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| --- | --- |
| **Assignment Case** |  |
| CPEN6098 | CPEN6108 | CPEN6109 | CPEN6098001  Computer Networks |
| **Computer Engineering** | **O223-CPEN6098-GA06-01** |
| ***Valid on*** *Odd Semester Year 2021/2022* | **Revision 00** |

1. Seluruh mahasiswa tidak diperkenankan untuk:

*All students are not allowed to:*

* + - Berdiskusi dan/atau bekerja sama dengan mahasiswa lainnya

*Discuss and/or work together with other student participants*

* + - Melihat sebagian atau seluruh jawaban mahasiswa lain

*Seeing a part or the whole answer from another student*

* + - Membuka dan menyalin dari **BUKU** atau **CATATAN**, **VIDEO** dari pengajar (recording kelas, VBL, Youtube, dsb) dan **REFERENSI** lainnya

*Open and copy from any resources such as notes, videos (class recording, VBL, Youtube, etc) and other references*

* + - Membuka dan menyalin jawaban dari internet (google, stackoverflow, dsb)

*Open and copy answer from the internet (google, stackoverflow, etc)*

* + - Mengerjakan soal yang tidak sesuai dengan tema yang ada di soal,

*Working with another theme which is not in accordance with the existing theme in the matter of the case,*

* + - Melakukan tindakan kecurangan lainnya,

*Committing other dishonest actions,*

* + - Secara sengaja maupun tidak sengaja melakukan segala tindakan kelalaian yang menyebabkan hasil karyanya berhasil dicontek oleh orang lain / kelompok lain.

*Accidentally or intentionally conduct any failure action that cause the results of the project was copied by someone else / other groups.*

1. Jika mahasiswa terbukti melakukan tindakan seperti yang dijelaskan butir 1 di atas, maka **nilai mahasiswa** yang melakukan kecurangan (menyontek maupun dicontek) akan di – **NOL** – kan.

*If the student is proved to the actions described in point 1 above, the score of the student which committed dishonest acts (cheating or being cheated) will be “Zero”*

1. Perhatikan jadwal pengumpulan jawaban, segala jenis pengumpulan jawaban di luar jadwal tidak dilayani.

*Pay attention to the submission schedule, all kinds of submission outside the schedule will not be accepted*

1. Bila Anda tidak membaca peraturan ini, maka Anda dianggap telah membaca dan menyetujuinya

*If you have missed to read these regulations, so you are considered to have read and agreed on it*

1. Persentase penilaiaan untuk matakuliah ini adalah sebagai berikut:

*Marking percentage for this subject is described as follows:*

|  |  |  |
| --- | --- | --- |
| **Tugas Mandiri**  *Assignment* | **Proyek**  *Project* | **UAP**  *Final Exam* |
| 100% | - | - |

1. Software yang digunakan pada matakuliah ini adalah sebagai berikut:

*Software will be used in this subject are described as follows:*

|  |
| --- |
| **Software**  *Software* |
| Cisco Packet Tracer 7.3.0  WinBox 3.24  VMware Workstation 15  VM MikroTik 6.45.9 |

## Ekstensi file yang harus disertakan dalam pengumpulan tugas mandiri untuk matakuliah ini adalah sebagai berikut:

*File extensions should be included in assignment collection for this subject are described as follows:*

|  |  |  |
| --- | --- | --- |
| **Tugas Mandiri**  *Assignment* | **Proyek**  *Project* | **UAP**  *Final Exam* |
| DOCX, PKA | - | - |

## Soal

*Case*

1. If you have two devices that is a **Switch** and **PC**, what **type of cable** will you use to connect the devices? Give the **order of colors** user from **left to right** for the **two of the cables! Please don’t use image to answer!**
2. Becefort is a new apartment that recently just moved into their new building. They want to create **4 networks** under their main network which has **network address 192.168.15.0/24.**

The details are written below:

* **Marketing Division – 35 computers**
* **Operation Division – 60 computers**
* **Finance Division – 21 computers**
* **Front Office Division – 5 computers**

This agency wants you to handle the works. These are the details of the works:

1. Create a **new subnet mask and IP address range for every network** using **FLSM. (Network address, Broadcast address, Usable IP address, Subnet mask / CIDR)**
2. **Open the “Case 02.pka”** file and follow the instructions shown in the case to **create a LAN connection. Make sure that each PC is connected to each other.**
3. Becefort has so many residents in their apartment building, so they decided to build another building. Because of your excellent work in the previous building they trusted you to build their network again. They want to create **4 sub-network** under its **network** with **address 192.168.27.0/24**. The details are written below :

* **Marketing Division – 27 computers**
* **Finance Division – 15 computers**
* **Operation Division – 70 computers**
* **Front Office Division – 10 computers**

They want you to make the sub-network using **VLSM. (Network address, Broadcast Address, Usable IP address, Subnet mask / CIDR)**

1. You are asked to create LAN **connection** based on the picture below. **Open** the **“Case 04.pka”** file and follow the instructions shown in the case **to create the routing configuration using static routing** and **create access list using extended access list.**

