

061906T4TEL

TELECOMMUNICATION ENGINEERING LEVEL 6

ENG/OS/TLE/CR/06/6/A

Install IP PABX

March/April 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

**WRITTEN ASSESSMENT**

**Time: 3 HOURS**



**INSTRUCTIONS TO CANDIDATE**

1. The paper consists of **TWO** sections: **A** and **B**.
2. Marks for each question are indicated in the brackets.
3. Candidates are provided with a separate answer booklet
4. **DO NOT** write on this question paper.

**This paper consists of THREE (3) printed pages.**

**Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.**

**SECTION A (40 MARKS)**

*Answer ALL the questions in this section.*

1. Distinguish between on premises and cloud based IP PABX (Internet Protocol Private Automatic Branch Exchange) systems. (2 marks)
2. Explain TWO call management features of VOIP (Voice over Internet Protocol). (4 marks)
3. List FOUR equipment used in connecting the SIP server to VOIP providers network. (4 marks)
4. Explain TWO client requirements when performing connection of IP PABX systems. (4 marks)
5. Explain the meaning of SIP server. (2 marks)
6. Explain TWO factors considered when connecting a mini SIP server to the VOIP network based on the available access device. (4 marks)
7. Name FOUR reasons for filing reports after the installation of IP PABX system. (4 marks)
8. State FOUR activities included in the commissioning schedule of IP PABX system. (4 marks)
9. State FOUR advantages of VOIP. (4 marks)
10. State FOUR features offered by IP PABX systems. (4 marks)
11. Explain TWO factors to consider during the installation of IP PABX systems. (4 marks)



**SECTION B (60 MARKS)**

*Answer THREE Questions in This Section*

12.

- a) Describe TWO tests carried out during installation of IP PABX systems. (8 marks)
- b) Explain THREE details to be included in the preparation of IP PABX installation report. (6 marks)
- c) Explain the functions of THREE components of an SIP server. (6 marks)

13.

- a) Describe the SIP Proxy server. (4 marks)
- b) Explain THREE voicemail features offered by VOIP. (6 marks)
- c) Explain the function of FIVE tools used in the installation of IP PABX systems. (10 marks)

14.

- a) Explain FOUR safety procedures to be followed to ensure successful completion of the installation of an IP PABX system. (8 marks)
- b) Explain THREE factors that should be considered when setting up SIP servers. (6 marks)
- c) Explain THREE benefits of an IP PABX System. (6 marks)

15.

- a) Outline the procedure of setting up an SIP server. (10 marks)
- b) Explain TWO factors to consider when testing IP PABX system. (4 marks)
- c) Explain THREE factors to consider when deploying network services. (6 marks)

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