Assignment No. 8

The due date for submitting this assignment has passed. Due on 2019-09-25, 23:59 IST. As per our records you have not submitted this assignment.

1) In machining operation, Uncut chip thickness $t_0=0.8$ mm and Chip thickness $t_c=1.2$ mm. The correct option for the chip thickness ratio ($r$) is

- 0.4  
- 0.66  
- 0.83  
- 1.5

No, the answer is incorrect. 
Score: 0 
Accepted Answers: 0.66

2) The tool angle which helps in reducing the rubbing of the machined surface to the flank of the tool is

- Rake angle  
- Cutting edge angle  
- Clearance angle  
- Nose radius

No, the answer is incorrect. 
Score: 0 
Accepted Answers: Clearance angle

3) On increasing shear plane angle ($\phi$), cutting force required for metal cutting

- 1 point
Lecture 37: Material Removal Processes: Chip Formation (unit? unit=54&lesson=56)

Lecture 38: Material Removal Processes: Types of Chips and Power Consumption (unit? unit=54&lesson=57)


Lecture 40: Material Removal Processes: Tool Failure and Tool Life (unit? unit=54&lesson=59)

Quiz: Assignment No. 8 (assessment? name=108)

Solution for Assignment No. 8 (unit? unit=54&lesson=127)

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Week 10

Week 11

Week 12

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- Reduces
- Increases
- Remains same
- First increases then constant

No, the answer is incorrect.
Score: 0
Accepted Answers: *Reduces*

4) A process which uses a multi-point cutting tool is *1 point*

- Boring
- Hobbing
- turning
- Necking

No, the answer is incorrect.
Score: 0
Accepted Answers: *Hobbing*

5) During metal cutting, type of chip formation depends on *1 point*

- Workpiece material
- Cutting speed
- Depth of cut
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: *All of the above*

6) Work material tends to adhere or cold weld with the cutting edge in case of *1 point*

- Discontinuous chips
- Continuous chips
- Continuous chips with built up edges
- Segmented chips

No, the answer is incorrect.
Score: 0
Accepted Answers: *Continuous chips with built up edges*

7) In metal cutting operations, secondary deformation occurs at *1 point*

- Chip-tool interface
- Below tool tip
- In uncut chip away from tool tip
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers: *Chip-tool interface*

8) Crater wear on tool during metal cutting occurs at *1 point*

- Nose

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9) Specific power consumption is reduced with increase of

- Cutting speed
- Feed rate/ depth of cut
- Hardness and strength of metal
- All of the above

No, the answer is incorrect. Score: 0
Accepted Answers: Feed rate/ depth of cut

10) At high cutting speed, high temperature at tool-chip interface is caused by

I. Heat generation rate increases with an increase in cutting speed
II. Friction coefficient (µ) decreases with an increase in cutting speed
III. The time required to transfer the heat decreases with an increase in cutting speed
IV. Localization of heat takes place with an increase in cutting speed

- (I), (III) and (IV)
- (I), (II), (III) and (IV)
- (I), (II) and (III)
- (II), (III) and (IV)

No, the answer is incorrect. Score: 0
Accepted Answers: (I), (III) and (IV)