

Mohamed Khider University of Biskra

Module: English 1 - A2 Level
Department of Materials Science

1st Year Licence
University Year 2025/2026

TEST 2: QCM

Student Name: _____ *Group:* _____

Instructions: Choose the correct answer (A, B, C, or D) for each question. Mark your answers clearly. No dictionaries or electronic devices allowed.

Activity 1 (4 points): Prepositions and Modals

- (1) The fatigue test is sensitive ___ surface defects.
(A) to, (B) for, (C) at, (D) on
- (2) Laboratory technicians ___ wear safety equipment at all times.
(A) could, (B) must, (C) may, (D) can
- (3) ___ laboratories use advanced imaging techniques.
(A) Much, (B) Any, (C) Many, (D) Little
- (4) The specimen was placed ___ the testing machine carefully.
(A) onto, (B) into, (C) at, (D) by

Activity 2 (5 points): WH Questions in Context

- (5) ___ alloy are we testing today? – "The aluminum-based one."
(A) Who, (B) What, (C) When, (D) Why
- (5) ___ did the creep test last? – "Approximately 72 hours."
(A) How long, (B) How many, (C) What, (D) Who
- (5) ___ performed the hardness measurement? – "The senior engineer."
(A) When, (B) Where, (C) Who, (D) Why
- (5) ___ are these standards important? – "They ensure reliability."
(A) Where, (B) Why, (C) What, (D) Which
- (5) ___ were the samples stored? – "In a controlled environment."
(A) What, (B) When, (C) Where, (D) Who

Activity 3 (3 points): Conditional Sentences

- (10) If the load ___ too heavy, the component will fail.
(A) is, (B) was, (C) were, (D) would be

- (20) The specimens ___ better results if they were heat-treated.
(A) show, (B) would show, (C) will show, (D) have shown
- (30) If you mix these elements, you ___ a new phase.
(A) would form, (B) will form, (C) formed, (D) have formed

Activity 4 (4 points): Word Forms

- (13) The ___ of the microstructure revealed defects.
(A) examine, (B) examination, (C) examining, (D) examined
- (23) This process ___ the mechanical properties significantly.
(A) improvement, (B) improves, (C) improving, (D) improved
- (33) The ___ between stress and strain is linear initially.
(A) relate, (B) relation, (C) relative, (D) relatively
- (43) Engineers need ___ data for accurate predictions.
(A) precise, (B) precisely, (C) precision, (D) preciseness

Activity 5 (4 points): Read and answer

Heat treatment processes modify material properties through controlled heating and cooling. Annealing reduces hardness and improves ductility by relieving internal stresses. Quenching increases hardness but may introduce brittleness. Tempering follows quenching to achieve a balance between hardness and toughness. These processes require precise temperature control and timing to achieve desired microstructural changes. Engineers must select appropriate treatment based on material composition and intended application.

- (17) What is the primary purpose of annealing?
(A) Increase hardness, (B) Reduce ductility, (C) Reduce hardness and improve ductility,
(D) Increase brittleness
- (27) Which process typically follows quenching?
(A) Annealing, (B) Tempering, (C) Heating, (D) Cooling
- (37) Why is precise temperature control important?
(A) To save energy, (B) To achieve desired microstructural changes, (C) To speed up
the process, (D) To reduce costs
- (47) What factor determines the appropriate treatment selection?
(A) Laboratory size, (B) Material composition and application, (C) Number of techni-
cians, (D) Time of day

Good luck
Dr. Ouaar, F

ANSWER KEY

Activity 1:

- (1) **A** (to) - The fatigue test is sensitive to surface defects.
- (2) **B** (must) - Laboratory technicians must wear safety equipment at all times.
- (3) **C** (Many) - Many laboratories use advanced imaging techniques.
- (4) **B** (into) - The specimen was placed into the testing machine carefully.

Activity 2:

- (5) **B** (What) - What alloy are we testing today?
- (6) **A** (How long) - How long did the creep test last?
- (7) **C** (Who) - Who performed the hardness measurement?
- (8) **B** (Why) - Why are these standards important?
- (9) **C** (Where) - Where were the samples stored?

Activity 3:

- (10) **A** (is) - If the load is too heavy, the component will fail.
- (11) **B** (would show) - The specimens would show better results if they were heat-treated.
- (12) **B** (will form) - If you mix these elements, you will form a new phase.

Activity 4:

- (13) **B** (examination) - The examination of the microstructure revealed defects.
- (14) **B** (improves) - This process improves the mechanical properties significantly.
- (15) **B** (relation) - The relation between stress and strain is linear initially.
- (16) **A** (precise) - Engineers need precise data for accurate predictions.

Activity 5:

- (17) **C** (Reduce hardness and improve ductility)
- (18) **B** (Tempering)
- (19) **B** (To achieve desired microstructural changes)
- (20) **B** (Material composition and application)

Good luck with your studies

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