



**NATIONAL EXAMINATION
AND SCHOOL INSPECTION
AUTHORITY**

T046

Wednesday, 28/7/2021

08:30 – 11:30 AM

Names

Index number

TVET NATIONAL EXAMINATIONS, RTQF LEVEL 5, 2020-2021

QUESTIONS and ANSWERS BOOKLET

OPTION / TRADE : MASONRY

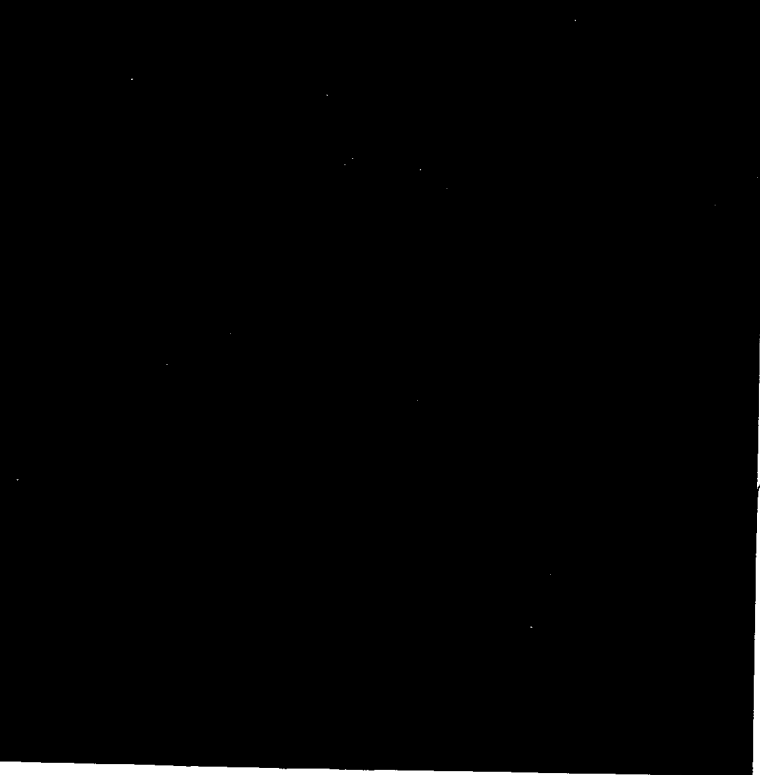
SUBJECT : Tiles works, openings and wall plastering

ACADEMIC YEAR: 2020-2021

1. Follow the instructions on page (i) & (ii)

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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: MASONRY

SUBJECT: Tiles works, openings and wall plastering

DURATION: 3 hours

INSTRUCTIONS TO CANDIDATES: PART II (Question paper)

The paper is composed of two (2) main 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 and 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.** Identify any five (5) types of tiles. **(5 marks)**
- 02.** What are the proportions of cement to sand do you recommend for the following works?
a) Masonry works
b) Plastering masonry
c) Plastering concrete surface
d) Pointing **(5 marks)**
- 03.** In tiling works, different materials are used. Within those materials admixtures are added in mortar when necessary. Discuss at least five (5) uses of adjuvants in mortar. **(5 marks)**
- 04.** While plastering, Surplus mortar may be removed with the help of mason's straight edge and then the mortar is pressed well with a wooden float so that mortar may fill in the joints of the masonry. Illustrate the four (4) common types of mortar used in plastering. **(5 marks)**
- 05.** The size of one brick which is equal to 19x9x9(Cm) and the mortar thickness (joint) equals to 10mm; calculate the number of bricks required to construct a wall of 1x1x1(m). **(5 marks)**
- 06.** Mention five (5) types of doors based on the method or manner of construction. **(5 marks)**
- 07.** Highlight four (4) types of doors based on the arrangement of components. **(5 marks)**
- 08.** List out five (5) types of doors based on the working operation. **(5 marks)**
- 09.** While fixing doors, hinges are used as connectors of sash and frame. Indicate any five (5) types of common hinges. **(5 marks)**

10. Sand is one of the materials required when producing a mortar for tiles,
a) Discuss any two (2) sources of sand.
b) Discuss any three (3) characteristics of good sand. **(5 marks)**
11. Discuss how the surface for tiling work is prepared. **(5 marks)**
12. a) What do you understand by grouting in tiles work?
b) List out the three (3) importance of grouting in tiles work. **(5 marks)**

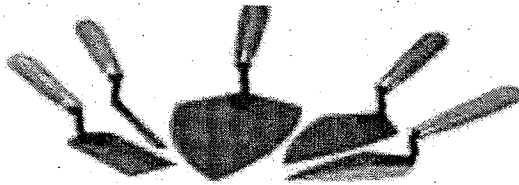
Section II: Attempt any Four (4) questions out of Six (6) (40 marks)

13. Plastering is done to achieve the specific objectives. Illustrate at least five (5) objectives of plastering. **(10 marks)**
14. Ms. Kami wants to plaster a wall of her house. The size of wall is 10mx10m and she wants to use two coats of cement by keeping 1:5 as ratio of the first coat and 1:3 as ratio of second coat. The thickness of plaster is 12mm and 8mm respectively. As a competent mason, calculate:
 a) Volume of first coat plastering
 b) Volume of second coat plastering
 c) Total volume of cement
 d) Total volume of sand. **(10 marks)**
15. With aid of sketch, show the following parts of a door:
 a) Head
 b) Horn
 c) Rebate
 d) Jamb/ Post
 e) Holdfast. **(10 marks)**
16. a) Explain briefly the functional requirements of a door.
 b) Identify any five (5) materials used in opening fixation work. **(10 marks)**
17. Complete the following table of the tools and equipment used in tiling work: **(10 marks)**

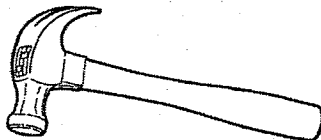
n°	Category of tools used in tiling work	Examples of tools
1	Setting out tools	1... 2...
2	Cutting tools/machines	1... 2...
3	Mixing tools	1... 2...
4	Cleaning tools/equipment	1... 2...
5	Compacting tools	1... 2...

18. a) It is known that the purpose of doors is to provide security of the building. The level of that security cannot be achieved if the door is not locked. Indicate two (2) types of locks and give the main criteria for selecting locks

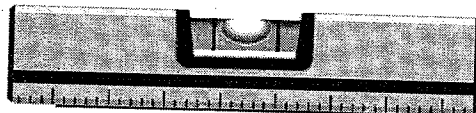
b) Name correctly those hand tools below and give their use while fixing doors and windows.



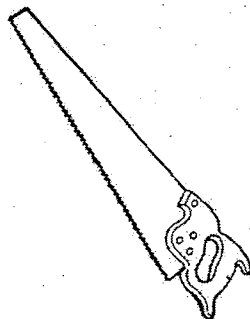
i.



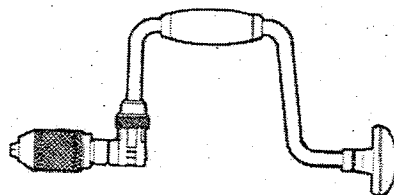
ii.



iii.

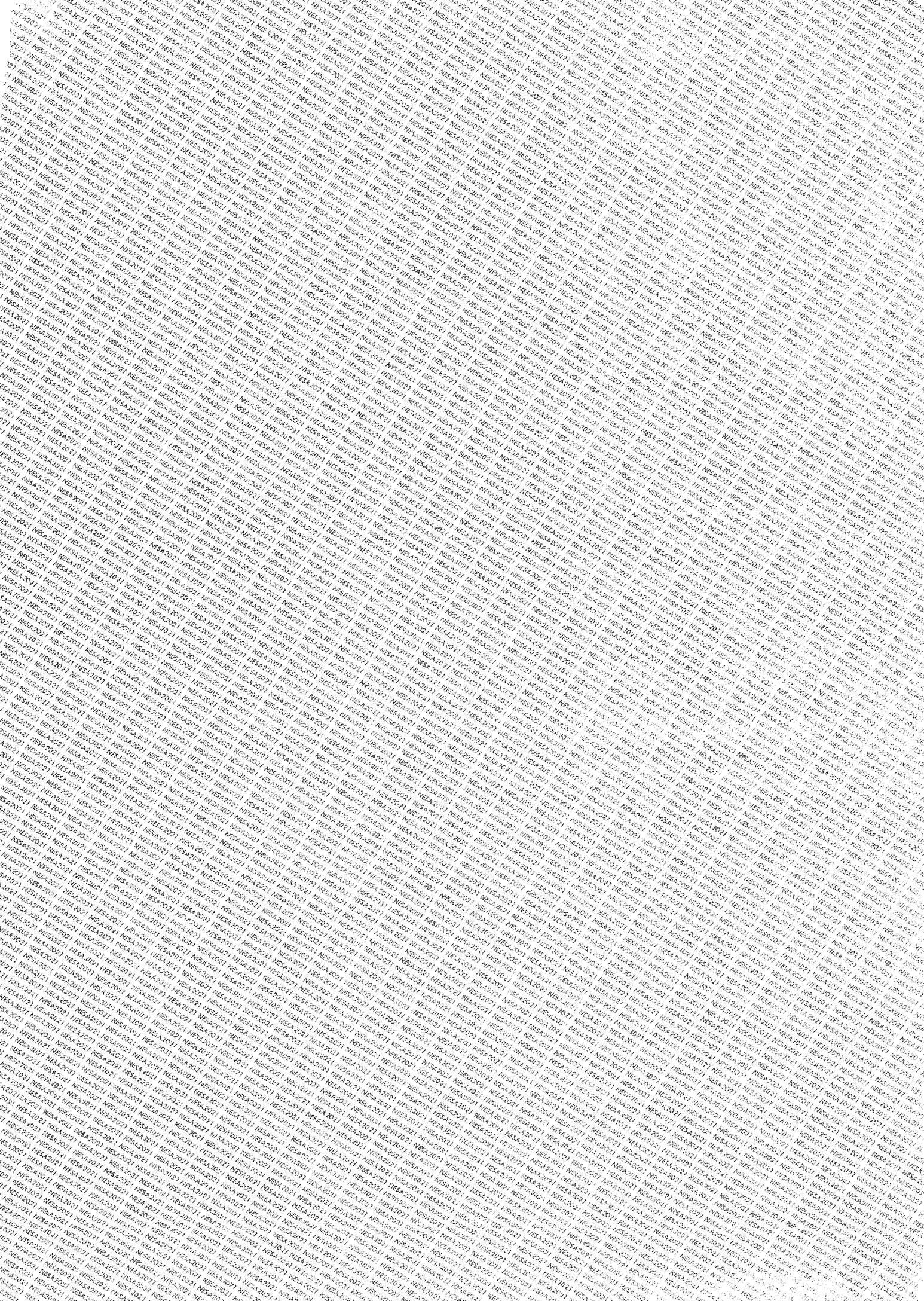


iv.



v.

(10 marks)





Tuesday, 20/7/2021
08:30 – 11:30 AM

Names

Index number

TVET NATIONAL EXAMINATION, RTQF LEVEL 5, 2020-2021

QUESTIONS and ANSWERS BOOKLET

OPTION/TRADE: **INDUSTRIAL ELECTRICITY**

SUBJECT: **Electrical Drawing**

ACADEMIC YEAR: 2020-2021

Read carefully the instructions on page (i) 8 (ii)

FOR EXAMINERS

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