear commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement.
- 10) To accord Japanese nationals whose services may be required in connection with the supply of products and services under the verified contract such facilities as may be necessary for their entry into Pakistan and stay therein for the performance of their work.
- 11) To maintain and use properly the equipment provided under the grant aid.
- 12) To bear all the expenses other than those to be borne by the grant aid, necessary for the execution of the Project.
- 13) To take measures of permission and sanction necessary for execution of the Project.





## Appendix-5 Social and Economic Conditions of Pakistan

Name of Country	Islamic Republic of Pakistan
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General Index					
Form of Government	Republic	*1	Area of land	796 thousand km2	*1
Sovereign	President Farooq Ahmed Khan Leghari	*1	Population	125,213 thousand (1993)	*1
Independence day	August 14, 1947	*1	Capital city	Islamabad	*1
Nation	Punjabi, Sindi, Baluchi, Patan	*1	Principal cities	Karachi, Lahore, Faisarabad, Hyderabad	*1
Language	Urdu, English	*1	Workforce	28,900 thousand (1987)	
Religion	Islam 97%	*1	Compulsory education	1 year (1992)	*2
Joining U.N.	September 1947	*1	Enrolment ratio	- (1990)	*2
World Bank, IMF	July 1950	*1	Literacy ratio	35.0 % (1990)	*1
			Population density	162.0 persons/km2 (1992)	*2
			Population growth rate	2.87 % (1993)	*2
			Average life expectanc	av. 57.11 m. 56.5 f. 57.7	*1
			Mortality rate	103.6/1000(5y old) (1993)	*1
			Nutrition	2,280.0cal/d/person (1990)	*2

Economic Index					
Currency	Pakistan Rupee(Rs)	*1	Trade	(1993)	*3
Exchange rate	1US\$=Rs30.727		Export	6,688.0 mil\$	*2
Financial year	July - June		Import	9,500.0 mil\$	*2
National budget	(1991)	*2	Import cover rate	1.4 % (1992)	*4
Income	7,369.7 mil\$	*2	Principal exports	cotton, textile, cloth, rice	*1
Expenditure	9,547.4 mil\$	*2	Principal imports	oil, oil products, machinery	*1
Balance of payment	530.00 mil\$ (1992)	*2	Export to Japan	527.0 mil\$ (1992)	*5
ODA acceptance	1,169.00 mil\$ (1992)	*2	Import from Japan	1,297.0 mil\$ (1992)	*5
GDP	50,160.00 mil\$ (1992)	*4			
GDP per person	47,287.0 \$ (1991)	*4	Foreign currency reserve	2,092.0 mil\$ (1994)	*1
GDP per sector	Agriculture 26.0%	*4	Debt outstanding	24,072.0 mil\$ (1992)	*4
	Industry 25.0%		Debt service ratio	23.3 % (1992)	*4
	Service 49.0%		Inflation rate	9.1 % (1992)	*2
Employment per sector	Agriculture 47.0%	*2			
	Industry 20.0%				
	Service 33.0%		National Development Plan		*5
Economic growth rate	7.8% (1992)	*4			

Weather conditions (average of 1949 - 1979) : Islamabad (above sea level 511m)														*6
Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Av. / Total	
Max. Temp.	16.0	19.0	24.0	31.0	37.0	40.0	36.0	34.0	34.0	32.0	28.0	20.0	29.2 °C	
Min. Temp.	2.0	6.0	10.0	15.0	21.0	25.0	25.0	24.0	21.0	15.0	9.0	3.0	14.6 °C	
Av. Temp.	9.0	12.5	17.0	23.0	29.0	32.5	30.5	29.0	27.5	23.5	18.5	11.5	21.9 °C	
Precipi.	64.0	64.0	81.0	42.0	23.0	55.0	233.0	258.0	85.0	21.0	12.0	23.0	961.0 mm	
Wet/Dry	rainy rainy													

\*1 The World Factbook(C. I. A.)

\*2 Human Development Report(UNDP)

\*3 International Financial Statistics(IMF)

Name of Country	Islamic Republic of Pakistan
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\*7

Total ODA of Japan (Commitment base)		(Million Yen)			
Sect.	F. Year	1989	1990	1991	1992
Grant		204,346	238,247	251,530	269,997
Technical Assistance		214,674	198,963	205,070	219,495
Loan		516,142	567,639	736,447	585,205
Total		935,162	1,004,849	1,193,047	1,074,697

\*7

ODA from Japan to Pakistan (Net disbursement)		(Million \$)			
Sect.	Year	1989	1990	1991	1992
Grant		14.26	11.54	12.67	12.82
Technical Assistance		74.78	56.06	74.13	59.39
Loan		88.42	125.96	40.55	101.04
Total		177.46	193.56	127.35	173.25

\*8

Economic cooperation by ODA countries						(Million \$)
	Grant (1)		Loan (2)	ODA (1)+(2)=(3)	Others (4)	Total (3)+(4)
		Tech. Assis.				
Direct (Principal)	402.20	214.80	67.20	684.20	46.30	730.50
1. USA	110.00	110.00	-71.20	148.80	4.00	152.80
2. Japan	72.20	12.90	101.10	186.20	0.00	186.20
3. Holland	47.30	27.00	-10.90	63.40	0.00	63.40
4. Germany	42.50	24.00	37.20	103.70	16.20	119.90
Indirect (Principal organization)	227.60	105.40	373.80	706.80	460.60	1,167.40
	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00
Others	163.90	73.90	55.90	293.70	42.30	336.00
Total	793.70	394.10	496.90	1,684.70	549.20	2,233.90

\*9

Organization in charge of accepting aid					
Technical	Public entity	→	Ministry concerned	→	EAD
Grant	Public entity	→	Ministry concerned	→	EAD
Cooperator	Public entity	→	Ministry concerned	→	EAD

\*7 Japan's ODA(Annual Report)

\*8 Geographical Distribution of Financial Flows of Developing Countries(OECD/OCDE)

\*9 Information of cooperation with each country(JICA)

## Appendix-6 ESTIMATION OF COSTS BORN BY PAKISTAN SIDE

The costs of the work to be borne by the Pakistan side in relation with this project will be about two million rupees. The breakdown is as follows:

Removal of partitions in the studio control room :	Rs. 5,000/-
Removal of existing equipment :	Rs. 20,000/-
Lighting/control works for sub studio :	Rs. 940,000/-
Civil and other related works for main and sub studios :	Rs.1,035,000/-



List of Existing Equipment

**Appendix-7 List of Existing Equipment**

S.NO.	Nomenclature & Model	Make	Model	Year of Installation	Q'ty	Present Status	Reason of Malfunction	Location	Financial Source
<b>A. TV Studio Equipment</b>									
01.	CCU Console	Sony		1983	1	G.		TV CONTROL ROOM	UNDP
02.	Oscilloscope	Tektronix	2213	1983	1	G.		MAINT ROOM	UNDP
03.	Dimmer Control Desk	Furse		1983	1	G.		TV CONT. ROOM	UNDP
04.	Dimmer Rack 12 Way	Furse		1983	2	PW.	MAIN FILTER DEF.		UNDP
05.	Patch Panel for Dimmer	Furse		1983	1	G.		DIMMER ROOM	UNDP
06.	Special Effect Gen.	Sony	SEG-2000P	1983	1	RR.		M.C.R.	UNDP
07.	Camera Talkback Unit	Link		1983	1	F.	P.S.U. DEF.	M.C.R. (AUDIO)	UNDP
08.	Caption Camera B/W	Link		1983	1	RR.		T.C.R.	UNDP
09.	Video Jackfield	Link		1983	2	G.		TV CONT. ROOM	UNDP
10.	Colour TV Monitor	Sony	PVM-9000	1983	3	PP.	WEAK PIX. TUBES	EFP USE	UNDP
11.	Colour TV Monitor	Sony	PVM-1850	1983	6	4-F. 2-PP.	WEAK PIX. TUBES	EDITING	UNDP
12.	Colour TV Monitor	Sony	BYM-1301	1983	1	U.	PIX TUBE / PSU	OUT OF SERVICE	UNDP
13.	Video Cassette Recorder	Sony	BYU-1110P	1983	2	1-F. 1-UR.	ARM PROCEED GUIDE	FEP USE	UNDP
14.	Video Cassette Recorder	Sony	BYU-800P	1983	2	UR.	POOR PERFORMANCE	OUT OF SERVICE	UNDP
15.	Video Camera	Sony	DXC-6000PK	1983	7	3-F. 2-UR. 1-D. 1-PP.		TV. STUDIO EFP USE OUT OF SERVICE	UNDP
16.	Camera Control Unit	Sony	CCU-6000P	1983	6	5-F. 1-UR.		TV C R + TC Tech STORES	UNDP
17.	Time Base Corrector	Sony	BVT-500	1983	2	1-UR. 1-PW.	OUTPUT PCB DEF.	OUT OF SERVICE TV CONT. ROOM	UNDP
18.	Editing Control Unit	Sony	BVE-500ACE	1983	1	F.		VTR	UNDP
19.	Film Chain Adaptor	Sony	VCR-20	1983	1	G.		T C R	UNDP
20.	Flexible Cable Unit	Sony	LO-23	1983	5	2-F. 3-D.	DUBBING MACH.	TV STUDIO	UNDP

# List of Existing Equipment

S.NO.	Nomenclature & Model	Make	Model	Year of Installation	Q'ty	Present Status	Reason of Malfunction	Location	Financial Source
21.	Video Cassette Recorder	Sony	BVU-200P	1983	6	2-F. 2-UR. 1-PW. 1-D.		TV CONT. ROOM VTR DUBBING OUT OF SERVICE	UNDP
22.	Film Projector (16mm)	Hokushin	M/SC-105	1983	1	F.		T.C.R.	UNDP
23.	Automatic Voltage Stabiliser	Claude-Lyons	TS-3	1983	2	F.		T.C.R.	UNDP
24.	Bulk Tape Eraser	Amos	Model-8	1983	1	G.		T.C.R.	UNDP
25.	Sound Console	Neve	NEVE-5452/12	1983	1	PW./UR.	POWER PCB DEF.	M.C.R (AUDIO)	UNDP
26.	Compact Microphone Booms with Pram	Colortran		1983	2	D.	BIG MECHANISM DEF.	TV STUDIO	UNDP
27.	Waveform & Vectorscope	System-Video	1202/1205	1983	1	PW.	VIDEO PCB DEF.	TV CONT. ROOM	UNDP
28.	Sync. Pulse Gen.	System-Video	1330	1983	2	F.		TV CONT. ROOM	UNDP/ODA
29.	Colour Black Unit	System-Video	1301	1983	2	F.		TV CONT. ROOM	UNDP
30.	Equipment Bay for above Unit	System-Video		1983	1	G.		TV CONT. ROOM	UNDP
31.	RITA Pre Amplifier	Sela		1983	1	U.	PCB DEF.	OUT OF SERVICE	UNDP
32.	Inter Face Board	Sony	BK-808	1983	2	G.		T.S	UNDP
33.	Colour Camera Cable	Sony	CCX-25A	1983	2	G.		T.S	UNDP
34.	Editing control Unit	Sony	BVE-800	1983	1	G.		T.S	UNDP
35.	Tripod w/Oil Head	Sony	SAM-TPD-205	1983	4	G.		TV STUDIO	UNDP
36.	Video Typewriter	FOR-A	VTW-210	1985	1	F.		T.C.R.	UNDP
37.	Video Writer	FOR-A	FWW-910	1985	1	G.		T.C.R	UNDP
38.	Audio Level Controller	FOR-A	ALC-4100	1985	1	G.		T.S. (DUB/EFP USE)	UNDP
39.	Magnetic Card Memory Unit	FOR-A	MU-300	1985	1	D.	PCB DEF.	OUT OF SERVICE	UNDP
40.	Video Pointer	FOR-A	VP-380	1985	1	G.		T.C.R.	UNDP

# List of Existing Equipment

S. NO.	Nomenclature & Model	Make	Model	Year of Installation	Q' ty	Present Status	Reason of Malfunction	Location	Financial Source
<b>B. RADIO STUDIO EQUIPMENT</b>									
01.	Cassette Tape Recorder	Bell & Howell	3085X	1983	1	F.		RADIO STUDIO	ODA
02.	Turntable	Technice	SL-Q303	1983	1	G.		RADIO STUDIO	ODA
03.	Audio Console 8 Channel	Neve	4552/8	1983	1	G.		RADIO STUDIO	ODA
04.	1/4" Audio Tape Recorder	Revox	PR-99	1983	1	G.		RADIO STUDIO	ODA
05.	1/4" Audio Tape Recorder	Proline	1000	1983	2	U.	Servo Problem	RADIO STUDIO	ODA
06.	Cartridge Machine	Spotmaster	3200RPS	1983	1	U.	Mechanical	RADIO STUDIO	ODA
07.	Audio Amplifier	H/H	TPA-250	1983		G.		RADIO STUDIO	ODA
08.	Loudspeaker	Goodmans	XP35	1983	2	G.		RADIO STUDIO	ODA
09.	Limiter / Compressor	Neve	33610	1983	1	G.		RADIO STUDIO	ODA
10.	Automatic Voltage Stabilizer	Claude	TS-3	1983	1	G.		RADIO STUDIO	ODA
11.	Microphone	AKG	D202	1983	2	G.		RADIO STUDIO	ODA
12.	Audio Distribution Amplifier	Surrey	Amp-3	1983	1	G.		RADIO STUDIO	ODA
	10 outlet								
13.	1/4" Audio Tape Recorder	Revox	PR-99	1983	2	G.		RADIO STUDIO	ODA
14.	Audio Amplifier	H/H	TPA-250	1983	1	G.		RADIO STUDIO	ODA
15.	Loudspeaker	-	-	1983	1	G.		RADIO STUDIO	ODA
16.	Cassette Tape Recorder	Goodsell	CTR-8285	1983	2	G.		RADIO STUDIO	ODA
17.	Audio Mixer	Ampey	KM-C	1983	1	PW.		RADIO STUDIO	
18.	1/4" Audio Tape Recorder	Revox	B77MK-II	1983	1	G.		RADIO STUDIO	ODA
19.	Audio Distribution Amplifier	Surrey	Amp-3	1983	1	G.		RADIO STUDIO	ODA

Note: "Year of Installation" denotes the year of installation on the present location.

Abbreviations in the column of "Present status" denote the following:

D : Defective.  
 G : Good.  
 PP: Poor performance.  
 F : Functional after Repairs.  
 PW: Partly working.  
 RR: Repaired Recently.  
 UR: Under Repairs.  
 U : Unserviceable.





# Appendix 8 8-1 Educational Course Enrolment of AIOU

Level/Programme	No. of Courses			Sub Total	Faculty of Social Sci. & Humanities	Faculty of Basic & Applied Sci.	Faculty of Education	BUESP	Sub Total
	Half Credit	Full Credit	Non-Credit						
Non-credit									
Newspaper courses	-	-	15	15	3	7	1	4	15
Basic Functional	-	-	17	17	-	9	-	8	17
IFLP	-	-	11	11	2	7	-	2	11
Functional	-	-	4	4	-	-	-	4	4
Sub Total	0	0	47	47	5	23	1	18	47
Under Graduate									
Matric	10	8	-	18	6	11	1	-	18
Intermediate	31	18	-	47	28	19	2	-	47
B.A.	30	31	-	61	58	4	1	-	61
Dip. in Computer Application	9	-	3	12	-	12	-	-	12
Dip. in Computer Maintenance	8	-	-	8	-	8	-	-	8
Sub Total	88	55	3	146	88	54	4	0	146
Master's Degree									
EPW	30	-	-	30	28	2	-	-	30
M.B.A.	10	9	-	19	13	-	-	-	13
M.Sc. Pakistan Studies	-	10	-	10	-	-	10	-	10
Dip./M.Ed. (Special Education)	10	2	-	12	-	-	12	-	12
M.A. TEFL	4	-	-	4	4	-	-	-	4
Sub Total	54	15	0	69	45	2	22	0	69
Teacher Education									
P.T.C.	9	1	-	10	-	-	10	-	10
C.T.	10	1	-	11	-	-	11	-	11
ATTC/ALTC	-	1	1	2	2	-	-	-	2
Population Education	2	-	-	2	-	-	-	2	2
B.Ed. (General)	6	4	-	10	-	-	10	-	10
B.Ed. (Arabic)	8	2	-	8	8	-	-	-	8
Sub Total	38	9	1	48	10	0	31	2	49
M.Phil. Degree									
Islamic Studies	-	4	-	4	4	-	-	-	4
Iqbaliat	-	4	-	4	4	-	-	-	4
Urdu	-	4	-	4	4	-	-	-	4
Education	-	10	-	10	-	-	10	-	10
Sub Total	0	22	0	22	12	0	10	0	22
Grand Total	175	101	51	327	180	79	88	20	327

## 8-2 Course-wise Enrolment

COURSE-WISE COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY

S.No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
	<b>FUNCTIONAL (NON-CREDIT)</b>											
1	Summer Vegetable Growing	101	-	-	-	-						
2	Winter Vegetable Growing	102	-	-	-	-						
3	Soil Problems and their Remedies	103	-	-	-	-						
4	Plant Protection	104	-	-	-	-						
5	Poultry Farming	105	-	-	-	-						
6	Tractor Repair and Maintenance	106	-	-	-	-						
7	Sheep and Goat Husbandry	107	-	-	-	-						
8	Elementary Arabic	110	192	283	114	168	124	237	183	293	237	393
9	Daftri Urdu for Federal Government Officers	111	110	115	82	87	104	108	69	71	26	27
10	Arabic Bool Chall	114	-	-	-	-						
11	Daftri Urdu for Provincial Government Officers	115	9	30	-	-						
	Sub-total		311	428	196	255	228	343	252	364	263	420
	<b>WOMEN'S EDUCATION MATRIC PROJECT</b>											
12	Selling of Home Made Products	200	-	1	-	1	-	4	-	4	3	7
13	Islamiat	201	-	100	-	571	-	27	-	14	1	440
14	Pakistan Studies	202	-	682	-	41	-	47	4	592	58	2,510
15	General Science	203	-	108	-	596	-	77	-	26	1	449
16	Urdu for Daily Use	204	-	614	-	32	-	20	4	513	57	2,361
17	Arabic	205	-	15	-	3	-					
18	Family Health Care	206	-	106	-	69	-	54	3	329	-	70
19	Functional English-I	207	-	82	-	597	-	108	-	53	1	459
20	Garment Making-I	208	-	77	-	57	-	733	-	19	1	31
21	General Home Economics	209	-	55	-	35	-	29	3	328	-	78
22	Garment Making-II	210	-	53	-	41	-	55	3	334	-	73
23	Poultry Farming	211	-	-	-	-	-					
24	Maintenance of Home Electrical Appliances	212	-	-	-	-	-					
25	Sindhi	213	-	71	-	-	-	2	-	69	1	128
26	General Arithmetic	214	-	150	-	78	-	740	1	30	1	28
27	Education	215	-	20	-	4	-	3	-	2	-	7
28	Food and Nutrition	217	-	1	-	1	-					
29	First Aid-I	218	-	55	-	10	-	10	-	8	-	8
30	First Aid-II	220	-	32	-	10	-	8	-	9	-	5
31	Functional English	221	-	168	-	113	-	810	-	69	2	68
32	Applied Food & Nutrition	222	-	2	-	-	-					
	Sub-total		-	2,401	-	2,250	-	2,727	18	2,399	126	6,722

COURSE-WISE COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY

S.No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
INTERMEDIATE COURSES												
33	Daftri Urdu	301	293	461	-	-	88	113	64	101	63	81
34	Urdu	302	1,822	2,780	601	1,096	974	1,709	996	1,702	2,369	3,948
35	Iqbaliat	303	1,001	1,760	-	-	312	593	326	573	361	638
36	Pakistan Studies (Elective)	304	-	-	1,042	1,740	586	1,000	614	1,031	702	1,152
37	Rural Development	305	394	740	-	-	100	183	89	165	68	107
38	Food and Nutrition	306	-	-	755	1,690	-	-	-	-	1	4
39	Electrical Wiring	307	372	374	2	2	458	463	243	243	531	533
40	General Science	308	560	1,102	-	1	302	519	216	400	257	426
41	Arabic	309	-	-	63	114	37	67	-	-	71	188
42	English	310	1,986	3,401	1,194	2,117	1,362	2,379	1,319	2,271	2,492	4,168
43	Book Keeping and Accountancy	311	96	108	1	1	28	34	25	29	17	21
44	Education	312	-	-	919	1,793	475	926	436	876	528	955
45	Dairy Husbandry	313	369	700	-	-	82	121	58	102	69	114
46	Electrician	314	-	-	144	145	-	-	21	21	71	71
47	Economics	315	-	-	223	348	87	155	98	142	131	182
48	Islamiat (Compulsory)	316	1,405	2,490	567	1,009	766	1,362	698	1,240	1,821	3,073
49	Pakistan Studies (Compulsory)	317	1,449	2,604	582	1,058	783	1,419	745	1,352	1,842	3,129
50	Sindhii Easy Urdu	318	6	8	9	15	2	5	2	4	32	37
51	Ethics	319	17	21	4	8	4	5	7	10	10	25
52	Sindhii Bool Chall	320	-	-	-	-	-	-	-	-	-	-
53	Muslim History of Sub-continent	321	1,055	1,756	-	-	529	768	306	512	361	548
54	Secretarial Practice	322	-	-	58	82	39	43	-	-	40	43
55	Mathematics-I	323	-	-	50	72	-	-	33	48	28	42
56	Mathematics-II	324	-	1	-	-	-	-	-	-	-	2
57	not offered	325	-	-	-	-	-	-	-	-	-	-
58	Farm Income Generating Skill	326	164	301	-	2	84	121	78	110	76	95
59	Farm Machinery	327	-	-	13	19	-	-	9	10	6	6
60	Improved Methods of Oil Seed Crops	328	-	-	236	388	112	171	123	165	142	186
61	Jadeed Ziraat	329	-	-	-	-	-	-	-	-	80	88
62	Child Care and Development	330	-	-	330	991	159	499	159	502	171	517
63	Statistics	331	-	-	75	86	26	32	-	-	36	48
64	Auto Servicing	332	-	-	65	66	38	38	-	-	39	41
65	English Typewriting (Elementary)	333	16	42	-	24	-	12	33	65	14	42
66	English Typewriting (Advance)	334	-	-	-	-	-	-	-	-	-	-
67	English Shorthand (Elementary)	335	15	35	-	16	-	11	11	19	10	36
68	English Shorthand (Advance)	336	-	1	-	-	-	-	-	-	-	-
69	Urdu Typewriting (Elementary)	337	-	-	12	12	6	7	3	3	-	-
70	Urdu Typewriting (Advance)	338	-	-	-	-	-	-	-	-	-	-
71	Urdu Shorthand (Elementary)	339	-	-	12	12	6	7	2	2	-	-
72	Urdu Shorthand (Advance)	340	-	-	-	-	-	-	-	-	-	-
73	Maintenance of Household Electrical Appliances	341	46	52	1	1	-	-	66	68	16	16
74	Improved Methods of Fruit Production	342	168	380	-	1	94	176	99	177	91	156
75	Islamiat (Elective)	343	-	-	1,361	2,406	432	864	591	1,129	882	1,582
76	Basic Electronics	344	-	-	99	104	12	13	-	-	32	32
77	Home Management	345	-	-	135	645	34	287	31	285	29	297
78	Principles of Commerce	346	-	-	114	130	-	-	69	85	86	104
79	Banking	347	-	-	45	54	25	30	-	-	17	29
80	Commercial Geography	348	-	-	15	15	-	-	7	8	7	7
81	Plant Protection	349	-	-	-	-	-	-	-	-	97	145
82	not offered	350	-	-	-	-	-	-	-	-	-	1
83	Auto Mechanics	351	-	-	17	17	-	-	27	27	10	10
84	Textile	355	-	-	-	-	-	-	-	-	1	27
85	Food & Nutrition	356	-	-	-	-	104	282	129	342	164	485
86	Health & Nutrition	357	-	-	-	-	107	304	132	348	134	392
87	Persian	361	-	-	-	-	-	-	-	-	25	42
88	Primary Teacher's Orientation Course	602	143	300	-	-	-	-	-	-	56	113
Sub-total			11,177	19,417	8,744	16,280	8,253	14,719	7,865	14,157	14,086	23,985

## COURSE-WISE, COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY

S.No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
B. A. COURSES												
89	Accountancy	401	580	638	-	-	331	348	349	382	551	581
90	Economics	402	-	-	489	602	409	456	378	418	628	679
91	Pakistan Studies (Elective)	403	406	599	1	1	763	893	627	830	737	859
92	Urdu	404	1,206	1,744	-	1	764	1,080	687	945	829	1,161
93	Iqbaliat	405	-	-	1,237	1,720	167	245	205	300	223	327
94	Economics of Pakistan	406	-	-	145	186	-	-	45	56	61	72
95	History of Modern Muslim World	407	-	-	400	555	299	374	215	285	254	313
96	Arabic	408	-	-	115	165	23	37	-	-	33	57
97	Commercial Geography	409	-	-	-	-	-	-	-	-	18	20
98	Business English	410	-	-	297	333	72	85	70	80	67	86
99	Sociology-I	411	776	1,101	1	1	236	360	194	308	234	334
100	Social and Cultural Anthropology	412	-	-	38	60	18	37	29	40	27	36
101	Sociology-II	413	-	-	145	220	-	1	25	38	29	45
102	Demography	414	-	-	9	13	4	4	-	-	5	10
103	Auditing	415	320	349	-	-	133	141	118	128	127	134
104	Islamiat (Compulsory)	416	1,713	2,270	1,135	1,503	1,074	1,472	1,308	1,694	2,569	3,353
105	Pakistan Studies (Compulsory)	417	1,755	2,318	1,155	1,537	1,091	1,498	1,338	1,743	2,564	3,366
106	Ethics	418	13	17	9	11	7	11	5	8	19	22
107	Education	419	782	1,141	-	-	561	862	480	712	536	840
108	Business Mathematics and Statistics	421	-	-	559	606	237	251	253	284	417	458
109	Organizing Library Resources	422	-	-	283	379	174	225	206	283	343	453
110	Library Services	423	203	269	102	150	181	247	191	264	321	426
111	Export Marketing and Management-I	424	-	-	12	13	21	23	1	1	15	17
112	Export Marketing and Management-II	425	-	-	9	11	-	-	11	11	6	6
113	Pakistani Adab-II	426	-	-	134	225	49	73	35	49	34	55
114	Pakistani Adab-I	427	40	58	2	2	27	47	25	35	22	29
115	Food and Nutrition	428	-	-	105	219	-	-	-	-	-	-
116	Development Journalism	430	-	-	596	756	102	127	114	145	104	122
117	Reporting	431	176	217	-	2	50	59	38	54	55	64
118	Population Education	432	148	195	1	1	63	81	43	71	30	38
119	Iqbal's Persian Poetry	433	-	-	4	8	6	8	-	-	3	4
120	Iqbal's Urdu Prose	434	-	-	39	57	-	1	22	33	20	31
121	Functional English	435	2,252	2,982	1,470	1,949	1,532	2,055	1,666	2,322	2,933	3,859
122	Secrat-e-Tayyaba	436	1,201	1,615	-	-	997	1,339	770	1,098	1,004	1,394
123	Islamic Studies	437	1,117	1,600	2	2	649	920	913	1,228	993	1,400
124	Advertising and Sales Promotion	439	219	245	-	-	107	115	128	141	93	100
125	Principles of Insurance	440	-	-	85	94	8	11	-	-	12	13
126	Trade and transportation	441	101	117	-	-	47	49	52	56	22	23
127	Banking and Finance	442	-	-	206	222	93	102	144	156	109	123
128	Adab Ka Tanqueedi Mutalia	443	11	15	-	-	2	3	1	1	2	3
129	One Pakistani Language	444	-	-	-	-	-	-	-	-	-	-
130	History of Urdu Adab	445	328	482	-	-	38	50	36	55	78	98
131	Adab-e-Anliya	446	-	-	54	73	1	1	5	6	7	10
132	Marketing Management	447	411	451	2	2	235	254	198	211	148	157
133	Industrial and Production Management	448	-	-	31	34	-	-	-	-	9	9
134	Magazine Journalism	449	1	1	-	-	-	-	-	-	21	25
135	Public Relations	451	52	61	1	1	74	83	61	89	90	112
136	Mass Communication	452	-	-	82	102	56	71	79	104	83	102
137	Radio Broadcasting	453	50	54	-	-	42	46	32	37	33	38
138	T.V Broadcasting	454	-	-	63	76	34	41	31	37	32	38
139	Book Editing	455	29	37	1	1	17	20	25	33	17	25
140	Business Communication	457	334	371	1	1	219	241	206	217	281	307
141	Community Development	458	-	-	110	160	-	-	9	14	7	10
142	Material Management-I	459	-	-	274	299	54	60	49	52	72	78
143	Mercantile Law	460	-	-	86	98	1	1	53	59	39	41
144	Advertising	461	42	46	-	1	24	28	19	26	38	44
145	Cost Accounting	462	-	-	133	139	65	67	3	3	77	87
146	Fundamentals of Business	463	140	150	-	-	54	61	52	59	199	217
147	Islamic Fiqah	464	-	-	1,642	2,274	189	242	340	436	374	509
148	Population and Development	465	-	-	317	439	-	-	18	22	21	29
149	History of Libraries with Reference to Pakistan	466	111	149	2	4	84	107	61	77	56	78
150	Classification or Cataloguing	467	-	-	153	200	53	69	53	69	60	75
151	Fundamentals of Data Processing	468	-	-	131	146	17	18	-	-	129	143
152	Principles of Marketing	470	-	-	3	4	1	1	10	11	6	7
153	Food & Nutrition	484	-	-	-	-	40	68	14	26	85	172
154	Health & Nutrition	485	-	-	-	-	-	-	72	125	70	146
Sub-total			14,517	19,294	11,871	15,658	11,595	15,248	12,130	15,967	18,079	23,563

COURSE-WISE, COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY

S. No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
<b>B.A. (EDUCATIONAL PLANNING AND MANAGEMENT)</b>												
155	Basic Concepts of Educational Planning	501	144	177	51	67	70	103	-	-	70	112
156	Process of Educational Planning	502	-	-	1	1	-	-	128	172	72	98
157	Plan Implementation and Management	503	86	123	-	-	-	-	63	78	54	76
158	Curriculum Planning and Evaluation	504	-	-	134	173	-	-	-	-	34	41
159	Economics and Financing of Education	505	62	92	1	1	-	-	35	48	39	51
160	Development Education	506	-	-	107	142	-	-	-	-	24	36
161	Educational Research and Statistics	507	41	59	1	1	-	-	48	65	29	38
162	Educational Project Implementation & Management	508	-	-	72	90	-	-	7	7	27	43
163	Term Paper/Field Study	509	10	12	2	4	-	-	1	3	2	4
164	Research thesis/Projects	510	1	3	1	5	-	-	-	-	1	1
	Sub-total		344	466	370	484	70	103	282	373	352	500
<b>POPULATION EDUCATION</b>												
165	Population Education for Secondary School Teachers (Post-graduate level)	511	1	1	-	-	245	266	-	-	2	4
	Sub-total		1	1	-	-	245	266	-	-	2	4
<b>POST-GRADUATE DIPLOMA IN ENGLISH LANGUAGE TEACHING</b>												
166	English Language Teaching-I	515	-	-	-	-	-	-	-	-	1	1
167	English Language Teaching-II	516	-	-	-	-	-	-	-	-	1	1
	Sub-total		-	-	-	-	-	-	-	-	2	2
<b>B.SC PAKISTAN STUDIES</b>												
168	Political & Constitutional Dev. in Pakistan	531	14	20	58	70	-	-	54	68	-	-
169	Geography of Pakistan	532	-	-	58	72	-	-	52	66	-	-
170	National, Provincial Languages & Their Literature	533	20	31	-	1	-	-	1	3	60	76
171	Economic Development in Pakistan	534	14	18	-	-	-	-	-	1	59	76
172	Pakistani Society and Culture	535	-	-	273	332	-	-	-	-	264	367
173	Foreign Policy of Pakistan	536	-	-	263	319	-	-	-	-	245	337
174	Ideological Foundation of Pakistan	537	-	-	259	312	-	-	-	-	236	333
175	Genesis of Pakistan Movement	538	-	-	261	314	-	-	-	-	231	325
176	Research Methods-I	539	-	-	6	7	-	-	43	54	-	-
177	Social Change	541	-	-	59	70	-	-	54	70	-	-
178	Social Theory-I	542	-	-	1	1	-	-	-	-	-	-
179	Social Theory	543	-	-	5	7	-	-	44	53	-	-
180	Political Parties & Pressure Groups in Pakistan	545	-	-	57	68	-	-	53	69	-	-
181	Research Methods-II	546	-	-	-	-	-	-	-	-	-	-
182	Thesis	547	-	-	3	3	-	-	4	6	14	14
	Sub-total		48	69	1,303	1,576	-	-	305	390	1,109	1,528
<b>TEACHING OF ENGLISH AS A FOREIGN LANGUAGE</b>												
183	Psycholinguistics and Sociolinguistics	551	142	221	-	-	-	-	-	-	195	309
184	Phonology and Grammar	552	140	218	-	-	-	-	-	-	181	286
185	The Language Skills	553	-	-	108	170	-	-	-	-	-	-
186	EFL in the Class room	554	-	-	99	161	-	-	-	-	-	-
	Sub-total		282	439	207	331	-	-	-	-	376	595
<b>B.A. (TEFL)</b>												
187	Educational Psychology & the Management of Learning	555	-	-	-	-	72	107	-	-	-	-
188	Language Variation & Stylistics	556	-	-	-	-	71	106	-	-	1	1
189	Semantics, Discourse Analysis	557	-	-	-	-	-	-	56	86	-	-
190	English for Specific Purposes	558	-	-	-	-	-	-	56	86	-	-
191	Modern Grammatical theory	559	-	-	-	-	-	-	-	-	46	69
192	Studies & Projects in Language Teaching	560	-	-	-	-	-	-	-	-	44	67
	Sub-total		-	-	-	-	143	213	112	172	91	137
<b>MASTER OF BUSINESS ADMINISTRATION (MBA)</b>												
193	Introduction to Behavioural Sciences	521	-	-	-	-	-	-	-	-	194	204
194	Business Mathematics and Statistics	523	-	-	103	111	120	130	-	-	-	-
195	Research Methods and Techniques	524	-	-	262	276	-	1	315	328	725	765
196	Business Communication	525	-	-	-	-	943	991	-	-	604	639
197	Principles of Management	526	-	-	280	295	12	16	362	378	686	726
198	Personnel Management	527	-	-	274	289	-	1	326	341	-	-
199	Financial Accounting	528	-	-	3	3	877	918	3	3	-	-
200	Managerial Economics	529	-	-	2	2	766	811	-	-	76	86
201	Taxation Management	530	-	-	-	-	52	53	67	73	621	658
202	Marketing Theory and Practice	561	-	-	1	1	765	806	-	-	183	194
203	Financial Management	562	-	-	106	114	113	123	-	-	181	192
204	Principles of Commercial and Development Bank	563	-	-	104	112	110	119	-	-	-	-
205	Operation Research	564	-	-	68	71	84	92	100	113	-	-
206	Management Analysis & Organizational Development	565	-	-	88	93	82	89	96	108	-	-
207	Computer Appreciation for Business	566	-	-	103	110	112	121	-	-	191	201
208	Business Commercial & Labour Laws	567	4	8	64	67	80	88	95	107	-	-
209	Cost and Management Accounting	568	-	-	257	271	2	3	317	330	-	-
210	Project Appraisal	569	-	-	91	96	75	82	95	108	-	-
211	Production Management	570	-	-	-	-	50	51	62	68	87	96
212	Transfer of Technology	571	-	-	26	27	53	54	58	65	81	88
213	Energy Management	572	-	-	25	26	49	50	60	67	78	86
214	Marketing Management	573	-	-	-	-	9	9	24	24	46	51
215	International Marketing	574	-	-	-	-	9	9	22	22	47	52
216	Advertising & Sales Promotion	575	-	-	-	-	11	11	23	23	47	52
217	Marketing Research	576	-	-	-	-	11	11	20	20	49	54
218	Investment & Security Analysis	577	-	-	-	-	10	11	13	13	20	21
219	International Financial Management	578	-	-	-	-	11	12	12	12	20	21
220	Corporate Planning & Financial Negotiation	579	-	-	-	-	10	11	12	12	20	21
221	Auditing	580	-	-	-	-	13	14	12	12	20	21
	Sub-total		4	8	1,857	1,963	4,429	4,687	2,094	2,227	3,976	4,228

COURSE-WISE, COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY

S. No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
<b>B. ED (DIPLOMA IN SPECIAL EDUCATION)</b>												
222	Planning for Population Education	584	-	-	-	-	-	-	-	-	26	32
223	Functional Psychology	671	-	-	-	-	-	-	-	-	149	199
224	Perspective of Special Education	672	-	-	-	-	-	-	-	-	137	185
225	Handicapped Person in Community	673	-	-	-	-	-	-	-	-	132	177
226	Braille System Practical Course in Urdu	674	-	-	-	-	-	-	-	-	10	15
227	Practical Component	675	-	-	-	-	-	-	41	63	-	-
228	Independence Training for Visually Handicapped Children	677	-	-	-	-	-	-	-	-	82	104
229	Curriculum development for Visually Handicapped	679	-	-	-	-	-	-	-	-	33	46
230	General Introduction to Hearing Impairment	680	-	-	-	-	-	-	-	-	51	75
Sub-total			-	-	-	-	-	-	41	63	620	833
<b>B. ED COURSES</b>												
231	Perspective of Educational Management	512	4,574	6,239	-	-	4,203	5,817	-	-	-	-
232	School Organization and Management	513	4,547	6,182	-	-	4,214	5,829	-	-	-	-
233	Evaluation, Guidance and Research	514	4,558	6,188	-	-	4,281	5,914	-	-	-	-
234	Teaching of Pakistan Studies	517	1,116	1,382	1	1	2,024	2,861	-	-	2,119	2,999
235	Educational Psychology and Curriculum	518	4,552	6,181	-	-	4,349	5,988	-	-	-	-
236	Teaching of English	519	4,377	5,410	1	1	755	1,030	-	-	561	777
237	Teaching of Biology	520	228	272	-	-	1,271	1,512	-	-	452	667
238	English (C)	551	1	1	3,947	5,335	1	1	3,840	5,266	1	1
239	Islam, Pakistan and Modern World	552	1	1	3,902	5,281	-	-	3,673	5,043	-	-
240	Teaching of Chemistry	553	-	-	-	-	-	-	-	-	280	393
241	Teaching of Islamiat	554	-	-	-	-	2,095	3,091	-	-	2,147	3,111
242	Workshop & Teaching Practice	555	5,640	6,963	3,897	5,291	131	190	3,649	5,607	90	131
243	Teaching of Physics	556	-	-	-	-	1,264	1,485	-	-	828	942
244	Teaching of General Science	557	-	-	-	-	264	438	-	-	405	640
245	Home Economics & its Teaching	560	-	-	-	-	-	-	-	-	-	1
246	Teaching of Mathematics	561	-	-	-	-	-	-	-	-	643	730
247	Prevention of Drug Abuse	562	-	-	1,081	1,895	-	-	1,263	1,962	-	3
Sub-total			29,594	38,819	12,829	17,804	24,852	34,156	12,425	17,278	7,524	10,395
<b>B. Ed (Diploma in Special Education)</b>												
248	Educational Psychology	671	-	-	-	-	-	-	-	-	-	-
249	Perspectives of Special Education	672	-	-	-	1	-	-	-	-	-	-
250	Handicapped Person in the Community	673	-	-	-	1	-	-	-	-	-	-
251	Braille system Practical course in Urdu	674	-	-	-	53	77	-	-	-	-	-
252	Practical Component	675	10	12	-	-	-	-	-	-	-	-
253	Braille System	676	-	-	-	31	37	-	-	-	-	-
254	Independence Training for the Visually Handicapped	677	-	-	-	-	-	-	-	-	-	-
255	Special Education for Visually Handicapped	678	-	-	-	31	37	-	-	-	-	-
256	General Introduction to Hearing Impairment	680	-	-	-	1	1	-	-	-	-	-
257	Psychology of Deaf & Child Development	681	-	-	-	22	41	-	-	-	-	-
258	Speech & Hearing	682	-	-	-	22	41	-	-	-	-	-
259	Audiology & Audiometry	683	-	-	-	22	41	-	-	-	-	-
Sub-total			10	12	183	277	-	-	-	-	-	-
<b>PRIMARY TEACHER CERTIFICATE (PTC)</b>												
260	Principles and Methods of Teaching	601	-	-	-	1	1	-	-	-	-	-
261	Primary Education and Curriculum	609	-	-	-	-	-	-	-	-	-	-
262	Workshop & Teaching Practice	611	3,988	6,114	925	1,502	3	9	1,031	2,397	3,745	5,658
263	Principles of Education	613	-	-	1,337	2,958	4,429	6,624	-	-	21,402	44,705
264	Educational Psychology	614	-	-	1,336	2,955	4,432	6,627	-	-	21,405	44,722
265	School organization	615	-	-	1,336	2,955	4,420	6,620	-	-	21,393	44,710
266	School Community & Practical Arts	616	-	-	1,315	2,913	4,434	6,629	1	1	21,411	44,710
267	Teaching of Urdu	617	925	1,502	-	-	1,016	2,372	3,720	5,619	-	3
268	Teaching of Mathematics	618	924	1,501	20	41	1,018	2,375	3,711	5,604	-	2
269	Teaching of Science and Physical Education	619	924	1,501	-	-	1,011	2,362	3,698	5,590	-	2
270	Teaching of Islamiat and school Studies	620	924	1,501	1	1	1,014	2,368	3,703	5,593	-	-
271	Teaching of Literacy	624	-	-	-	-	-	-	-	-	-	-
272	Intermediate New PTOC Orientation Course	650	1	1	270	551	-	-	-	-	-	-
Sub-total			7,686	12,120	6,541	13,877	21,777	35,986	15,884	24,804	89,356	184,512
<b>PRIMARY TEACHERS ORIENTATION COURSE (PTOC)</b>												
273	PTOC (NEW)	650	-	-	-	-	2,555	4,315	-	-	4,340	7,247
Sub-total			-	-	-	-	2,555	4,315	-	-	4,340	7,247
<b>CERTIFICATE OF TEACHING (CT)</b>												
274	Foundation of Education	603	-	-	-	-	-	-	-	-	-	-
275	Urdu and its Teaching	604	-	-	2	2	684	1,132	1,299	1,782	-	2
276	Social Studies & its Teaching	605	-	-	1	1	672	948	1,305	1,742	-	-
277	Home Economics & its Teaching	606	-	-	-	-	3	267	2	184	-	2
278	Science & its Teaching	607	-	-	1	1	87	112	108	159	-	-
279	Workshop & Its Teaching	612	1,302	1,883	-	-	-	-	734	1,239	1,380	1,963
280	Dimensions in Education	631	-	-	921	1,522	1,704	2,393	-	-	7,628	15,492
281	Educational Psychology	632	-	-	921	1,524	1,693	2,375	2	2	7,815	15,683
282	School Organization	633	-	-	920	1,522	1,688	2,368	1	1	7,619	15,485
283	Teaching of English	634	-	-	1	2	729	1,224	1,359	1,935	1	6
284	Islamiat and its Teaching	635	-	-	2	3	707	1,180	1,319	1,863	-	2
285	Sindhi & Its Teaching	637	-	-	-	-	-	-	-	-	-	-
286	Teaching Strategies and Evaluation	638	-	-	918	1,520	1,686	2,366	1	1	7,621	15,484
Sub-total			1,302	1,883	3,687	6,097	9,653	14,365	6,130	8,908	32,062	64,119

**COURSE-WISE COURSE ENROLMENT, ALLAMA IQBAL OPEN UNIVERSITY**

S.No	COURSES	Code	Spring-92		Autumn-92		Spring-93		Autumn-93		Spring-94	
			M	T	M	T	M	T	M	T	M	T
ATTC AND ALTC												
287	Arabic Teacher's Training Course	608	436	526	-	-	320	386	-	-	1,150	1,695
288	Arabic Lecturer Training Course	810	-	-	-	-	1	1	-	-	2	2
	Sub-total		436	526	-	-	321	387	-	-	1,152	1,697
B. ED (ARABIC)												
289	Methods of Teaching	594	-	-	-	-	-	-	-	-	-	-
290	Arabic Phonetics	595	-	-	-	-	-	-	-	-	-	-
291	Four Skills for Language Learning	596	-	-	-	-	-	-	-	-	-	-
292	Aids of Education	597	-	-	-	-	-	-	-	-	-	-
	Sub-total		-	-	-	-	-	-	-	-	-	-
M. PHIL IQBALIAT												
293	Iqbal's Intellectual and Artistic Development	701	-	-	74	97	-	-	41	52	-	-
294	The Basic Thoughts and Ideas of Allama Iqbal	702	-	-	75	97	-	-	37	47	-	-
295	Study of Selected Text of Iqbal's Prose & Poetry	703	37	54	-	-	-	-	44	58	29	37
296	Methods of Research	704	29	48	-	-	-	-	44	57	28	33
	Sub-total		66	102	149	194	-	-	166	214	57	70
M. PHIL ISLAMIAT												
297	Methods of Research	711	-	-	80	98	-	-	40	45	-	-
298	Methods of Research in Islam	712	-	-	1	1	-	-	37	42	-	-
299	Applied Research Methodology	713	49	61	1	1	-	-	57	68	29	35
300	Synopsis and Bibliography of Research in Islam	714	48	59	1	1	-	-	64	75	36	42
301	Error / not offered	715	-	-	-	-	-	-	-	-	1	1
	Sub-total		97	120	82	100	-	-	198	230	66	78
M. PHIL URDU												
302	The Political & Cultural Background of Urdu Literature	721	-	-	33	44	-	-	-	-	54	71
303	Literary Movements and Critical Movements	722	-	-	37	47	-	-	-	-	46	61
304	Methods of Teaching Literature	723	38	45	1	1	-	-	30	39	-	-
305	The Methods of Research	724	34	40	1	1	-	-	30	40	-	-
	Sub-total		72	85	72	93	-	-	60	79	100	132
M. PHIL EDUCATION												
306	Trends and Issues in Education	731	-	-	-	-	-	-	-	-	25	41
307	Comparative Education	733	-	-	31	41	-	-	-	-	36	54
308	Advanced Course on Non-formal Education	734	-	-	2	4	-	-	27	48	-	-
309	Advanced Course on Educational Management	735	-	-	-	-	-	-	-	-	6	9
310	Advanced Approaches and Curriculum Development	736	-	-	-	-	-	-	-	-	8	13
311	Advanced Course on Adult Basic Edu. & Literacy	737	-	-	-	-	-	-	17	21	-	-
312	Advanced Course on Educational Planning	738	-	-	-	-	-	-	-	-	8	12
313	Teaching Strategies (Teaching Education)	739	-	-	-	-	-	-	-	-	35	53
314	Educational Technology	740	1	1	6	8	-	-	28	47	16	20
315	Distance Education	741	-	-	1	4	-	-	2	4	2	3
316	Advanced Methods of Testing	742	1	1	-	-	-	-	-	-	5	5
317	Advanced Course on Economics of Education	743	-	-	-	-	-	-	-	-	-	-
318	Thesis	744	-	-	6	8	-	-	11	13	-	-
	Sub-total		2	2	46	65	-	-	85	133	141	210
COMPUTER SCIENCES												
319	Computer Concept & Architecture	901	750	794	-	-	-	-	-	-	265	290
320	Programming with COBOL	902	750	794	1	1	-	-	-	-	265	290
321	Operating Systems	903	750	794	1	1	-	-	-	-	265	290
322	Application Soft Ware-I (Word Processing & Spread sheet Applications)	904	750	794	1	1	-	-	-	-	266	291
323	System Analysis & Design	905	467	507	-	-	-	-	-	-	156	174
324	Programming with "C Language"	906	467	507	-	-	-	-	-	-	155	173
325	Application Soft Ware-II (Database Application)	907	467	507	-	-	-	-	-	-	155	173
326	Programming with PASCAL	908	466	506	-	-	-	-	-	-	154	172
	Sub-total		4,867	5,203	3	3	-	-	-	-	1,681	1,853
327	Methods of Research	711	1	1	76	93	-	-	-	-	-	-
	Sub-total		1	1	76	93	-	-	-	-	-	-
DIPLOMA IN COMPUTER MAINTENANCE												
328	Fundamentals of Electricity & Electronic Concept	911	-	-	-	-	-	-	-	-	21	21
329	Digital Computer Basics	912	-	-	-	-	-	-	-	-	21	21
330	Digital Electronics	913	-	-	-	-	-	-	-	-	21	21
331	Programming in Assembly Language	914	-	-	-	-	-	-	-	-	12	12
332	Computer Peripherals Maintenance	915	-	-	-	-	-	-	-	-	11	11
333	Computer Architecture and Organization	916	-	-	-	-	-	-	-	-	11	11
334	Computer system Maintenance	917	-	-	-	-	-	-	-	-	11	11
335	Interfacing with Computer	918	-	-	-	-	-	-	-	-	129	129
	Sub-total		-	-	-	-	-	-	-	-	129	129
	GRAND TOTAL		70,817	101,398	48,216	77,409	84,121	127,516	58,027	87,758	175,690	332,960

### 8-3 Course-wise Cumulative Enrolment, Appear. Pass, Pass Percentage and Dropout Rate

COURSE-WISE, CUMULATIVE ENROLMENT, APPEAR, PASS, PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>FUNCTIONAL(NON-CREDIT)</b>						
1	Summer Vegetable Growing	101	6,131	-	-	-	-
2	Winter Vegetable Growing	102	4,518	-	-	-	-
3	Soil Problems and their Remedies	103	1,817	-	-	-	-
4	Plant Protection	104	2,283	-	-	-	-
5	Poultry Farming	105	5,854	-	-	-	-
6	Tractor Repair and Maintenance	106	1,525	-	-	-	-
7	Sheep and Goat Husbandry	107	583	-	-	-	-
8	Elementary Arabic	110	24,861	9,934	8,863	89	60
9	Daftri Urdu for Federal Government Officers	111	8,806	2,655	2,578	97	70
10	Arabic Bool Chall(*)	114	36	-	-	-	-
11	Daftri Urdu for Provincial Government Officers	115	1,353	390	381	98	71
	Sub-total		57,767	12,979	11,822	91	78
	<b>PROJECTS/FOUNDATION COURSES</b>						
12	Integrated Functional Education Project(IFEP)(*)	-	6,671	-	-	-	-
13	Foundation Courses	-	501	92	29	32	82
14	Functional Education Programme for Rural Areas (FEFRA)/Basic Functional Education Programme(BFEP)(*)	-	8,577	-	-	-	-
15	Integrated Functional Literacy Programme(*)	-	1,231	-	-	-	-
16	MA English	-	80	44	31	70	45
17	MA Persian	-	11	11	11	100	-
18	MA German	-	10	9	8	89	10
19	MA French	-	10	9	8	89	10
20	Diploma in Arabic	-	79	77	76	99	3
21	Certificate in Arabic	-	139	129	115	89	7
	Sub-total		17,309	371	278	75	98

(\*) Course not offered/result is not available.



COURSE-WISE, CUMULATIVE ENROLMENT, APPEAR, PASS, PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>WOMEN'S EDUCATION MATRIC PROJECT</b>						
22	Selling of Home Made Products	200	1,261	519	322	62	59
23	Islamiat	201	6,578	2,239	1,786	80	66
24	Pakistan Studies	202	6,063	2,392	1,348	56	61
25	General Science	203	5,355	2,114	833	39	61
26	Urdu for Daily Use	204	6,867	2,416	1,874	78	65
27	Arabic	205	357	80	52	65	78
28	Family Health Care	206	4,625	1,598	1,229	77	65
29	Functional English-I	207	4,576	1,799	832	46	61
30	Garment Making-I	208	4,670	1,382	892	65	70
31	General Home Economics	209	4,389	1,689	1,052	62	62
32	Garment Making-II	210	3,039	1,013	665	66	67
33	Poultry Farming	211	655	351	264	75	46
34	Maintenance of Home Electrical Appliances(*)	212	2	-	-	-	-
35	Sindhi	213	398	88	87	99	78
36	General Arithmetic	214	4,800	1,683	1,034	61	65
37	Education(*)	215	2	-	-	-	-
38	Food and Nutrition(*)	217	1	-	-	-	-
39	First Aid-I	218	664	195	141	72	71
40	First Aid-II(*)	220	4	4	-	-	-
41	Functional English	221	3,154	1,060	244	23	66
	Sub-total		57,460	20,622	12,655	61	64

(\*) Course not offered/result is not available.

COURSE-WISE,CUMMULATIVE ENROLMENT, APPEAR,PASS,PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
<b>INTERMEDIATE COURSES</b>							
42	Daftri Urdu	301	13,835	6,434	4,897	76	53
43	Urdu	302	65,349	38,620	30,093	78	41
44	Iqbaliat	303	21,527	13,975	10,988	79	35
45	Pakistan Studies(Elective)	304	36,512	22,927	16,553	72	37
46	Rural Development	305	9,550	5,277	3,637	69	45
47	Food and Nutrition	306	31,167	20,448	16,491	81	34
48	Electrical Wiring	307	32,968	2,438	1,317	54	93
49	General Science	308	18,915	10,861	7,910	73	43
50	Arabic	309	5,122	2,392	1,918	80	53
51	English	310	52,298	38,129	15,947	42	27
52	Book Keeping and Accountancy	311	5,723	1,068	329	31	81
53	Education	312	21,000	13,870	9,209	66	34
54	Dairy Husbandry	313	3,251	1,969	1,577	80	39
55	Electrician	314	7,940	846	280	33	89
56	Economics	315	10,122	1,449	862	59	86
57	Islamiat(Compulsory)	316	59,542	36,481	30,669	84	39
58	Pakistan Studies(Compulsory)	317	60,539	37,880	26,995	71	37
59	Sindhi+Easy Urdu	318	595	274	219	80	54
60	Ethics	319	466	119	75	63	74
61	Sindhi Bool Chall(*)	320	3	-	-	-	-
62	Muslim History of Sub-continent	321	5,763	3,528	2,425	69	39
63	Secretarial Practice	322	655	312	250	80	52
64	Mathematics-I	323	272	59	29	49	78
65	Farm Income Generating Skill	326	1,230	563	530	94	54
66	Improved Methods of Oil Seed Crops	328	1,396	941	845	90	33
67	Child Care and Development	330	13,380	10,350	8,565	83	23
68	Statistics	331	379	50	18	36	87
69	Auto Servicing	332	1,034	214	130	61	79
70	English Typewriting(Elementary)	333	11,644	225	140	62	98
71	English Typewriting(Advance)(*)	334	223	-	-	-	100
72	English Shorthand(Elementary)	335	10,696	229	117	51	98
73	English Shorthand(Advance)	336	1,220	392	260	66	68
74	Urdu Typewriting(Elementary)(*)	337	1,399	-	-	-	-
75	Urdu Typewriting(Advance)(*)	338	15	-	-	-	-
76	Urdu Shorthand(Elementary)(*)	339	975	-	-	-	-
77	Urdu Shorthand(Advance)(*)	340	2	-	-	-	-
78	Maintenance of Household Electrical Appliances	341	808	177	122	69	78
79	Improved Methods of Fruit Seed Production	342	4,624	2,766	2,512	91	40
80	Islamiat(Elective)	343	19,076	14,631	12,070	82	23
81	Basic Electronics	344	1,462	272	168	62	81
82	Home Management	345	1,607	1,087	900	83	32
83	Principles of Commerce	346	947	362	248	69	62
84	Banking	347	2,776	148	98	66	95
85	Commercial Geography(*)	348	1	-	-	-	-
86	Primary Teacher's Orientation Course	602	487	247	216	87	49
Sub-total			538,495	292,010	209,609	72	46

(\*) Course not offered/result is not available.

**COURSE-WISE,CUMMULATIVE ENROLMENT, APPEAR,PASS,PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991**

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
<b>B. A. COURSES</b>							
87	Accountancy	401	9,189	2,574	1,238	48	72
88	Economics	402	14,256	5,432	3,394	62	62
89	Pakistan Studies(Elective)	403	21,274	12,689	10,850	86	40
90	Urdu	404	23,894	14,360	12,476	87	40
91	Iqbaliat	405	10,945	8,022	6,826	85	27
92	Economics of Pakistan	406	6,903	4,579	3,813	83	34
93	History of Modern Muslim World	407	10,605	6,932	6,007	87	35
94	Arabic	408	1,195	403	222	55	66
95	Business English	410	15,658	5,778	3,884	67	63
96	Sociology-I	411	11,399	8,525	5,753	67	25
97	Social and Cultural Anthropology	412	466	298	275	93	36
98	Sociology-II	413	1,464	896	805	90	39
99	Demography	414	180	81	70	86	55
100	Auditing	415	2,517	845	677	80	66
101	Islamiat(Compulsory)	416	37,943	21,669	19,392	89	43
102	Pakistan Studies(Compulsory)	417	37,996	21,519	16,885	78	43
103	Ethics	418	255	102	88	86	60
104	Education	419	12,358	7,718	5,588	72	38
105	Business Mathematics and Statistics	421	6,093	1,496	713	48	75
106	Organizing Library Resources	422	3,585	1,770	1,271	72	51
107	Library Services	423	3,463	1,835	1,672	91	47
108	Export Marketing and Management-I	424	5,495	1,740	1,094	63	68
109	Export Marketing and Management-II	425	2,429	786	552	70	68
110	Pakistani Adab-II	426	5,781	4,207	3,576	85	27
111	Pakistani Adab-I	427	2,057	1,361	1,160	85	34
112	Food and Nutrition	428	2,610	1,421	1,156	81	46
113	Development Journalism	430	1,126	581	495	85	48
114	Reporting	431	681	309	275	89	55
115	Population Education	432	11,166	3,129	2,607	83	72
116	Iqbal's Persian Poetry	433	366	256	244	95	30
117	Iqbal's Urdu Prose	434	1,661	1,257	1,137	90	24
118	Functional English	435	27,238	14,552	6,872	47	47
119	Seerat-e-Tayyaba	436	13,971	9,522	8,375	88	32
120	Islamic Studies	437	10,915	6,735	5,564	83	38
121	Advertising and Sales Promotion	439	1,906	523	340	65	73
122	Principles of Insurance	440	917	345	184	53	62
123	Trade and transportation	441	350	126	101	80	64
124	Banking and Finance	442	1,775	621	439	71	65
125	Adab Ka Tanqueedi Mutalia	443	299	172	157	91	42
126	History of Urdu Adab	445	1,294	910	743	82	30
127	Adab-e-Aaliya	446	344	217	181	83	37
128	Marketing Management	447	2,689	805	469	58	70
129	Industrial and Production Management	448	903	232	179	77	74
130	Public Relations	451	54	30	27	90	44
131	Mass Communication	452	827	415	343	83	50
132	Radio Broadcasting	453	35	19	19	100	46
133	Book Editing	455	220	131	104	79	40
134	Business Communication	457	1,998	556	432	78	72
135	Material Management-I	459	1,142	385	330	86	66
136	Mercantile Law	460	659	221	162	73	66
137	Advertising	461	45	20	17	85	56
138	Cost Accounting	462	920	242	177	73	74
139	Fundamentals of Business(*)	463	3	-	-	-	-
140	Islamic Fiqah	464	3,607	2,259	2,008	89	37
141	Population and Development(*)	465	1	-	-	-	-
142	History of Libraries with Reference to Pakistan	466	397	284	253	89	28
143	Classification or Cataloguing	467	387	276	206	75	29
Sub-total			337,906	182,166	141,877	78	46

(\*) Course not offered/result is not available.

COURSE-WISE,CUMMULATIVE ENROLMENT, APPEAR,PASS,PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>M. A(EDUCATIONAL PLANNING AND MANAGEMENT)</b>						
144	Basic Concepts of Educational Planning	501	2,572	1,064	720	68	59
145	Process of Educational Planning	502	1,005	629	480	76	37
146	Plan Implementation and Management	503	953	519	431	83	46
147	Curriculum Planning and Evaluation	504	711	481	419	87	32
148	Economics and Financing of Education	505	730	439	377	86	40
149	Development Education	506	668	374	307	82	44
150	Educational Research and Statistics	507	428	318	268	84	26
151	Educational Project Implementation & Management	508	373	207	193	93	45
152	Term Paper/Field Study	509	164	10	10	100	94
153	Research thesis/Projects	510	165	57	57	100	65
	Sub-total		7,769	4,098	3,262	80	47
	<b>M. SC PAKISTAN STUDIES</b>						
154	Political & Constitutional Dev. in Pakistan	531	183	20	18	90	89
155	Geography of Pakistan	532	234	34	33	97	85
156	National, Provincial Languages & Their Literature	533	140	24	18	75	83
157	Economic Development in Pakistan	534	154	7	6	86	95
158	Pakistani Society and Culture	535	1,043	103	61	59	90
159	Foreign Policy of Pakistan	536	740	43	23	53	94
160	Ideological Foundation of Pakistan	537	655	39	23	59	94
161	Genesis of Pakistan Movement	538	654	97	69	71	85
162	Research Methods-I	539	90	16	9	56	82
163	Social Change	541	230	63	47	75	73
164	Social Theory	543	306	49	35	71	84
165	Political Parties & Pressure Groups in Pakistan	545	232	59	45	76	75
166	Research Methods-II (*)	546	68	-	-	-	-
167	Thesis	547	40	11	11	100	73
	Sub-total		4,769	565	398	70	88
	<b>POPULATION EDUCATION</b>						
168	Population Education for Secondary School Teachers(Post-graduate level)	511	2,917	963	865	90	67
	Sub-total		2,917	963	865	90	67
	<b>POST-GRADUATE DIPLOMA IN ENGLISH LANGUAGE TEACHING</b>						
169	English Language Teaching-I	515	947	102	99	97	89
170	English Language Teaching-II	516	785	97	87	90	88
	Sub-total		1,732	199	186	93	89
	<b>TEACHING OF ENGLISH AS A FOREIGN LANGUAGE</b>						
171	Psycholinguistics and Sociolinguistics	551	818	347	294	85	58
172	Phonology and Grammar	552	622	379	350	92	39
173	The Language Skills	553	272	156	124	79	43
174	EFL in the Class room	554	255	134	120	90	47
	Sub-total		1,967	1,016	888	87	48

(\*) Course not offered/result is not available.

**COURSE-WISE, CUMULATIVE ENROLMENT, APPEAR, PASS, PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991**

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>MASTER OF BUSINESS ADMINISTRATION(MBA)</b>						
175	Introduction to Behavioural Sciences	521	140	53	44	83	62
176	Economic Analysis	522	137	54	32	59	61
177	Business Mathematics and Statistics	523	1,046	88	40	45	92
178	Research Methods and Techniques	524	1,099	147	82	56	87
179	Business Communication	525	1,679	257	209	81	85
180	Principles of Management	526	898	70	48	69	92
181	Personnel Management	527	885	90	61	68	90
182	Financial Accounting	528	1,972	237	183	77	88
183	Managerial Economics	529	1,530	308	226	73	80
184	Taxation Management	530	76	26	22	85	66
185	Marketing Theory and Practice	561	1,216	312	201	64	74
186	Financial Management	562	358	73	19	26	80
187	Principles of Commercial and Development Bank	563	346	95	45	47	73
188	Operation Research	564	304	67	61	91	78
189	Management Analysis & Organizational Development	565	266	56	34	61	79
190	Computer Appreciation for Business	566	255	65	51	78	75
191	Business Commercial & Labour Laws	567	153	46	37	80	70
192	Cost and Management Accounting	568	527	126	92	73	76
193	Project Appraisal	569	73	37	37	100	49
194	Production Management	570	95	26	23	88	73
195	Transfer of Technology	571	64	28	28	100	56
196	Energy Management	572	61	26	23	88	57
197	Marketing Management	573	20	10	10	100	50
198	International Marketing	574	17	9	9	100	47
199	Advertizing & Sales Promotion	575	18	7	7	100	61
200	Marketing Research	576	17	7	7	100	59
201	Investment & Security Analysis	577	37	24	20	83	35
202	International Financial Management	578	39	24	22	92	38
203	Corporate Planning & Financial Negotiation	579	38	24	22	92	37
204	Auditing	580	37	25	22	88	32
	<b>Sub-total</b>		<b>13,403</b>	<b>2,417</b>	<b>1,717</b>	<b>71</b>	<b>82</b>
	<b>B. ED COURSES</b>						
205	Perspective of Educational Management	512	18,468	12,238	9,551	78	34
206	School Organization and Management	513	17,966	12,359	9,961	81	31
207	Evaluation, Guidance and Research	514	17,773	12,192	8,321	68	31
208	Teaching of Pakistan Studies	517	7,499	4,577	4,074	89	39
209	Educational Psychology and Curriculum	518	17,189	12,043	8,388	70	30
210	Teaching of English	519	5,838	3,197	2,203	69	45
211	Teaching of Biology	520	291	153	110	72	47
212	English(C)	651	5,658	4,421	4,337	98	22
213	Islam, Pakistan and Modern World	652	5,642	4,628	4,337	94	18
214	Workshop & Teaching Practice	655	3,686	2,344	2,065	88	36
	<b>Sub-total</b>		<b>100,010</b>	<b>68,152</b>	<b>53,347</b>	<b>78</b>	<b>32</b>

(\*) Course not offered/result is not available.

COURSE-WISE,CUMMULATIVE ENROLMENT, APPEAR,PASS,PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>M. Ed (Diploma in Special Education)</b>						
215	Psychology of Deaf & Child Development (*)	681	60	-	-	-	-
216	Speech & Hearing (*)	682	60	-	-	-	-
217	Audiology & Audiometry (*)	683	60	-	-	-	-
	Sub-total		180	-	-	-	-
	<b>PRIMARY TEACHER CERTIFICATE (PTC)</b>						
218	Principles and Methods of Teaching	601	50,217	33,637	25,135	75	33
219	Primary Teacher's Orientation Course	602	83,638	47,078	31,890	68	44
220	Primary Education and Curriculum	609	32,778	18,269	15,508	85	44
221	Principles of Education	613	16,042	8,386	6,055	72	48
222	Educational Psychology	614	16,046	9,067	6,508	72	43
223	School organization	615	16,037	9,694	7,616	79	40
224	School Community & Practical Arts	616	5,359	4,527	4,091	90	16
225	Teaching of Literacy	624	10,679	4,207	2,194	52	61
	Sub-total		230,796	134,865	98,997	73	42
	<b>CERTIFICATE OF TEACHING (CT)</b>						
226	Foundation of Education	603	9,231	6,254	5,043	81	32
227	Urdu and its Teaching	604	14,907	4,662	3,979	85	69
228	Social Studies & its Teaching	605	13,485	4,027	3,241	80	70
229	Home Economics & its Teaching	606	2,238	946	855	90	58
230	Science & its Teaching	607	1,225	459	389	85	63
231	Dimensions in Education	631	6,105	2,820	1,987	70	54
232	Islamiat and its Teaching	635	5,009	2,558	2,152	84	49
	Sub-total		52,200	21,726	17,646	81	58
	<b>ATTC AND ALTC</b>						
233	Arabic Teacher's Training Course	608	7,627	3,749	3,136	84	51
234	Arabic Lecturer Training Course (*)	610	2	-	-	-	-
	Sub-total		7,629	3,749	3,136	84	51
	<b>B. ED(ARABIC)</b>						
235	School Management	591	51	50	50	100	2
236	Pakistan Studies	592	51	50	50	100	2
237	Teaching of English	593	51	50	50	100	2
238	Methods of Teaching	594	49	49	49	100	-
239	Arabic Phonotics	595	49	49	49	100	-
240	Four Skills for Language Learning	596	49	49	49	100	-
241	Aids of Education	597	49	49	49	100	-
	Sub-total		349	346	346	100	1

(\*) Course not offered/result is not available.

**COURSE-WISE, CUMULATIVE ENROLMENT, APPEAR, PASS, PASS PERCENTAGE & DROP-OUT-RATE FROM 1975-76 TO SPRING 1991**

S. No	COURSES	Code	Enrol- ment	Appear- ed	Passed	Pass (%)age	Drop-out rate(%) age.
	<b>M. PHIL IQBALIAT</b>						
242	Iqbal's Intellectual and Artistic Development	701	220	78	62	79	65
243	The Basic Thoughts and Ideas of Allama Iqbal	702	189	80	62	78	58
244	Study of Selected Text of Iqbal's Prose & Poetry	703	153	78	70	90	49
245	Methods of Research	704	2	2	2	100	-
	Sub-total		564	238	196	82	58
	<b>M. PHIL ISLAMIAT</b>						
246	Methods of Research in Islam	712	198	99	83	84	50
247	Applied Research Methodology	713	164	108	101	94	34
248	Synopsis and Bibliography of Research in Islam	714	165	112	95	85	32
	Sub-total		527	319	279	87	39
	<b>M. PHIL URDU</b>						
249	The Political & Cultural Background of Urdu Literature	721	215	111	101	91	48
250	Literary Movements and Critical Movements	722	178	98	95	97	45
251	Methods of Teaching Literature	723	174	128	125	98	26
	Sub-total		567	337	321	95	41
	<b>M. PHIL EDUCATION</b>						
252	Trends and Issues in Education	731	146	21	21	100	86
253	Comparative Education (*)	733	33	-	-	-	-
254	Advanced Course on Non-formal Education (*)	734	25	-	-	-	-
255	Advanced Course on Educational Management	735	22	9	8	89	59
256	Advanced Approaches and Curriculum Development (*)	736	76	-	-	-	-
257	Advanced Course on Adult Basic Education(*) & Literacy	737	5	-	-	-	-
258	Advanced Course on Educational Planning (*)	738	14	-	-	-	-
259	Teaching Strategies (Teaching Education)	739	13	7	7	100	46
	Sub-total		334	37	36	97	89
260	Methods of Research	711	543	208	159	76	62
	Sub-total		543	208	159	76	62
	<b>GRAND TOTAL</b>		<b>1,435,193</b>	<b>747,383</b>	<b>558,020</b>	<b>75</b>	<b>48</b>

(\*) Course not offered/result is not available.











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