

**UGANDA MARTYRS UNIVERSITY, NKOZI/ RUBAGA
CAMPUS**

**FACULTY OF BUSINESS ADMINISTRATION AND
MANAGEMENT**

INFORMATION SYSTEMS AND DATABASES

BAM II

SPECIAL/ SUPPLEMENTARY EXAMINATION

DATE: 05th/08/2015

Time allowed: 3 hours

Instructions to Candidates:

Read the following before answering the examination questions.

1. Question one is compulsory
2. Attempt two questions
3. Begin the answer of each question on a fresh page
4. Use of relevant Examples is Important
5. Adhere to all other Examination regulations
6. Do not write anything on this question paper

QUESTION ONE

Below is an extract of some video rental company database tables study them and answer the questions that follow.

- a) List the relations(1marks)
- b) Construct the datadictionary for the database(18marks)
- c) State the relation schema for each of the relation(12marks)
- d) Draw a possible entity relationship diagram for the database(12marks)
- e) Write an SQL that that would –
 - 1.Create this database (1mark)
 2. Create the Branch relation (2marks)
 3. Populate a relation called staff (2marks)
 4. Select all items from rentalagreement (2marks)

An example of the
StayHome video
rental database.

Branch

branchNo	street	city	state	zipCode	mgrStaffNo
B001	8 Jefferson Way	Portland	OR	97201	S1500
B002	City Center Plaza	Seattle	WA	98122	S0010
B003	14 – 8th Avenue	New York	NY	10012	S0415
B004	16 – 14th Avenue	Seattle	WA	98128	S2250

Staff

staffNo	name	position	salary	branchNo
S1500	Tom Daniels	Manager	46000	B001
S0003	Sally Adams	Assistant	30000	B001
S0010	Mary Martinez	Manager	50000	B002
S3250	Robert Chin	Supervisor	32000	B002
S2250	Sally Stern	Manager	48000	B004
S0415	Art Peters	Manager	41000	B003

Video

catalogNo	title	category	dailyRental	price	directorNo
207132	Die Another Day	Action	5.00	21.99	D1001
902355	Harry Potter	Children	4.50	14.50	D7834
330553	Lord of the Rings	Fantasy	5.00	31.99	D4576

Member

memberNo	fName	lName	address
M250178	Bob	Adams	57 - 11th Avenue, Seattle, WA 98105
M166884	Art	Peters	89 Redmond Rd, Portland, OR 97117
M115656	Serena	Parker	22 W. Capital Way, Portland, OR 97201
M284354	Don	Nelson	123 Suffolk Lane, Seattle, WA 98117

Registration

branchNo	memberNo	staffNo	dateJoined
B002	M250178	S3250	1-Jul-01
B001	M166884	S0003	4-Sep-02
B001	M115656	S0003	12-May-00
B002	M284354	S3250	9-Oct-01

RentalAgreement

rentalNo	dateOut	dateReturn	memberNo	videoNo
R753461	4-Feb-03	6-Feb-03	M284354	245456
R753462	4-Feb-03	6-Feb-03	M284354	243431

QUESTION TWO

With regard to corporate information systems explain the following -1. Internet

-2. Network

-3. Database

-4. DBMS

-5. IS users

(@5marks)

QUESTION THREE

With reference to a corporate database of your choice explain the purpose of the following in a database environment, use illustrations in all cases (@5marks)

- (a) Data dictionary
- (b) Row
- (c) Column
- (d) Primary key
- (e) Foreign key