# **BINUS University**

Academic Career:  Undergraduate / Master / Doctoral *)				Class Program:  International/Regular/Smart Program/Global Class*)						
□ Mid Exam       ☑ Final Exam         □ Short Term Exam       □ Others Exam :			Term : Odd/ <del>Even/Short</del> *)							
☑ Kemanggisan □ Senayan	☐ Alam Sutera ☐ Bandung	□ Bekasi □ Malang	Academic Year : 2021 / 2022							
Faculty / Dept. :	School of Information Information Systems	Systems /	Deadline	Day / Date Time	:	Thursday, February 10 <sup>th</sup> 2022				
Code - Course :	ISYS6123 – Introduction Systems	to Database	Class	111110	:	All				
Lecturer : *) Strikethrough the un	Team necessary items		Exam Type	2	:	Online				
	The penalty for	r CHEATING	is DROP OU	U <b>T!!!</b>						

#### **Ketentuan umum:**

#### General Rules:

- **1.** Mohon untuk membaca instruksi soal dibawah ini sebaik mungkin. *Please read the exam instruction carefully*
- 2. Mohon tidak melakukan copy-paste (plagiarism). Tindakan Plagiarism = Mencontek. Please do not copy-paste (plagiarism). Plagiarism = Cheating
  Lihat poster dibawah ini:
  Look at this poster below:



NEVER CLAIM SOMEONE ELSE'S WORK
- school of information systems -

Verified by,

Richard, S.Kom., M.M. (D5053) and sent to Department/Program on Jan 15, 2022

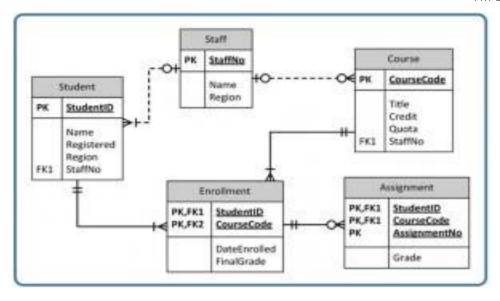
- **3.** Mohon perhatikan deadline waktu penyerahan jawaban ujian sesuai dengan jadwal di binusmaya.
  - Please pay attention to the deadline of exam answer submission according to Binusmaya
- **4.** Mohon mengerjakan ujian ini secara <u>INDIVIDU</u>, bukan berkelompok.
  - Please do this exam **INDIVIDUALLY** not in GROUP
- **5.** Tidak ada dispensasi jika mengumpulkan jawaban melewati deadline (**TANGGAL dan WAKTU**) yang telah ditentukan di Binusmaya dengan alasan apapun. Mahasiswa diharapkan tidak mengumpulkan jawaban mendekati deadline

  There is no dispensation if you submit the answer over the deadline (**DATE and TIME**) specified in Binusmaya for any reason. Students are not expected to submit answers near the deadline.
- 6. Setelah file jawaban di upload, mohon pastikan kembali dengan cara mendownload kembali jawabannya sesuai dengan matakuliahnya.
  - After the answer file is uploaded, please check it again by downloading the answer according to the course.
- 7. Setelah file jawaban diupload, mohon untuk melakukan *screenshot* layar hasil upload jawaban dan pastikan terdapat icon *waiting* ①
  - After the answer file has been uploaded, please take a screenshot of the uploaded answer screen and make sure there is a waiting icon ()

## Learning outcomes:

- LO 1: Describe concepts, terminologies, environment, and relational model in database system
- LO 2 : Apply user role and right access to increase security in database system
- LO 3: Construct Query of SQL that Suitable with the Problem
- LO4: (C3) Application: design database using structured data model
- LO5: (C2) Comprehension: recognize database technology concept

Student Course database



## Use the Student\_Course database model to answer these questions

## **Create SQL script for these queries: (LO3)**

- 1. List number of students registered in each region (10%)
  Output : | Region | Number\_of\_Students |
- 2. For each region with more than 1 student registered, find number of student in each region and order the result based on region in ascending order (10%)

  Output: | Region | Number\_of\_Students |
- 3. Find course code, course title which quota is larger than quota of every course registered by staffno 001 (10%)
- 4. List of all regions where there is a student but no staff. (10%)
- 5. List all course whose quota is greater than the average quota (10%)
- 6. Find all student who take Database course (use EXIST) (10%) Output : | StudentID | Name | FinalGrade|
- 7. Create view of students details at who get "A" FinalGrade (10%)

#### **Normalization**

### **Use this form below for Normalization process (LO4)**

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### Roy's Burger House Receiving Report Moseley, Virginia 23120

Vendor: 512 Purchase Order Number: 612

Manny's Meat Purchase Order Date: 2/9/2009
16 River Road Auth. Employee Number: 11
Blackstone & 23801 Auth. Employee Name: Shelly Jones

Item				Unit of		
Number	Description	Quantity		Measure	Price	Total
16	Hotdogs		7	Boxes	12.00	84.00
86	Hotdog Buns		8	Packs	11.00	88.00
85	Burger Buns		4	Packs	14.00	56.00
17	Burgers		5	Boxes	15.00	75.00
				Tax Shipping		15.60 10.00
	Receipt		328.60			
	Total					

1. Normalization 1NF – 3 NF (15%)

Note:

Create 5 minutes video explain the normalization process. Submit the video on a drive then paste the video link in your answer sheet.

2. Create complete ERD from 3NF (15%)