



**NATIONAL EXAMINATION
AND SCHOOL INSPECTION
AUTHORITY**

TEL - TV broadcasting Station

T134

Wednesday, 21/7/2021

08:30 - 11:30 AM

Names:

Index number

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

QUESTIONS and ANSWERS BOOKLET

OPTION / TRADE: **TELECOMMUNICATION**

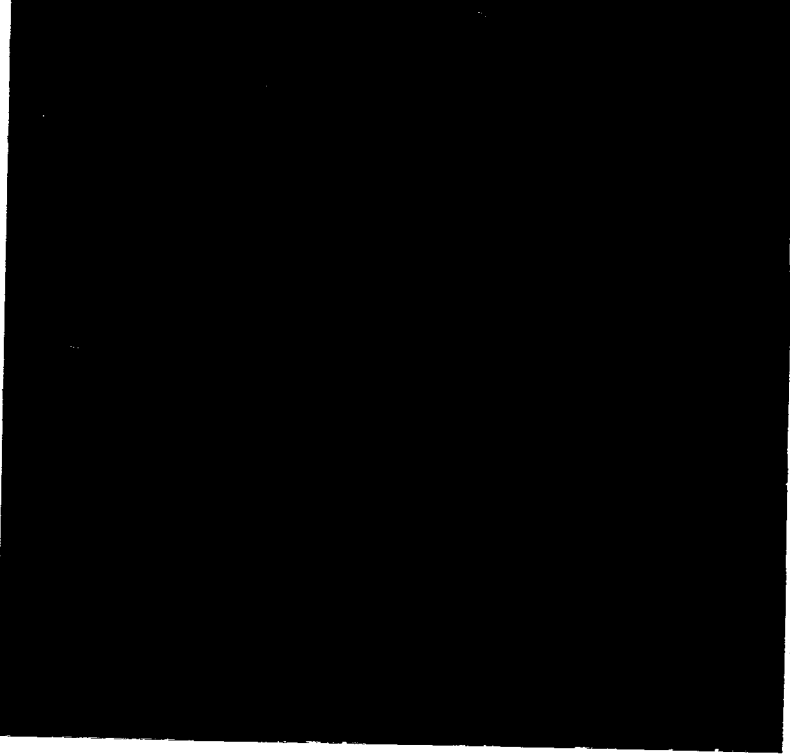
SUBJECT: TV broadcasting Station

ACADEMIC YEAR: 2020-2021

Read carefully the instructions on page (i) & (ii).

FOR EXAMINER'S USE ONLY

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TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

INSTRUCTIONS TO CANDIDATES: PART I (Answer Booklet)

1. A candidate should fill in the actual names and the index number on the cover of this questions and answer booklet on the provided place (Black Box).
2. It is illegal for a candidate to write any of his/her names, index number or a school name inside the answer booklet.
3. A candidate should check if all pages of the answer booklet are complete. No candidate should remove or tear any pages or part of it from the answer booklet.
4. A candidate should answer in the language in which the examination is set. (See page **(ii)**)
5. A candidate should sign on the sitting plan when submitting the answer booklet. He/she has also to check if the answer booklet is well sealed.
6. No extra paper is allowed in the examinations room. If a candidate is caught with it his/her results will be nullified.
7. No candidate is allowed to write answers not related to the subject being sat for, otherwise it will be considered as a cheating case.
8. Write your answers on the 12 lined pages (From page 1 of 12 to page 12 of 12).
9. Use the last non-lined pages as draft.
10. Results for any candidate who is caught in examination malpractices are nullified. The cheating can be recognized during examinations administration, marking exercise or even thereafter.

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

OPTION/TRADE: TELECOMMUNICATION

SUBJECT: TV broadcasting Station

DURATION: 3 hours

INSTRUCTIONS TO CANDIDATES: PART II (Question paper)

The paper is composed of two (2) Sections as follows:

Section I: Attempt all the Twelve (12) questions (60 marks)

Section II: Attempt any Four (4) questions out of Six (6) (40 marks)

Allowed materials:

- Ruler or square
- Calculator

Note:

Every candidate is required to carefully comply with the provided assessment instructions.

Section I : Attempt all the Twelve (12) questions (60 marks)

01. Complete the following table: **(5 marks)**

No	Consumables wires	Their applications
1	Wires	
2	Fuses	
3	Cable ties	
4	Power cables	
5	Super glue	

02. Which arrangement of steps is correct to follow during interconnection of lighting system equipment: 1) Perform wiring 2) Power the lighting system 3) Mount lighting platform 4) Assemble lighting system equipment 5) Fix equipment **(5 marks)**

a) 1) → 2) → 3) → 4) → 5)

b) 4) → 1) → 3) → 5) → 2)

c) 4) → 3) → 5) → 2) → 1)

d) 4) → 3) → 5) → 1) → 2)

03. List five (5) advantages of LED lights over other types of lighting elements. **(5 marks)**

04. List five (5) TV studio lighting system installation tools and their functionalities. **(5 marks)**

05. What are the requirements of TV broadcasting transmission? **(5 marks)**

- 06.** What does a broken LCD screen look like? Explain. **(5 marks)**
- 07. a)** What is faulty equipment? **(2.5 marks)**
- b)** What is the risk of faulty equipment? **(2.5 marks)**
- 08.** With example, differentiate cables from connectors. **(5 marks)**
- 09.a)** What does the cooling system do? **(2.5 marks)**
- b)** What are the two (2) main types of cooling systems? **(2.5 marks)**
- 10.** What is the difference between plug and socket? **(5 marks)**
- 11.** Write down steps required in cabling procedures. **(5 marks)**
- 12.** Based on principle working of LED, define the term “depletion region.” **(5 marks)**

Section II: Attempt any Four (4) questions out of Six (6) (40 marks)

13. Complete the following sentences with these terms: Key light, Dimmers, Light projector, Handover report, Console, Contrast range, Backlights, Light projector, Reflector and Fill light. **(10 marks)**

- a) The helps the successor to understand his duties in the new position.
- b) The is the dominant light in the scene. It sets the mood, provides direction, shows dimension and texture, and creates the darkest shadows.
- c) The fill light is placed just above the lens on the opposite side from the key light. Its purpose is to reduce contrast and bring out detail in the shadows by simulating light reflected off nearby objects.
- d) is the device that projects the light on the object.
- e) The first part of a stage lighting system is the

14.a) What are the two (2) functions of lighting in the studio? **(2 marks)**

b) Give the function of the following power equipment used in studio lighting system: **(8 marks)**

- i. generator,
- ii. regulator,
- iii. power converter and
- iv. stabilizer.

- 15.** Explain the process of set up lighting system in manipulating the light mixer. **(10 marks)**
- 16.** Explain the parameters used in lighting. **(10 marks)**
- 17.** a) Explain three (3) properties of color. **(6 marks)**
- b) Explain two techniques used in mixing colors. **(4 marks)**
- 18.** a) What are the differences between viewfinder and Shutter release? **(4 marks)**
- b) Explain the working principle of TV Camera. **(6 marks)**

