Assignment 12

The due date for submitting this assignment has passed.

Due on 2019-10-23, 23:59 IST.

Instructions for answering numerical questions:
1. In all numerical type questions, you are expected to round off the answers to the decimal places accuracy unless otherwise specified.
   - For exam, if you round off 0.88 to 0.9, you get a mark.
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2. If an answer is expected in a specific unit, the answer must be rounded off to the number of decimal places specified in the question.
3. The answers to numerical questions are to be reported in the following units unless otherwise specified: (Kg/10^2, N/mm, N/mm^2, MPa, etc.)
4. Use of the correct symbol in the numerical question is mandatory.
5. Any answer that is not in the correct units will not be accepted.

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Week 11

1. The correct order of occurrence of stages during the crack tip is:
   - Initiation zone
   - Propagation zone
   - Craze zone
   - Fracture Process zone
   - Fatigue Process zone

   Accepted Answers:
   - A = B = C
   - A = C = B
   - B = A = C

   No, the answer is incorrect.

2. A crack arrest mechanism is observed in the following options:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   Accepted Answers:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   No, the answer is incorrect.

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Week 12

3. If a is the crack tip opening displacement (CTOD), the A is the tip of a single crack, and C is the tip of a double crack, then which of the following is true?
   - A = B
   - A = C
   - B = C

   Accepted Answers:
   - A = B
   - A = C
   - B = C

   No, the answer is incorrect.

4. A crack arrest mechanism is observed in the following options:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   Accepted Answers:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   No, the answer is incorrect.

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Exam Review

1. The critical stress intensity factor is independent when:
   - The crack area is increased
   - The crack length is varied
   - The area is increased
   - The crack is loaded

   Accepted Answers:
   - The crack area is increased
   - The crack length is varied
   - The area is increased

   No, the answer is incorrect.

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Week 10

5. The stress intensity factor is:
   - a crack size
   - a crack size
   - a crack size
   - a crack size

   Accepted Answers:
   - a crack size
   - a crack size
   - a crack size
   - a crack size

   No, the answer is incorrect.

6. A crack arrest mechanism is observed in the following options:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   Accepted Answers:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   No, the answer is incorrect.

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Week 9

7. The correct order of occurrence of stages during the crack tip is:
   - Initiation zone
   - Propagation zone
   - Craze zone
   - Fracture Process zone
   - Fatigue Process zone

   Accepted Answers:
   - A = B = C
   - A = C = B
   - B = A = C

   No, the answer is incorrect.

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Week 8

8. A crack arrest mechanism is observed in the following options:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   Accepted Answers:
   - welded joints
   - inserted joints
   - brazed joints
   - none of the above

   No, the answer is incorrect.

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Week 7

9. The correct order of occurrence of stages during the crack tip is:
   - Initiation zone
   - Propagation zone
   - Craze zone
   - Fracture Process zone
   - Fatigue Process zone

   Accepted Answers:
   - A = B = C
   - A = C = B
   - B = A = C

   No, the answer is incorrect.

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Week 6

10. A crack arrest mechanism is observed in the following options:
    - welded joints
    - inserted joints
    - brazed joints
    - none of the above

    Accepted Answers:
    - welded joints
    - inserted joints
    - brazed joints
    - none of the above

    No, the answer is incorrect.