

AUTOMATION
OF
ADMISSION AND EXAMINATION
SYSTEM FOR
GOVT GORDON COLLEGE
RAWALPINDI

BY

MUHAMMAD MAJID



COMPUTER CENTRE
QUAID_I_AZAM UNIVERSITY
ISLAMABAD

IN THE NAME OF ALLAH

THE MOST BENEFICENT,
THE MOST MERCIFUL.

PROJECT TITLE
AUTOMATION
OF
ADMISSION AND EXAMINATION
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RAWALPINDI

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SUBMITTED TO
COMPUTER CENTRE

QUAID_I_AZAM UNIVERSITY
ISLAMABAD

AS REQUIREMENT FOR COMPLETION
OF PGD IN COMPUTER SCIENCE
SEPTEMBER 2003.

CERTIFICATE

We accept the work contained in this dissertation as conforming to the required standard for the partial fulfillment for the post graduate diploma in computer science.

1. *Dr. GHULAM MUHAMMAD*

Director

Computer Centre

Quaid_I_Azam University

Islamabad.

.....

2. *Mr. ABDUL SUBHAN*

Supervisor

Computer Centre

Quaid_I_Azam University

Islamabad.

.....

3. *External Examiner*

.....

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I am highly indebted to my family for their inspiring encouragement during my course.

(MUHAMMAD MAJID)

P.G.D. F.D.E. BATCH.
LANE NO 12,
LALA RUKH COLONY,
CHAKARY ROAD , RAWALPINDI.
PHONE RESI :5575845.

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DECLARATION

I/We declare that this software, neither as a whole nor as a part has been copied from any other source. It is further declared that I/we have completed my/our final project of Post Graduate Diploma in Computer Sciences/Information Technology successfully as a result of my own struggle and research. No portion of this whole work is presented in this report has been submitted in support of any application for any other degree or qualification of this or any other University or institute of learning. If any part of the project and write up is proved to be copied out or there is any duplication of code then I/we will be responsible for the consequences.

Name of Student(s):

Muhammad Majid (FDE)

MFN = 6527

PROJECT BRIEF

PROJECT TITLE:

Automation Of College Admission And Examination System.

OBJECTIVES:

To Computerize The Examination And Admission System Of GOVT GORDON COLLEGE Rawalpindi.

UNDERTAKEN BY:

MUHAMMAD MAJID

SUPERVISED BY :

MR. ABDUL SUBHAN
ASST. PROGRAMMER,
COMPUTER CENTRE,
Q.A.U.,
ISLAMABAD

Date of Starting:	5-JULY-2003.
Date of Completion:	25-SEP-2003.
Software Used:	Oracle/Developer 2000
Operating System:	Window 98

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CHAPTER NO. 1

INTRODUCTION

1.1: INTRODUCTION OF COLLEGE.

In 1993, Gordon College Rawalpindi completed a memorable and eventful century of its existence. It is indeed one of the most prestigious, historical and oldest educational institutions of the subcontinent.

In 1893 Gordon College headed by E.E Fife as the first principal, was started to meet the need of higher education of the area. The college started with intermediate classes and for nine years these classes were held in the present Government Christian High School Raja Bazar, Rawalpindi. The college moved in to its present premises in 1902 and in the same year it was raised to a Degree college.

Gordon College has had a distinctive mission since it's founding in 1893, to provide dedicated individuals with a most comprehensive environment for building a wholesome personality through excellence in education.

The college like other private institutions in the country was nationalized in 1972.

1.2: -PROBLEM DEFINATION

The basic purpose of this work is to solve the problems of staff of the Gordon College, which are faced by them during the admission process for first and

third year classes every year.

Secondly preparation of result of different internal examinations is a time consuming job. At present both the examination and admission procedures are handled manually. This study has been conducted keeping in view various problems faced by the students and the college staff because of huge amount of data handling and due to increasing number of candidates for admission to the college every year.

1.3:-OBJECTIVES:

- ❖ To study the problems which does college staff face.
- ❖ To find out the drawbacks in existing system.
- ❖ To propose steps in order to over come the problems and difficulties.
- ❖ To design an efficient admission and examination system.

1.4:-LIMITATIONS:

- Admission system will work only for new admission in first and third year.
- Examination system has been designed for handling only internal examinations.

CHAPTER NO. 2

PRESENT SYSTEM

2.1: - ADMISSION:

Admission policy for admission in first year is different from the policy for admission in third year. So both the cases will be discussed separately. However the general rules are as following:

- ✓ Separate forms must be submitted for each combination/category of various seats.
- ✓ Number of seats for different combinations i.e. groups vary every year.
- ✓ Shifting of form from one to an other combination after the declaration of merit is not allowed.
- ✓ The candidates who have passed their last examination prior to the last supplementary exam will not be considered for admission.
- ✓ A receipt of the admission form must be obtained at the time of its submission.

2.2 ADMISSION IN FIRST YEAR:

- 98% percent seats are reserved for open merit.
- 02% percent seats are reserved for disabled candidates.
- Hafiz_e_Quran will be awarded 20 additional marks for admission.
- No other quota of seats has been reserved.

2.3 ADMISSION IN THIRD YEAR:

- ❖ No additional marks for Hafiz_e_Quran will be awarded.
- ❖ Preference will be given to the candidates who passed the intermediate examination from the Gordon College.
- ❖ 98% percent seats are reserved for open merit.
- ❖ 02% percent seats are reserved for disabled candidates.

2.4 COURSES OF STUDY FOR INTERMEDIATE CLASSES.

Compulsory subjects for all groups are following:

- I. English.
- II. Urdu.
- III. Islamic Studies.
- IV. Pak. Studies.

Elective subjects of different groups are as under:

- 1) PRE_MEDICAL GROUP.
Physics, Chemistry, Biology.
- 2) PRE_ENGINEERING GROUP.
Physics, Chemistry, Mathematics.
- 3) GENERAL SCIENCE GROUP.
Statistics, Mathematics, Economics.
- 4) COMPUTER SCIENCE GROUP.
Mathematics, Physics, Computer Sc.

5) GENERAL ARTS GROUP.

(Candidate has to choose three elective subjects from three sub groups for F.A.).

ELECTIVE SUB GROUPS FOR F.A.

a) Sub group no 1.

Psychology, Civics, Persian, Arabic.

b) Sub group no 2.

History, Stat, Sociology.

c) Sub group no 3.

Islamiyat, Economics,
Education, Ph. Education.

2.5 COURSES OF STUDY FOR B.A/B.Sc.:

Compulsory subjects for degree classes.

- i. English
- ii. Islamic studies
- iii. Pak. Studies

Elective subjects of different groups of B.Sc. are as under:

- 1) Botany, Zoology, Chemistry.
- 2) Botany, Zoology, Applied Psychology.
- 3) Math A, Math B, Physics.
- 4) Math A, Math B, Statistics.
- 5) General Math, Physics, Chemistry.
- 6) General Math, Statistics, Economics.

Elective subjects of different groups of B.A are as under:

- 1) Economics, Pol_Science.
- 2) Economics, History.
- 3) Economics, Stat.
- 4) Pol_Science, History.
- 5) Stat, App_Psychology.
- 6) Psychology, Stat.
- 7) Urdu, Persian.
- 8) Islamiat, History.
- 9) Islamiat, Arabic.
- 10) Journalism, Pol_Science.
- 11) Journalism, Psychology.

Every B.A. student is required to take one of the following optional subjects as well.

- i. URDU
- ii. ISLAMIAT
- iii. ARABIC
- iv. G.PSYCHOLOGY
- v. APP.PSYCHOLOGY
- vi. PERSIAN

2.6 EXAMINATION SYSTEM :

- Examination section arranges two major exams every year (December test and Annual examination).

- Only 3rd year class appears in internal annual examination.
- Present principal of Gordon College Prof. Muhammad Saleem Chaudhri intends to hold monthly test of 20 marks for each subject in future.
- Total marks of different subjects vary for different internal examinations.
- Pass marks are 33%.

2.7 DRAW BACKS AND LIMITATIONS OF PRESENT SYSTEM.

- LACK OF ACCURACY.
- SLOW DATA PROCESSING.
- POOR SECURITY.

CHAPTER No: 3

PROPOSED SYSTEM

3.1 OBJECTIVES OF THE PROPOSED SYSTEM.

1) CODES:

Codes will be assigned to reduce the storage and number of typing strokes used to input data. Codes will be easy and small.

2) EFFICIENCY:

Output would be satisfactory and error free. It would be done by some validation checks.

3) SPEED:

The manual system is slow and cumbersome because calculations for each and every thing are done by hand and a minor error in entry may result in a delay of hours. Proposed system will allow user to create delete , modify and retrieve information with greater speed with a touch of button only.

4) USER FRIENDLY:

Proposed system is user friendly. It would be menu driven. Data entry and modification process would be in user_ friendly environment.

3.2 SOFT WARE SELECTION:

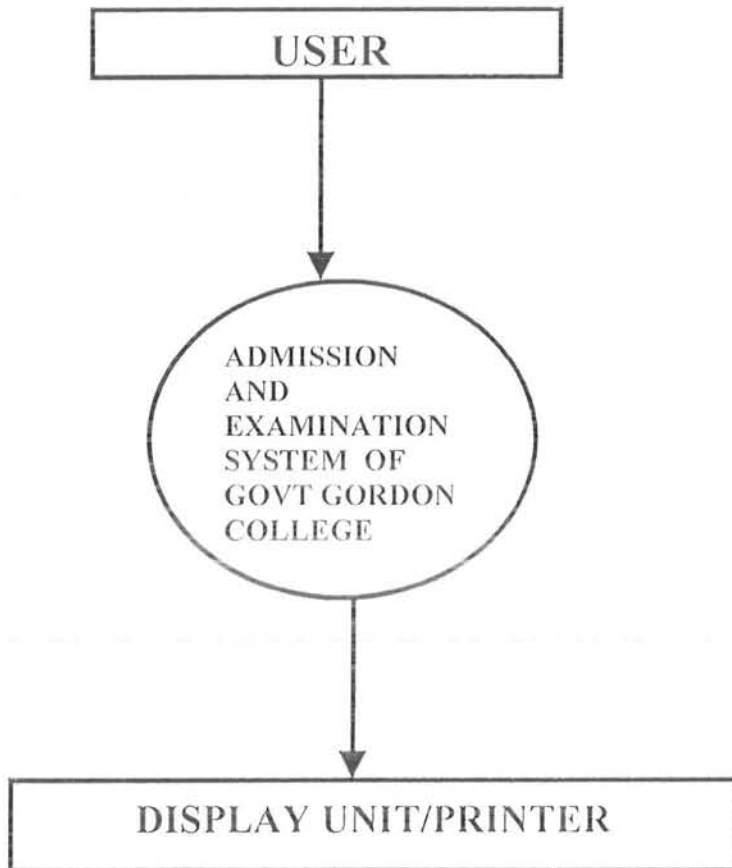
✓ ORACLE 7.3

✓ DEVELOPER/2000 –FORM 5

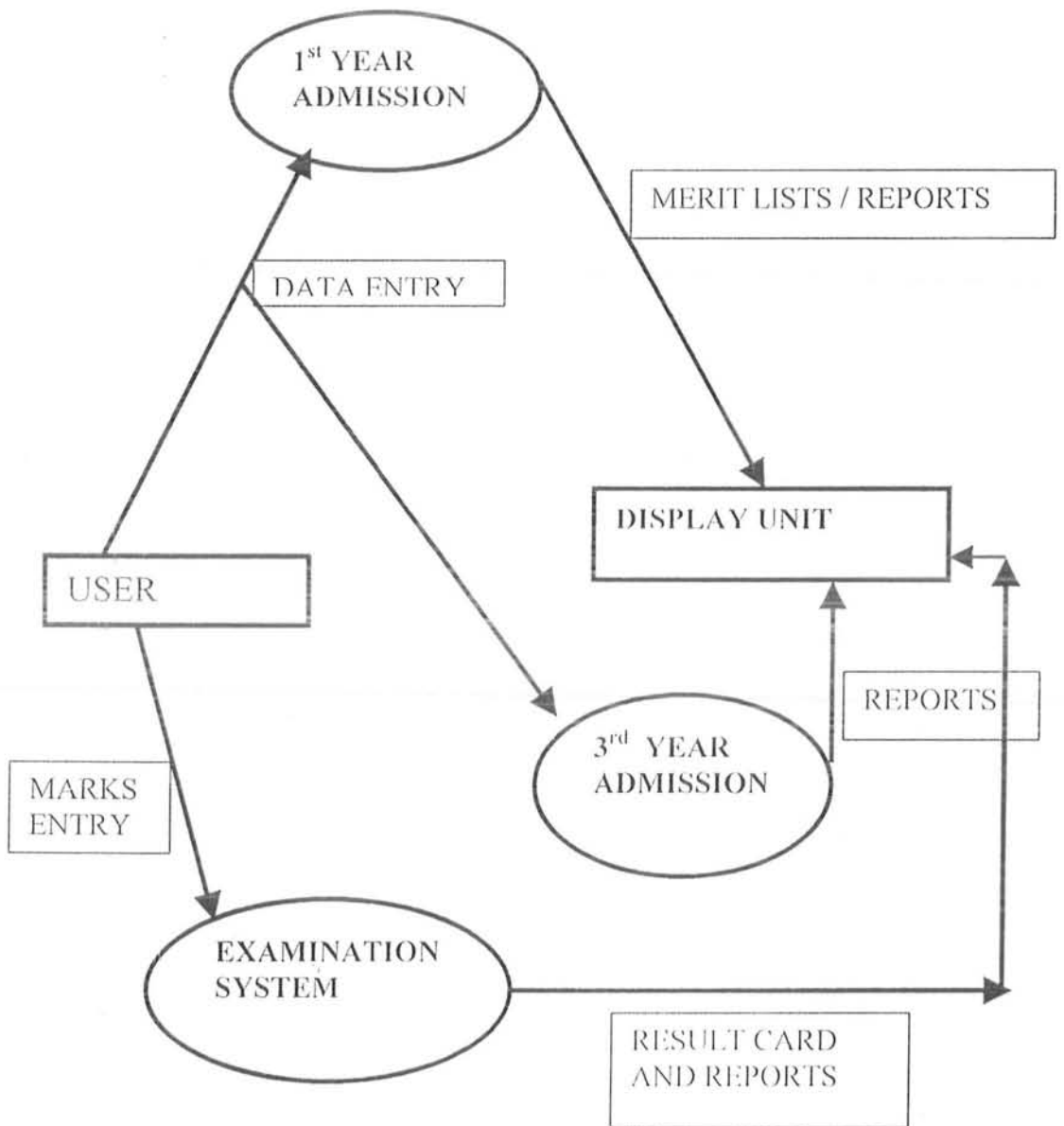
✓ WINDOW 98

LOGICAL DATA FLOW DIAGRAM

CONTEXT LEVEL:



LOGICAL
DFD
INTERMEDIATE LEVEL

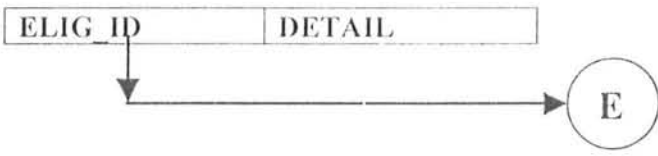
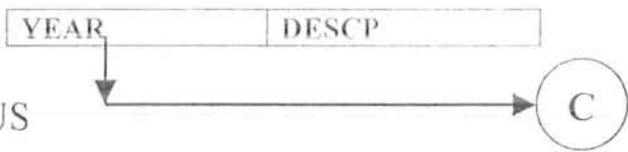
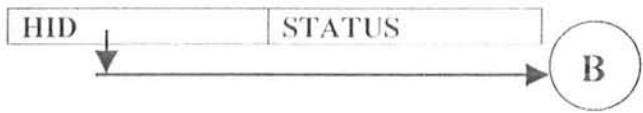
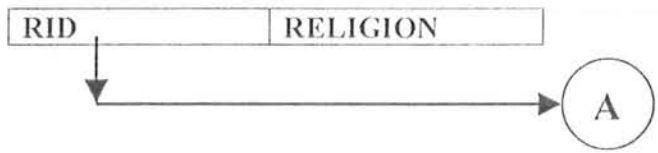


CHAPTER No. 4

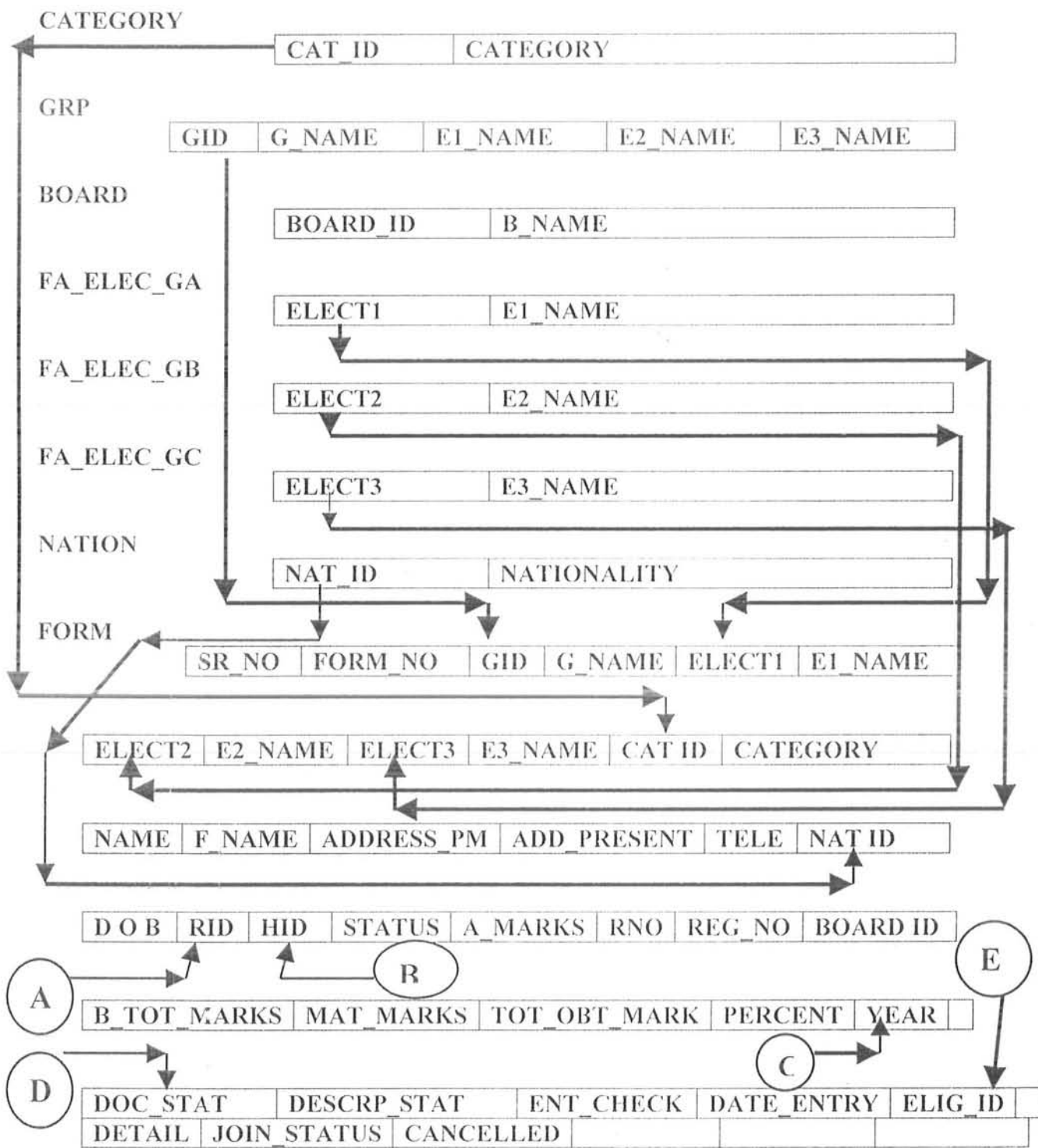
SYSTEM DESIGN

LOGICAL DATA BASE DESIGN FOR FIRST YEAR ADMISSION SYSTEM:

RELIGION

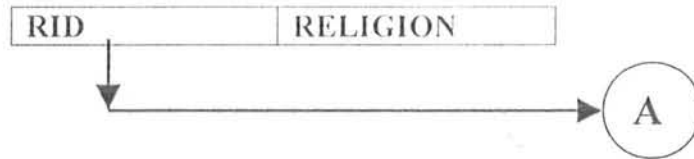


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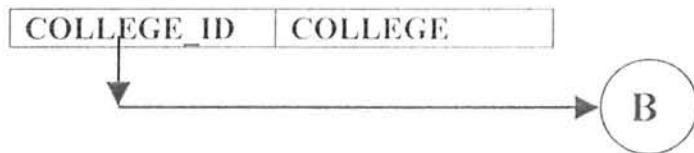


LOGICAL DATA BASE DESIGN FOR THIRD YEAR ADMISSION SYSTEM:

RELIGION



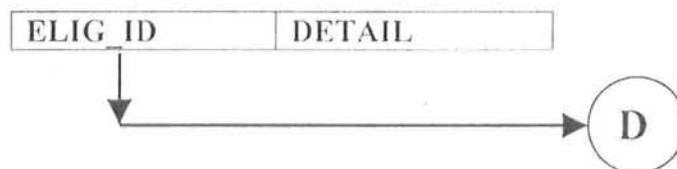
COLLEGE



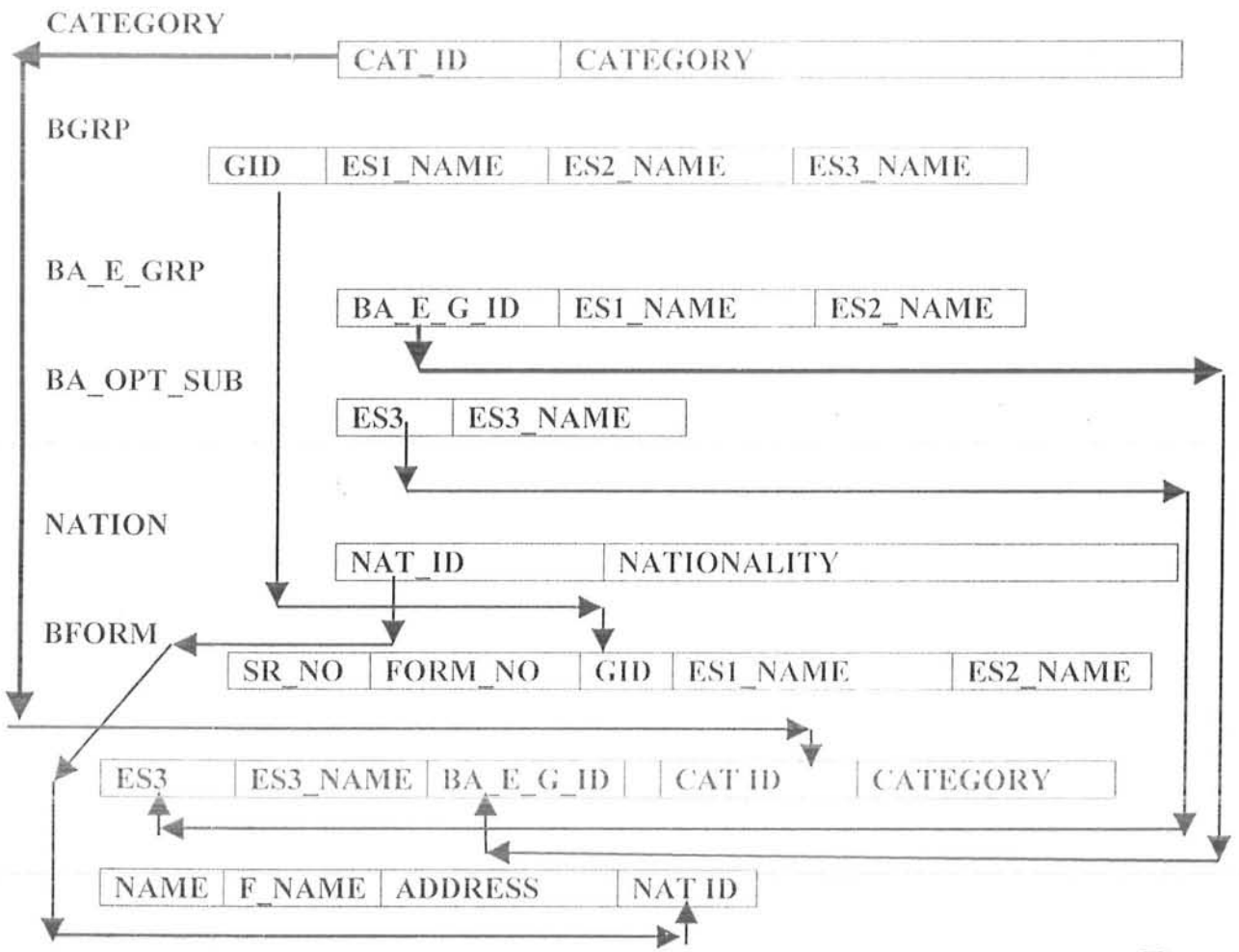
FA_YEAR



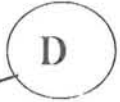
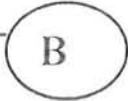
ELIGIBILITY



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DOB	RID	COLLEGE_ID	COL_NAME	FA_MARK
-----	-----	------------	----------	---------



YEAR	ENT_CHECK	DATE_ENTRY	ELIG_ID	
DETAIL	JOIN_STATUS	CANCELLED		

LOGICAL DATA BASE DESIGN FOR EXAMINATION SYSTEM:

SECTION

SECT_ID	SECTION
---------	---------

GROUP

GID	GROUP
-----	-------

CLASS

CID	CLASS
-----	-------

STUDENT

REG	RNO	NAME	CID	SECT_ID	GID
-----	-----	------	-----	---------	-----

SUBJECT

SID	TYPE_ID	SUB_NAME
-----	---------	----------

EXAM

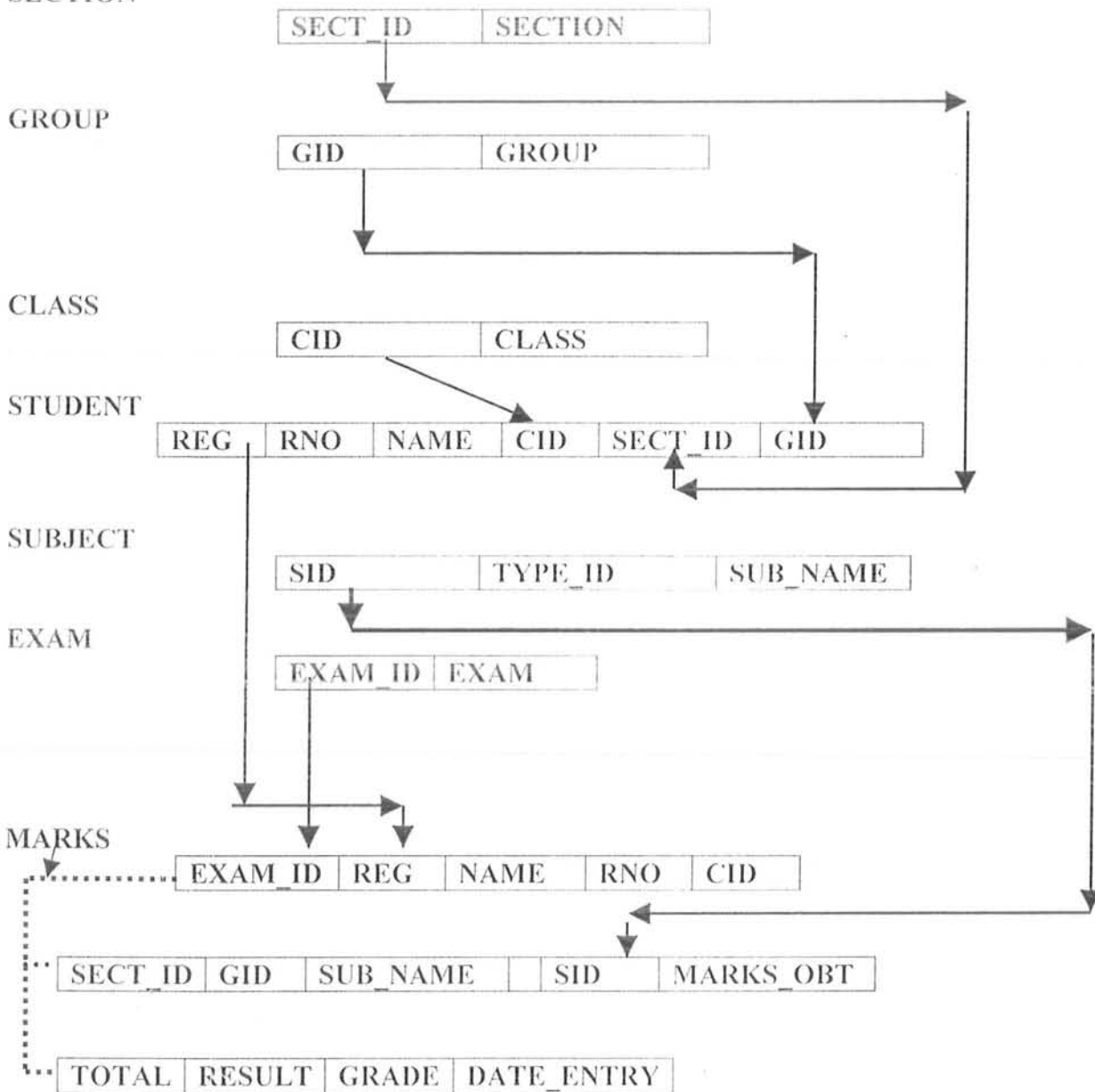
EXAM_ID	EXAM
---------	------

MARKS

EXAM_ID	REG	NAME	RNO	CID
---------	-----	------	-----	-----

SECT_ID	GID	SUB_NAME	SID	MARKS_OBT
---------	-----	----------	-----	-----------

TOTAL	RESULT	GRADE	DATE_ENTRY
-------	--------	-------	------------



PHYSICAL DATA BASE DESIGN FOR FIRST YEAR ADMISSION SYSTEM:

TABLES DESIGN:-

TABLE No. 1:

TABLE NAME : GRP

PRIMARY KEY: GID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
GID	GROUP CODE	PK	NUMBER
G_NAME	GROUP NAME		CHAR(10)
E1_NAME	ELECTIVE SUBJECT No 1		CHAR(10)
E2_NAME	ELECTIVE SUBJECT No 2		CHAR(10)
E3_NAME	ELECTIVE SUBJECT No 3		CHAR(10)

TABLE No. 2:

TABLE NAME : FA_ELEC_GA

PRIMARY KEY: ELECT1

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
ELECT1	CODE OF ELECTIVE SUBJECT 1	PK	NUMBER
E1_NAME	NAME OF ELECTIVE SUBJECT 1		CHAR(10)

TABLE No. 3:

TABLE NAME : FA_ELEC_GB

PRIMARY KEY: ELECT2

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
ELECT2	CODE OF ELECTIVE SUBJECT 2	PK	NUMBER
E2_NAME	NAME OF ELECTIVE SUBJECT 2		CHAR(10)

TABLE No. 4:

TABLE NAME : FA_ELEC_GC

PRIMARY KEY: ELECT3

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
ELECT3	CODE OF ELECTIVE SUBJECT 3	PK	NUMBER
E3_NAME	NAME OF ELECTIVE SUBJECT 3		CHAR(10)

TABLE No. 5:

TABLE NAME : CATEGORY

PRIMARY KEY: CATID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
CATID	CODE OF CATEGORY	PK	NUMBER
CATEGORY	NAME OF CATEGORY		CHAR(10)

TABLE No. 6:

TABLE NAME : BOARD

PRIMARY KEY: BOARD_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
BOARD ID	CODE OF SECONDARY BOARDS	PK	NUMBER
B_NAME	NAME OF BOARD		CHAR(10)
B_TOT_MARKS	TOTAL MARKS OF MATRIC		NUMBER

TABLE No. 7:

TABLE NAME : NATION

PRIMARY KEY: NAT ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
NAT ID	CODE OF NATIONALITY	PK	NUMBER
NLTY	NATIONALITY		CHAR(10)

TABLE No. 8:

TABLE NAME : RELIGION

PRIMARY KEY: RID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
RID	CODE OF RELIGION	PK	NUMBER
RELIGION	NAME OF RELIGION		CHAR(10)

TABLE No. 9:

TABLE NAME : HAFIZ

PRIMARY KEY: HID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
HID	CODE OF HEFEEZ	PK	NUMBER
STATUS	STATUS OF HEFEEZ		CHAR (10)
A_MARKS	ADDITIONAL MARKS ALLOWED		NUMBER

TABLE No. 10:

TABLE NAME : MAT_YEAR

PRIMARY KEY: YEAR

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
YEAR	CODE OF YEAR OF PASSING MATRIC	PK	NUMBER
DESCP	DETAIL OF YEAR		CHAR(10)

TABLE No. 11:

TABLE NAME : DOCUM_STATUS

PRIMARY KEY: DOC_STAT

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
DOC_STAT	CODE OF STATUS OF DOCUMENTS	PK	NUMBER
DESCRP_STAT	STATUS OF DOCUMENTS		CHAR(15)

TABLE No. 12:

TABLE NAME : ELIGIBILITY

PRIMARY KEY: ELIG_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
ELIG_ID	CODE OF ELIGIBILITY	PK	NUMBER
DETAIL	STATUS OF ELIGIBILITY		CHAR (10)

TABLE No. 13:

TABLE NAME : FORM

PRIMARY KEY: SR_NO

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
SR_NO	SR_NO OF ADMISSION FORM ENTERED	PK	NUMBER
FORM_NO	FORM NO OF ADMISSION FORM		NUMBER
GID	CODE OF GROUP	FK	NUMBER
G_NAME	NAME OF GROUP		CHAR (10)
ELECT1	No OF ELECTIVE SUBJECT 1	FK	NUMBER
E1_NAME	NAME OF ELECTIVE SUBJECT 1		CHAR (10)
ELECT2	No OF ELECTIVE SUBJECT 2	FK	NUMBER
E2_NAME	NAME OF ELECTIVE SUBJECT 2		CHAR (10)
ELECT3	No OF ELECTIVE SUBJECT 3	FK	NUMBER
E1_NAME	NAME OF ELECTIVE SUBJECT 3		CHAR (10)

CONTINUE

21

CONTINUE TABLE NO 13

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
CATID	CODE OF CATEGORY	FK	NUMBER
CATEGORY	CATEGORY		CHAR (10)
NAME	CANDIDATE'S NAME		CHAR (20)
F_NAME	FATHER'S NAME		CHAR (15)
ADDRESS_PERM	PERMANENT ADDRESS		CHAR (30)
ADD_PRESENT	PRESENT ADDRESS		CHAR (30)
TELE	TELE PHONE NO		NUMBER
NATID	CODE OF NATIONALITY	FK	NUMBER
D_O_B	DATE OF BIRTH		DATE
RID	CODE OF RELIGION	FK	NUMBER
HID	CODE OF HEFEEZ	FK	NUMBER
STATUS	HAFEEZ STATUS		CHAR (10)
A_MARKS	ADDITIONAL MARKS OF HEFEEZ		NUMBER
RNO	ROLL NO OF MATRIC		CHAR (10)
REG NO	REGISTRATION NO OF BOARD		CHAR (10)
BOARD ID	CODE OF BOARD	FK	NUMBER
B_TOT_MARKS	TOTAL MARKS OF BOARD		NUMBER
MAT_MARKS	MARKS OBTAINED BY CANDIDATE IN MATRIC		NUMBER
PERCENT	PERCENTAGE OF MARKS OBTAINED INCLUDING HEFEEZ MARKS		

CONTINUE

CONTINUE TABLE N0 13

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
YEAR	CODE OF YEAR OF PASSING MATRIC	FK	NUMBER
DOC_STAT	CODE OF DOCUMENT STATUS	FK	NUMBER
DESCRP_STAT	DETAIL OF DOCUMENT STATUS		CHAR (15)
ENT_CHECK	CODE OF RE_CHECKING ENTRIES		NUMBER
DAT_ENTRY	DATE OF ENTRY OF FORM		DATE
ELIG ID	CODE OF ELIGIBILITY	FK	NUMBER
DETAIL	DETAIL OF ELIGIBILITY		CHAR (10)
JOIN_STATUS	STATUS OF JOINING COLLEGE AFTER ADMISSION		CHAR (1) Y/N
CANCELLED	ADMISSION CANCELLED		CHAR (5)

PHYSICAL DATA BASE DESIGN FOR THIRD YEAR ADMISSION SYSTEM:

TABLES DESIGN:-

TABLE No. 14:

TABLE NAME : BGRP

PRIMARY KEY: GID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
GID	GROUP CODE	PK	NUMBER
ES1_NAME	ELECTIVE SUBJECT No 1		CHAR (15)
ES2_NAME	ELECTIVE SUBJECT No 2		CHAR (15)
ES3_NAME	ELECTIVE SUBJECT No 3		CHAR (15)

TABLE No. 15:

TABLE NAME : BA_E_GRP

PRIMARY KEY: BA_E_G_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
BA_E_G_ID	CODE OF ELECTIVE GROUP OF B.A.	PK	NUMBER
ES1_NAME	NAME OF ELECTIVE SUBJECT 1		CHAR (15)
ES2_NAME	NAME OF ELECTIVE SUBJECT 2		CHAR (15)

TABLE No. 16:

TABLE NAME : BA_OPT_SUB

PRIMARY KEY: ES3

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
ES3	CODE OF ELECTIVE SUBJECT 3	PK	NUMBER
ES3_NAME	NAME OF ELECTIVE SUBJECT 3		CHAR (15)

TABLE No. 17:

TABLE NAME : COLLEGE

PRIMARY KEY: COLLEGE ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
COLLEGE ID	CODE OF COLLEGE LAST ATTENDED	PK	NUMBER
COL_NAME	NAME OF COLLEGE		CHAR (20)

TABLE No.18:

TABLE NAME : CATEGORY

PRIMARY KEY: CATID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
CATID	CODE OF CATEGORY	PK	NUMBER
CATEGORY	NAME OF CATEGORY		CHAR(10)

TABLE No. 19:

TABLE NAME : FA_YEAR

PRIMARY KEY: YEAR

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
YEAR	CODE OF YEAR OF PASSING F.A	PK	NUMBER
DESCP	DETAIL OF YEAR		CHAR(10)

TABLE No. 20:

TABLE NAME : BFORM

PRIMARY KEY: SR_NO

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
SR_NO	SR_NO OF ADMISSION FORM ENTERED	PK	NUMBER
FORM_NO	NO OF ADMISSION FORM		NUMBER
GID	CODE OF GROUP	FK	NUMBER
G_NAME	NAME OF GROUP		CHAR (10)
ES1_NAME	NAME OF ELECTIVE SUBJECT 1		CHAR (15)
ES2_NAME	NAME OF ELECTIVE SUBJECT 2		CHAR (15)
ES3	No OF ELECTIVE SUBJECT 3	FK	NUMBER
ES3_NAME	NAME OF ELECTIVE SUBJECT 3		CHAR (15)
BA_E_G_ID	CODE OF B.A. ELECTIVE GROUP	FK	NUMBER
CATID	CODE OF CATEGORY	FK	NUMBER

CATEGORY	CATEGORY		CHAR (10)
NAME	CANDIDATE'S NAME		CHAR (20)
F_NAME	FATHER'S NAME		CHAR (20)
ADDRESS	PERMANENT ADDRESS		CHAR (30)
NATID	CODE OF NATIONALITY	FK	NUMBER
D_O_B	DATE OF BIRTH		DATE
RID	CODE OF RELIGION	FK	NUMBER
COLLEGE ID	CODE OF COLLEGE	FK	NUMBER
COL_NAME	NAME OF COLLEGE		CHAR (20)
FA_MARKS	MARKS OBTAINED BY CANDIDATE IN INTERMEDIATE		NUMBER
YEAR	CODE OF YEAR OF PASSING INTERMEDIATE	FK	NUMBER
ENT_CHECK	CODE OF RE_CHECKING ENTRIES		NUMBER
DAT_ENTRY	DATE OF ENTRY OF FORM		DATE
ELIG ID	CODE OF ELIGIBILITY	FK	NUMBER
DETAIL	DETAIL OF ELIGIBILITY		CHAR (10)
JOIN_STATUS	STATUS OF JOINING COLLEGE AFTER ADMISSION		CHAR (1) Y/N
CANCELLED	ADMISSION CANCELLED		CHAR (5)

PHYSICAL DATA BASE DESIGN FOR EXAMINATION SYSTEM:

TABLES DESIGN:-

TABLE No. 21:

TABLE NAME : SUBJECT
PRIMARY KEY: SID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
SID	SUBJECT CODE	PK	NUMBER
TYPE_ID	TYPE OF SUBJECT		NUMBER
SUB_NAME	NAME OF SUBJECT		CHAR (15)

TABLE No. 22:

TABLE NAME : SECTION
PRIMARY KEY: SECT_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
SECT_ID	CODE OF SECTION	PK	NUMBER
SECTION	NAME OF SECTION		CHAR (5)

TABLE No. 23:

TABLE NAME : EXAM
PRIMARY KEY: EXAM_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
EXAM_ID	CODE OF EXAMINATION	PK	NUMBER
EXAM	NAME OF EXAMINATION		CHAR (10)

EXAMINATION SYSTEM:

TABLE No. 24:

TABLE NAME : GROUPS

PRIMARY KEY: GID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
GID	GROUP CODE	PK	NUMBER
GRP	NAME OF GROUP		CHAR (25)

TABLE No. 25:

TABLE NAME : CLAS

PRIMARY KEY: CID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
CID	CODE OF CLASS	PK	NUMBER
CLASS	NAME OF CLASS		CHAR (10)

TABLE No. 26:

TABLE NAME : STUDENT

PRIMARY KEY: REG

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
REG	REGISTRATION NO	PK	NUMBER
RNO	ROLL NO		NUMBER
NAME	STUDENT NAME		CHAR (20)
CID	CODE OF CLASS	FK	NUMBER
SECT_ID	CODE OF SECTION	FK	NUMBER
GID	CODE OF GROUP	FK	NUMBER

EXAMINATION SYSTEM:

TABLE No. 27:

TABLE NAME : MARKS

PRIMARY KEY: EXAM_ID

NAME	DESCRIPTION	CONSTRAINTS	DATA TYPE
EXAM_ID	EXAMINATION CODE	FK	NUMBER
REG	REGISTRATION NO	FK	NUMBER
NAME	STUDENT NAME		CHAR (20)
RNO	ROLL NO		NUMBER
CID	CODE OF CLASS		NUMBER
SECT_ID	CODE OF SECTION		NUMBER
MARKS_OBT	MARKS OBTAINED		NUMBER
TOTAL	MAXIMUM MARKS OF SUBJECT		NUMBER
RESULT	PASS FAIL STATUS		CHAR (4)
GRADE	GRADE		CHAR (5)
DATE_ENTRY	DATE OF ENTRY OF RESULT		DATE

CHAPTER No 5

SOFTWARE DEVELOPMENT & IMPLEMENTATION

5.1 INTRODUCTION:

The major task in the process of a computer-based system is software development. The purpose of software development is to transfer the complete proposed system into executable computer-based system. There are number of clearly identifiable steps that are always involved in the programming phase, and these are:

- 1) Defining the problem.
- 2) Planning a system.
- 3) Maintaining the program.

Thus the purpose of programming task is to code, debug and test each program module before and after integrating them into software.

5.2 SYSTEM TESTING:

Following steps have been taken for testing the system.

- a) Each phase of the system has been tested.
- b) Dummy data was prepared to test all parts of the system.
- c) Manual checking has been done.
- d) All modules are inter linked.

- e) Form designed and other documents generated by the system are accurate and complete in all respect.
- f) Comparison between outputs of the new system and the manual system has been made.
- g) All processing tabulation is up to the required standard.

5.3 IMPLEMENTATION.

Implementation is the process of transforming present manual system into a new computerized system. There are several options which are listed below.

- 1) Direct conversion
- 2) Gradual conversion
- 3) Pilot conversion
- 4) Parallel conversion

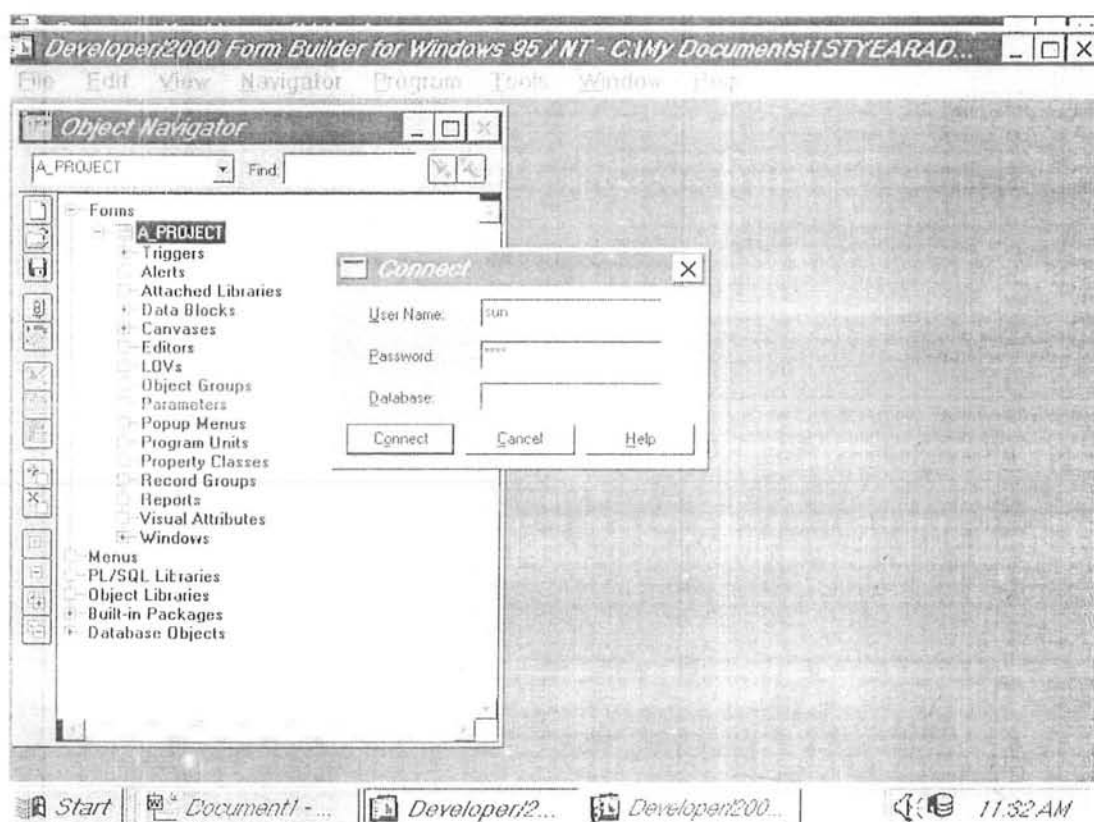
5.4 PROPOSED METHOD OF CONVERSION.

The most feasible conversion plan that suits best is parallel conversion. It is selected because it provides an opportunity to compare the results of the existing system with the new system. Another advantage of this technique is that the risk of failure of system is avoided.

5.5 TRAINING OF PERSONAL.

The developed system is quite user friendly, so that any can obtain the required information efficiently out of the database, after few days training and practice. Further more in this regard two days training program has been completed for the college staff.

USER ID AND PASSWORD FOR SECURITY



IMPORTANT

FORMS



GOVT GORDON COLLEGE RAWALPINDI

Sr No | Form 66 | GROUP ID | GROUP PRE_ENGG
ELEC_SUBJECT 1 MATH | ELEC_SUBJECT 2 PHY | ELEC_SUBJECT 3 CHEM

CATEGORY | OPEN MERIT

STUDENT NAME | ASAD

FATHER ZAHID NAME

Address Permanent | BRIAN PURA RAWALPINDI

Address Present | 53B LIADAT ROAD RAWALPINDI

Tele Phone

Birth Date

Nationality 1 Id

RELIGION 1

HAFEEZ HAFIZ

ADDITIONAL 20 MARKS

R NO 555666
MATRIC

Reg No 35252647
[MATRIC]

Board 1 Id

BOARD TOTAL MARKS 850

MATRIC MARKS | 456

TOTAL OBTAINED MARKS | 476

PERCENT 56

Year(MATRIC) | 1

Entry Checked (0/1) 1

Document OK Status

Date Of Entry 09-SEP-2003

Eligibility | OK

SAVE [SAVE]

EXIT

Developer2000 Forms Runtime for Windows 95/NT - [WINDOW] _ | □ | X

Action Edit Query Block Record Field Window Help _ | □ | X

GROUPS INTERMEDIATE

GROUP ID	GROUP	ELECTIVE SUB 1	ELECTIVE SUB 2	ELECTIVE SUB 3
1	PRE_ENGG	MATH	PHY	CHEM
2	PRE_MED	BIO	PHY	CHEM
3	I_C_S	COMPU	PHY	MATH
4	G_SCIENCE	STAT	MATH	ECON
5	ARTS			

Record 1/5

Start
 R32-Microsoft...
 Developer200...
 Developer2...

4:01 PM

ELECTIVE SUBJECTS OF F.A. GROUP A

SR NO	SUBJECT NAME
1	PSYCH
2	CIVICS
3	PERSIAN
4	ARABIC

GOVT GORDON COLLEGE RAWALPINDI

B.A. B.Sc. ADMISSION FORM

SR NO 47 Form No 545 GRP ID 4

ELEC SUBJECT 1 MATH A ELEC SUBJECT 2 MATH B ELEC SUBJECT 3 STAT

CATEGORY OPEN MERIT

COLLEGE FG SIR SYED COLLEGE

RNO 3434

MARKS(FA) 663

YEAR OF PASSING FA 1

NAME OF CANDIDATE MUHAMMAD MAJID

FATHER'S NAME MUHAMMAD ISMAIL

BIRTH DATE 22-JAN-1968

RELIGION ID NATIONALITY ID

ADDRESS G 547 DAV COLLEGE ROAD RWP

ELIGIBILITY_ID 0 ELIG_STATUS OK

DATE OF ENTRY 09-SEP-2003

SAVE

BA ELEC GID JOINED STATUS NO

CANCELLED NO

B.A OPTIONAL SUBJECTS

OPTIONAL SUB ID	SUBJECT
1	URDU
2	ISLAMIAT
3	ARABIC
4	G PSYCHOLOGY
5	APP PSYCHOLOG
6	PERSIAN

ELECTIVE GROUPS OF BA

BA ELEC GRP ID	SUBJECT 1	SUBJECT 2
1	ECONOMICS	POL_SCIENCE
2	ECONOMICS	HISTORY
3	ECONOMICS	STAT
4	POL_SCIENCE	HISTORY
5	STAT	APP_PSYCHOLOGY
6	PSYCHOLOGY	STAT
7	URDU	PERSIAN
8	ISLAMIAT	ARABIC
9	ISLAMIAT	ARABIC
10	JOURNALISM	POL_SCIENCE
11	JOURNALISM	POL_SCIENCE

B.A. B.Sc. GROUPS

G ID	ELECTIVE SUB 1	ELECTIVE SUB2	ELECTIVE SUB 3
1	BOTANY	ZOOLOGY	CHEMISTRY
2	BOTANY	ZOOLOGY	APP PSYCHOLOG
3	MATH A	MATH B	PHYSICS
4	MATH A	MATH B	STAT
5	GEN MATH	PHYSICS	CHEMISTRY
6	GEN MATH	STAT	ECONOMICS
7			

Developer2000 Forms Runtime for Windows 95 / NT - [WINDOW1] _ | Ⓞ | X

Action Edit Query Block Record Field Window Help _ | Ⓞ | X

Execute Query

GOVT GORDON COLLEGE

CATEGORIES OF ADMISSION

CATEGORY ID	CATEGORY
1	OPEN MERIT
2	DISABLE

Record 1/2

Start P82 - Microsoft... Developer200... Developer2...

8:34 AM

Developer2000 Forms Runtime for Windows 95 / NT - [WINDOW1] - | | X
Action Edit Query Block Record Field Window Help - | | X
[Icons: Home, Back, Forward, Stop, Refresh, Print, Save, Find, Help, etc.]

DATA ENTRY OF STUDENTS

REG NO	12	ROLL NO	2
STUDENT NAME	WASEEM	CLASS_ID	1
SECT_ID	3	GROUP_ID	5
EXIT		SAVE	

Record: 1/1

Start | PS2 - Microsoft... | Developer200... | Developer2...

8:39 AM

GOVT GORDON COLLEGE RAWALPINDI EXAMINATION SYSTEM

MARKS ENTRY FORM FOR COMPULSORY SUBJECTS

REG NO	12	R NO	2	Secd Id	3	CLASS ID	1
GRP ID	5	EXAM ID	2	SUB_ID	1	SUBJECT	ISLAMIC STUDIES
NAME	WASEEM	MARKS OBTAINED	55	TOTAL	75		
RESULT	PASS	PRESS	<input type="button" value="SAVE"/>	GRADE		Date Entry	11-SEP-2003

FRM-40400: Transaction complete: 1 records applied and saved.
Record: 1/1

ENTRY OF SUBJECTS

TYPE ID KEY

COMPULSORY SUBJECTS =1

SCIENCE SUBJECTS =2

ARTS SUBJECTS=3

SUBJECT ID	TYPE ID	SUBJECT
1	1	ISLAMIC STUDIES
2	1	PAK STUDIES
3	1	ENGLISH
4	1	ENGLISH A
5	1	ENGLISH B
6	1	URDU
7	2	MATH
8	2	MATH A
9	2	MATH B
10	2	GEN. MATH

Developer2000 Forms Runtime for Windows 95 / NT - [WINDO...]

Action Edit Query Block Record Field Window Help

EXAMINATION NAME

Exam Id	Exam
1	DECEMBER
2	ANNUAL

Record 1/2

9:30 AM

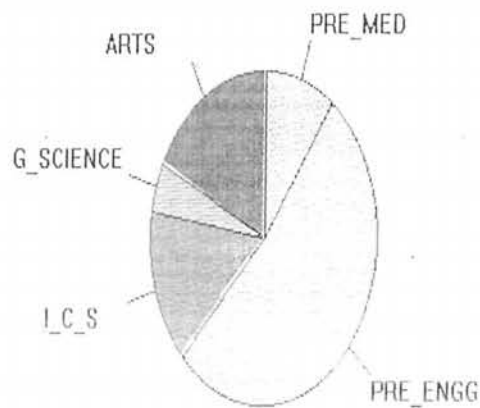
IMPORTANT

REPORTS



PIE CHART OF 1ST YEAR CANDIDATES

Report run on January 26, 1999 6:58 AM



G Name	Applicants
--------	------------



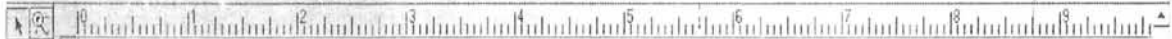
RELIGION WISE STRENGTH OF CANDIDATES FOR FIRST YEAR ADMISSION

RELIGION ID	1	2	
GROUP	CANDIDATES	CANDIDATES	
ARTS	7	0	7
G_SCIENCE	2	0	2
I_C_S	5	1	6
PRE_ENGG	21	0	21
PRE_MED	4	0	4
	39	1	40



BOARD WISE STRENGTH OF CANDIDATES
FOR FIRST YEAR

BOARD ID	1	2	3	4
GROUP	CANDIDATES	CANDIDATES	CANDIDATES	CANDIDATES
ARTS	5	0	1	1
G_SCIENCE	2	0	0	0
I_C_S	5	1	0	0
PRE_ENGG	19	2	0	0
PRE_MED	4	0	0	0
	35	3	1	1



GOVT GORDON COLLEGE RAWALPINDI

MERIT LISTS FOR FIRST YEAR

SR No	GROUP NAME	CATEGORY	D_SR_NO	NAME	MATRIC	HEFEZ MARKS	TOTOL
1	PRE_ENGG	OPEN MERIT	10	GUL KHAN	789	0	789
2	PRE_ENGG	OPEN MERIT	16	JAWAD	763	0	763
3	PRE_ENGG	OPEN MERIT	40	farooq	678	20	698
4	PRE_ENGG	OPEN MERIT	24	REHMAT	667	0	667
5	PRE_ENGG	OPEN MERIT	3	HAMID	666	0	666
6	PRE_ENGG	OPEN MERIT	1	ASAD	456	20	476
7	PRE_ENGG	OPEN MERIT	5	FAROOQ	456	20	476
8	PRE_ENGG	OPEN MERIT	23	AHAMAD	446	20	466
9	PRE_ENGG	OPEN MERIT	21	JAMEEL	455	0	455
10	PRE_ENGG	OPEN MERIT	28	GHANI	453	0	453
11	PRE_ENGG	OPEN MERIT	25	FAROOQ	376	0	376
12	PRE_ENGG	OPEN MERIT	30	WADEEM	334	0	334

- Reports
 - NAME_LIST_CAND_BA
 - Live Preview
 - Data Model
 - Layout Model
 - Parameter Form
 - Report Trigger
 - Program Units
 - Attached Libraries
 - NAME_LIST_CANDIDATE**
 - Live Preview
 - Data Model
 - Layout Model
 - Parameter Form
 - Report Trigger
 - Program Units
 - Attached Libraries
 - Templates
 - External SQL Queries
 - PL/SQL Libraries
 - Debug Actions
 - Stack
 - Built-in Packages
 - Database Objects

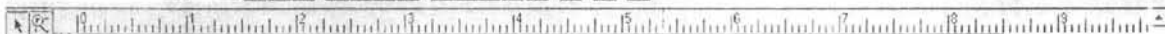
NAME_LIST_CANDIDATE.Report

Report Parameters

Enter values for the parameters

Student Name:

- AHMAD
- AHSAN
- ALI
- ASAD
- BABAR
- DAVID
- FARIED
- FAROOQ**
- GHAZI
- GHULAM MUHAMMAD



GOVT GORDON COLLEGE RAWALPINDI

1ST YEAR ADMISSION

LIST OF REQUIRED CANDIDATES

Report run on: September 10, 2003 10:06 AM

<u>Sr No</u>	<u>Form No</u>	<u>Name</u>
<u>5</u>	<u>6</u>	<u>FAROOQ</u>
<u>25</u>	<u>5454</u>	<u>FAROOQ</u>



GROUPS V CATEGORY

CATEGORY GROUP	DISABLE	OPEN MERIT	
	CANDIDATES	CANDIDATES	
ARTS	6	1	7
G_SCIENCE	2	0	2
LC_S	4	2	6
PRE_ENGG	5	16	21
PRE_MED	0	4	4
	17	23	40

Re-run the report with new data



GOVT GORDON COLLEGE RAWALPINDI

STRENGTH OF STUDENTS WHO SELECTED THE
SUBJECT AS ELECTIVE SUBJECT NO 1

Report run on: September 10, 2003 9:53 AM

ELECTIVE SUBJECT	COUNT
MATH	7



GOVT GORDON COLLEGE RAWALPINDI

LIST OF 3rd YEAR ADMITTED STUDENTS

Report run on: September 10, 2003 9:44 AM

Sid 1
Category: OPEN MERIT

SR No	DY No	Form No	Name
1	45	745	WAQAR
2	6	6677	BABAR
3	46	43	HASAN
4	14	44	AHAMAD
5	16	444	TAHIR
6	10	655	MAJEED
7	34	35	MUNEEB

Count 7
Count 7
Count 7



GOVT GORDON COLLEGE RAWALPINDI

SECOND MERIT LIST FOR THIRD YEAR

OWN STUDENTS

SR No	Cid	CATEGORY	D_SR_NO	NAME	FAI Marks	College Id
1		OPEN MERIT	43	FAREED	435	1
2	1	OPEN MERIT	15	FAREED	356	1
3	1	OPEN MERIT	7	GUL	345	1



GOVT GORDON COLLEGE RAWALPINDI

MERIT LIST FOR THIRD YEAR

STUDENTS OF OTHER COLLEGES

SR No	Gid	CATEGORY	D SR NO	NAME	FA Mark	College Id
1	1	OPEN MERIT	6	BABAR	780	3
2	1	OPEN MERIT	14	AHAMAD	666	2
3	1	OPEN MERIT	13	KAMAL	475	3
4	1	OPEN MERIT	19	RASHID	467	3

Developer2000 Report Builder for Windows 95/NT - IELEC.SUB2.COUNTBA Report Editor - Live Previewer

File Edit View Insert Format Arrange Program Tools Window Help

Counter New 12 B I L % . 0 % X

Report Parameters

Enter values for the parameters

Sub APP_PSYCHOLOGY

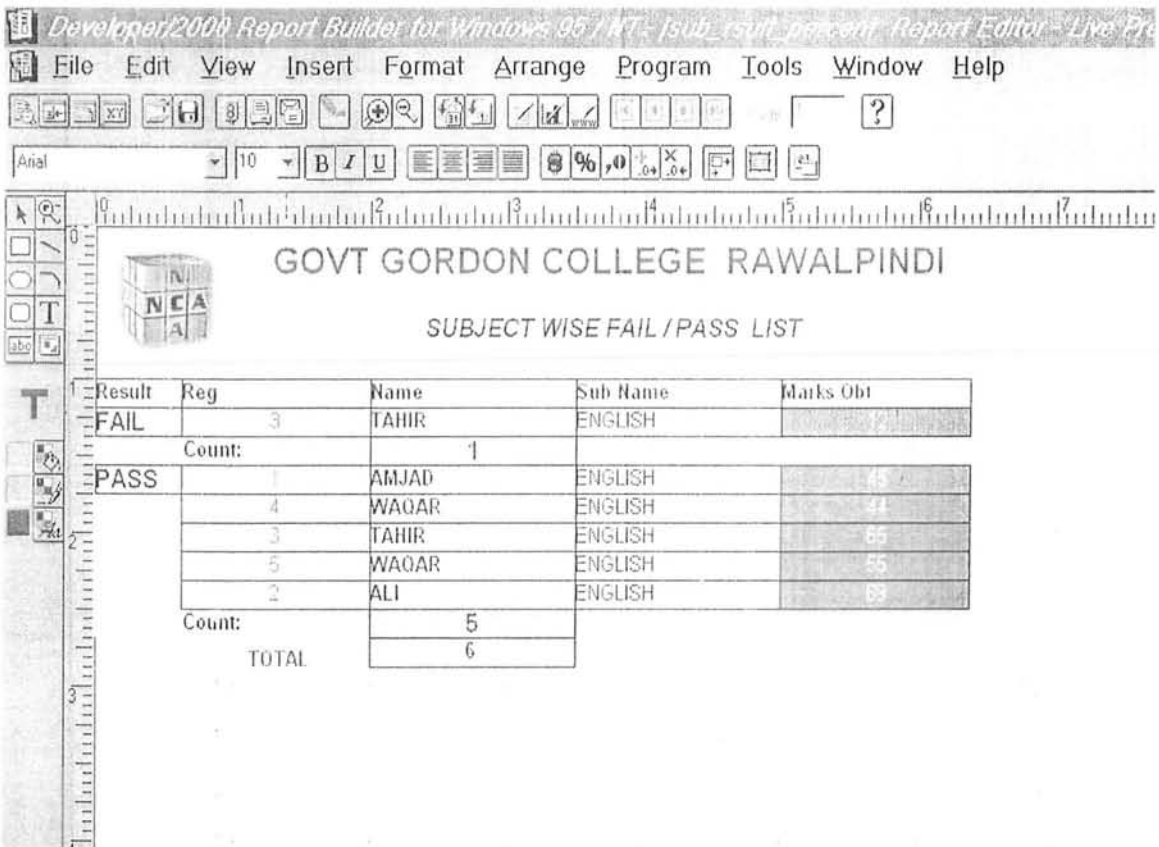
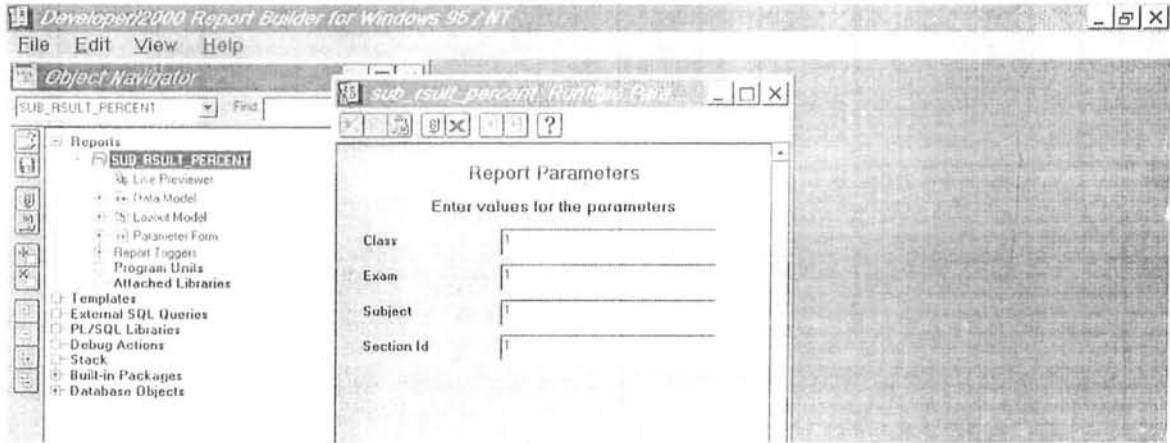
APP_PSYCHOLOGY
ARABIC
HISTORY
MATH B
POL SCIENCE
STAT
ZOOLOGY

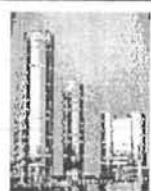
GOVT GORDON COLLEGE RAWALPINDI

STRENGTH OF STUDENTS WHO SELECTED THE SUBJECT AS ELECTIVE SUBJECT NO 2

Report run on: September 10, 2003 10:17 AM

Esc Name	Count
MATH B	2





GOVT GORDON COLLEGE RAWALPINDI

SECTION WISE RESULT COMPARISON

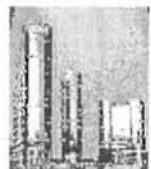
Report run on:

January 26, 1989 5:00 AM

SECTION ID 1

	Result	FAIL	PASS	
Sub Name	STRENGTH	STRENGTH		
BIOLOGY	2	3	5	
CHEMISTRY	2	4	6	
ENGLISH	2	5	7	
ENGLISH A	0	2	2	
GEN. MATH	0	1	1	
ISLAMIC STUDIES	0	4	4	
PAK STUDIES	0	1	1	
PHYSICS	0	5	5	
PSYCHOLOGY	0	1	1	
URDU	0	4	4	
	6	30	26	

Saves the active document



GOVT GORDON COLLEGE RAWALPINDI

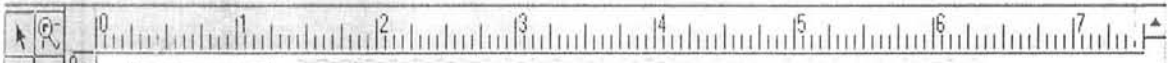
GROUP WISE RESULT COMPARISON

Report run on:

January 26, 1999 5:03 AM

Gid 1

Sub Name	Result		
	FAIL	PASS	
	Countname	Countname	
BIOLOGY	2	3	5
CHEMISTRY	2	4	6
ENGLISH	2	5	7
ENGLISH A	0	2	2
GEN. MATH	0	1	1
ISLAMIC STUDIES	0	4	4
PAK STUDIES	0	1	1
PHYSICS	0	5	5
PSYCHOLOGY	0	1	1
IRIDI	0	4	4



GOVT GORDON COLLEGE RAWALPINDI

COMPARISON OF CLASSES RESULT

Report run on:

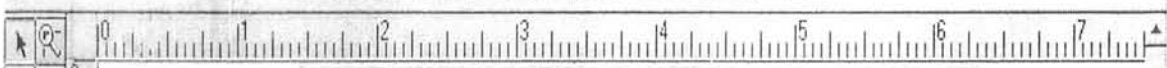
January 26, 1989 5:05 AM

Result FAIL

CLASS	1	2	
Sub Name	Countname	Countname	
ARABIC	0	1	1
BIOLOGY	2	1	3
CHEMISTRY	4	1	5
EDUCATION	1	0	1
ENGLISH	3	4	7
GEN PSYCHOLOGY	0	1	1
ISLAMIC STUDIES	5	0	5
PAK STUDIES	0	4	4
PHY_EDUCATION	0	1	1
PHYSICS	1	0	1



Arial 12 B I U [text alignment icons] [numbering icons] [font color icon] [background color icon] [text color icon]



GOVT GORDON COLLEGE RAWALPINDI

COMPARISON OF CLASSES RESULT

Report run on:

January 26, 1999 5:07 AM

Result FAIL

AVERAGE MARKS OBTAINED COMPARISON

CLASS	1	2
Sub Name	AVERAGE MARKS OBTAINED	AVERAGE MARKS OBTAINED
ARABIC	0.0	0.0
BIOLOGY	11.0	1.0
CHEMISTRY	14.3	22.0
EDUCATION	29.0	0.0
ENGLISH	28.0	7.0
GEN PSYCHOLOGY	0.0	32.0
ISLAMIC STUDIES	11.8	0.0
PAK STUDIES	0.0	9.0
PHY EDUCATION	0.0	0.0

1x 0.38 0.75



Arial 10 B I U [List Bulleted] \$ % , 0 + . x . 0 + [Print] [Preview]

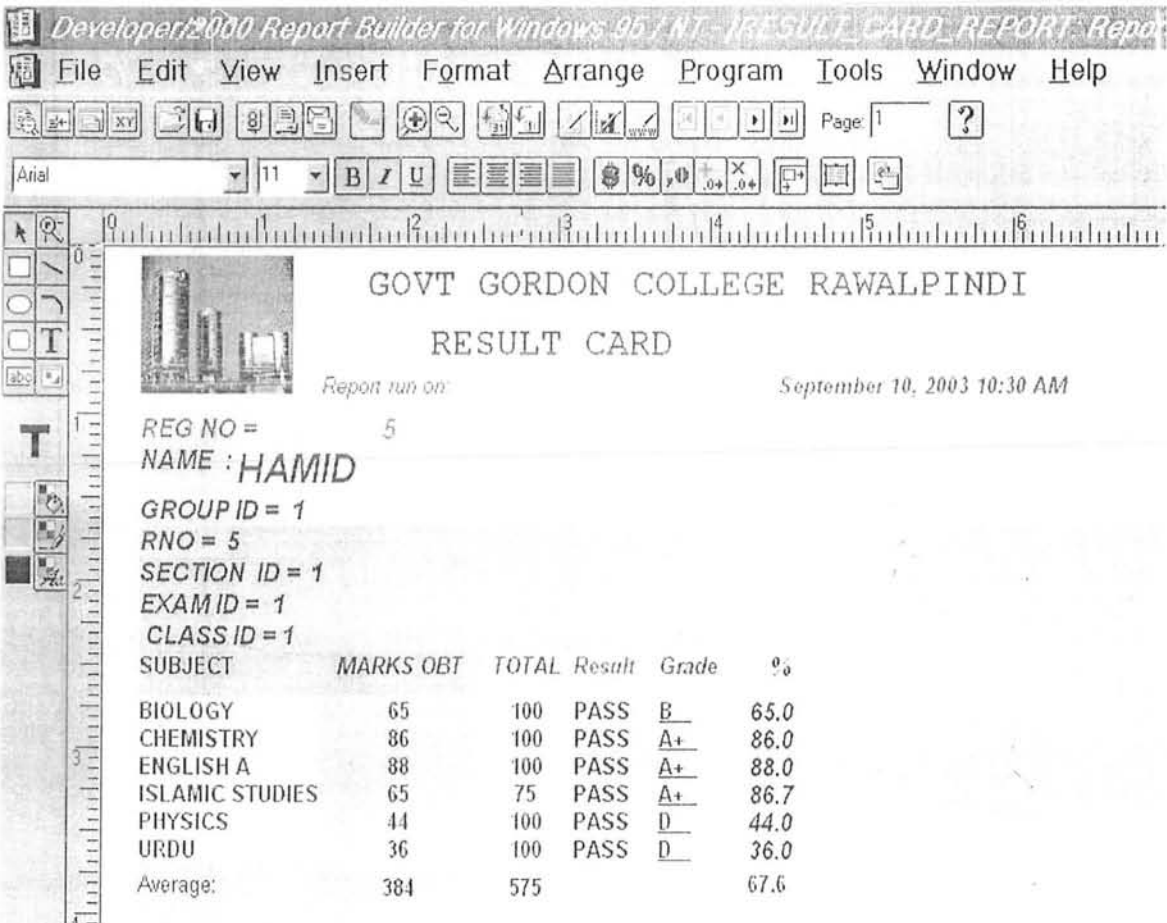
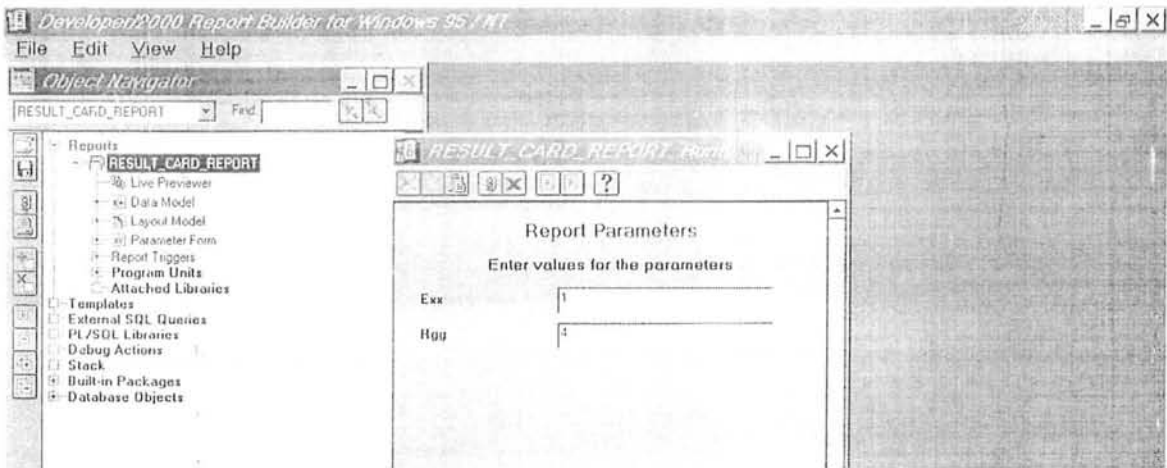


GOVT GORDON COLLEGE RAWALPINDI

STUDENT WISE RESULT SHEET

Reg	Rno	Name	Sub-Name	Marks Obt	Total	Result
6	1	KHAN	ENGLISH	100	100	PASS
			ISLAMIC STUDIES	0	75	FAIL
			MATH	66	100	PASS
			PHYSICS	45	100	PASS
			URDU	88	100	PASS
			CHEMISTRY	0	100	FAIL
Total:			52.00	299	575	pass
7	2	FAREED	ENGLISH	46	100	PASS
			CHEMISTRY	24	100	FAIL
			ISLAMIC STUDIES	24	75	FAIL
			URDU	37	100	PASS
			PHYSICS	0	100	FAIL
			MATH	33	100	PASS
Total:			28.52	164	575	fail
8	3	NADEEM	ENGLISH	44	100	PASS

1x 4.75 0.00



Toolbar with icons for file operations (New, Open, Save, Print, Copy, Paste, Undo, Redo), editing (Cut, Paste), and formatting (Bold, Italic, Underline, Bulleted List, Numbered List, Indent Left, Indent Right, Decrease Indent, Increase Indent, Paragraph, Text Color, Background Color, Font Color, Font Size, Font Style, Font Weight, Font Color, Font Size, Font Style, Font Weight, Font Color, Font Size, Font Style, Font Weight).

LIST OF ALL STUDENTS

Report run on: September 10, 2003 10:35 AM

REG NO	R NO	NAME	CLASS	SECTION	G ID
1	1	AMJAD	1	1	1
2	2	ALI	1	1	1
3	3	TAHIR	1	1	1
4	4	WAQAR	1	1	1
5	5	HAMID	1	1	1
6	1	KHAN	1	2	2
7	2	FAREED	1	2	2
8	3	NADEEM	1	2	2
9	4	ZAKIR	1	2	2
10	5	NAVEED	1	2	2
11	1	JAN	1	3	5
12	2	WASEEM	1	3	5
13	3	BABAR	1	3	5
14	4	nasir	1	3	5
15	5	JAMAL	1	3	5
16	1	HAROON	2	1	1
17	2	MAJID	2	1	1
18	3	BASIT	2	1	1
19	4	QASIM	2	1	1
20	5	ABID	2	1	1
21	1	YASIR	2	2	2

USER GUIDE

1. Folder “1styearadm” which has all the forms and repots must be saved in My Documents in C drive.
2. At the end of every session all entries in the following tables must be deleted.
 - A) ‘Student’
 - B) ‘Marks’
 - C) ‘Form’
 - D) ‘Bform’
3. At the start of new session , for examination system, fresh data entry in table ‘Student’ through student data entry form must be made.
4. Operating must be Window 98.
5. Oracle 7 with Developer 2000, Form 5 must be installed in the system.
6. To run the system:
Click ‘Form Runtime’ icon. Browse the ‘1styearadm’ folder in My Documents in drive C. Select the “A_Project” file. Give the user name ‘sun’ and password ‘.....’. Click OK.

BIBLIOGRAPHY

1. "THE PROGRAMMING LANGUAGE OF ORACLE", BY IVAN BAYROSS , BPB PUBLICATIONS.
2. "COMMERCIAL APPLICATION DEVELOPMENT USING ORACLE DEVELOPER 2000" , BY IVAN BAYROSS , BPB PUBLICATIONS.
3. "DEVELOPER 2000 (VER 2.1)" , BY EJAZ AHMAD , ILMO-O-IRFAN PUBLISHERS.
4. "SOFTWARE ENGINEERING" , BY SOMMERVILLE , 6TH EDITON.

