BINUS University

Academic Career: *Undergraduate / ~~Master / Doctoral / International / BASE / BINUS Online*~~)	Class Program: *Regular / ~~Global Class*~~)

☐ **Mid Exam** ☐ **Compact Term Exam** ☒ **Final Exam** ☐ **Others Exam : _____**	**Term : ~~Odd~~ / Even / ~~Compact *)~~ 2023/2024** **Period (Only for *BINUS Online*): 1 / 2 *)**

☒ **Kemanggisan** ☐ **Senayan** ☐ **Semarang** ☒ **Alam Sutera** ☐ **Bandung** ☐ **Bekasi** ☐ **Malang**	**Academic Year :** **2023 / 2024**

Exam Type*	: ~~Onsite~~ / Online	Faculty / Dept.	: School of Information Systems / Information Systems
Day / Date**	: Monday / 08 July 2024	Code - Course	: ISYS6210003 – Data Visualization
Time**	: 17.00 WIB (3 days)	Code - Lecturer	: Team
Exam Specification***	: ☐ Open Book ☐ Open Notes ☐ Close Book ☐ Submit Project ☐ Open E-Book ☐ Oral Test	BULC (Only for BINUS Online)	:
		Class	: All

Equipment***	:	Student ID ***	:
☐ Exam Booklet ☐ Laptop ☐ Drawing Paper – A3 ☐ Calculator ☐ Tablet ☐ Drawing Paper – A2 ☐ Dictionary ☐ Smartphone ☐ Notes		Name ***	:
		Signature ***	:

*) *Strikethrough the unnecessary items*   ****)** *For Online Exam, this is the due date*   *****)** *Only for Onsite Exam*

Please insert the test paper into the exam booklet and submit both papers after the test.

The penalty for CHEATING is DROP OUT!

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:

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 **INDIVIDU**, bukan berkelompok.
*Please do this exam **INDIVIDUAL** 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 make sure 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*
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 Outcome for
☐ Mid Exam   ☒ Final Exam

LO3: (C3) Application: Use the Tableau workspace to create visualizations
LO4: (C3) Application: build a range of essential chart types for analysis
LO5: (C3) Application: build interactive dashboards and stories to reveal data insights

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Verified by,

Yulia Ery Kurniawati, S.Kom., M.Eng. (D6913) and sent to Department/Program on June 3, 2024

I. **Essay (30%)**
1. [LO3 – 10 Points] What are the **differences** when the **date field** is presented as **discrete** and **continuous**, especially for the number of levels of detail (**hierarchy**)? Show the **differences** in **Tableau**.
2. [LO3 – 10 Points] Why **conversion function** is **needed**? Give an **example** to **illustrate** the **purpose** of the **conversion function** in **Tableau**.
3. [LO4 – 10 Points] Show the differences between **Histograms** and **Box & Whisker Plots** to show the **distribution** by creating an **example of each chart**.

II. **Kasus (70%)**
The dataset is available at:
https://binusianorg-
my.sharepoint.com/personal/mediana_aryuni_binus_ac_id/_layouts/15/guestaccess.aspx?share=E
qZfYM4pIahDmMIM0du_OxEBZ2EX5L7K9iV5lJbCjlM-xg&e=y9g0jY

Source: https://www.kaggle.com/datasets/thedevastator/unlock-profits-with-e-commerce-sales-data

Note: Take a screenshot of all step-by-step processes in answering all questions below.

4. [LO3 – 10 Points] **Import** the **Amazon Sale Report** dataset to **Tableau**.
   a. **Check** whether all **dimensions** and **measures** are already in the **right place** and **data type**. If there is any mistake, **identify** the **mistake** and **show** the **correction** you made.
   b. **Save** the dataset into a **TDS** file.
5. [LO4 – 10 Points] Make a **chart** to show the **trend of total quantity** by **Date (Month)**, **Sales Channe**l, and **Category**. Add **a filter** to show the **Top 5** only.
6. [LO4 – 10 Points] Make a **text table** to show the **total quantity** by **Date (Quarter and Month), Ship-Service-Level, Fulfilment, and Category.** Add **subtotal** and **grand total**.
7. [LO4 – 10 Points] Make a **chart** to show the **percentage proportion** of **distinct count of SKUs (using aggregate functions)** by each **Courier status.**
8. [LO4 – 10 Points] Make a **chart** to show the **total amount** by **status**. Create a **parameter** for the **calculated field (total amount multiplied by parameter). Apply** the **parameter** and **show both** the **total amount** and the **calculated field** in the chart.
9. [LO5 – 10 Points] Design all your worksheets to **a dashboard** for a good data story and apply **filter & highlight actions** (minimum 1 of each action).
10. [LO5 – 10 Points] Create **a video (maximum 3 minutes) of data storytelling** based on the dashboard that you created for this case. The video must show your face and you must wear modest clothing. Upload the video to YouTube or similar tools and **write the URL of the video on the answer sheet.**

Merge the tableau (.twb) file and answer sheet (essay & case) file into ZIP or RAR before uploading your exam answer file.