

ATTEMPT ALL QUESTIONS PART A & B

PART B: TEST 3 (30 Marks)

- 1) Generating a set of relation schemas that allows storing information without unnecessary redundancy, is goal of (1 Mark)
- Assertions
 - Associations
 - Normalization
 - Integration
- 2) Suppose you are given a relation R= (A, B, C, D, E) with the following functional dependencies: (CE → D, D → B, C → A)
- Identify the primary key. (1 Mark)
 - In what normal form is relation R? (1 Mark)
 - List the relations (tables) in the 3NF (7 Marks)

- 3) Following the approach of removing repeating groups from an unnormalized table, identify the primary key and normalize the table below to the 3NF (20 Marks)

eId	ename	jobTitle	deptNo	deptName	supervisor	salary	bonus	projectNo	projectDesc	start	end	contract
100	Kizito	Analyst	3	Design	Mbabazi	35000	5000	23	DB Design	02-Apr	02-Jul	D100
								25	Reports	02-Oct	02-Nov	C100
								31	Forms	02-Aug	02-Oct	D100
130	Okware	Analyst	3	Design	Mbabazi	38000	5000	23	DB Design	02-Apr	02-Jun	D130
110	Bosco	Analyst	5	Analysis	Nabukenya	34000	5000	31	Forms	02-Mar	02-May	D110
								25	Reports	02-May	02-Jul	D110
120	Tamale	Analyst	5	Analysis	Nabukenya	35000	5000	11	Order Entry	02-Jul	02-Sept	D120
160	Baino	Technician	4	Tech Support	Edroma	30000	3000	14	Network Cabling	02-Sept	02-Nov	S160
								36	Network Testing	02-Nov	02-Dec	S160
190	Agaba	DBA	1	DB Support	Taddeo	45000	6000	45	Physical Design	02-Aug	02-Nov	D190
								48	Space Allocation	02-Nov	02-Dec	S190
200	Wafula	Programmer	6	Programming	Akello	32000	4000	11	Order Entry	02-Sept	02-Oct	D200
								12	Inventory Control	02-Oct	02-Dec	P200
								13	Invoicing	02-Nov	02-Dec	P200
180	Babirye	Programmer	6	Programming	Akello	30000	4000	31	Forms	02-Sept	02-Nov	C180
								25	Reports	02-Nov	02-Dec	C180