Unit 12 - Week 10 - Electro-discharge Machining Process

Assignment 10

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-04-08, 23:59 IST.

Assignment 10

1) What is the most preliminary condition for selecting workpiece in ECM? *1 point*

- Workpiece must be brittle.
- Workpiece must be conductive.
- Workpiece surface must have mirror finish.
- Workpiece must be rectangular in shape.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Workpiece must be conductive.

2) Which of the following is the most appropriate reason for designing for electrolyte flow? *1 point*

- To carry away heat.
- To carry away machining products.
- To have machining at required feed rate.
- All of the above.

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

3) Which of the following is the primary function of electrolyte in ECM? *1 point*

- Completing the electrical circuit.
- Sustaining the required electrochemical reactions.
- Carrying away the generated heat/waste product.
- All of the above.

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

4) Electrochemical drilling observes: *1 point*

- Increase in hydraulic forces.
- Decrease in hydrolic forces.
- No effect related to hydraulic forces.
- None of the above.

No, the answer is incorrect.
Score: 0
Accepted Answers:
Increase in hydraulic forces.

5) What is the percentage of material removed in electrochemical grinding by mechanical abrasive action and electrochemical dissolution respectively? *1 point*

- 50% and 50%
- 30% and 70%
- 10% and 90%
- 70% and 30%

No, the answer is incorrect.
Score: 0
Accepted Answers:
10% and 90%

6) Life of a ECG grinding wheel is: *1 point*

- Half of the conventional grinding wheel.
- 100 times more than conventional grinding wheel.
- Same as that of conventional grinding wheel.
- 10 times more than conventional grinding wheel.

No, the answer is incorrect.
Score: 0
Accepted Answers:
10 times more than conventional grinding wheel.

7) Which of the following material cannot be machined using electronic discharge machine? *1 point*

- Iron
- Wood
- Aluminum
- Copper

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

8) The most important function of dielectric medium in EDM is: *1 point*

- To serve as medium only.
- To decrease the material removal rate.
- To flush away the debris and assist spark.
- None of the above.

No, the answer is incorrect.
Score: 0
Accepted Answers:
To flush away the debris and assist spark.

9) For maximum power delivery using resistance capacitance relaxation circuit in EDM, discharge voltage should be ___ % of the supply voltage? *1 point*

- 80
- 72
- 23
- 65

No, the answer is incorrect.
Score: 0
Accepted Answers:
72

10) In electric discharge machining, the pulse cycle time (t_c) can be obtained using the relation: (R and C are resistance and capacitance of the circuit; V_0 is the applied voltage, and V_d is discharge voltage) *1 point*

- $t_c = RC\log_e (V_d/(V_0-V_d))$
- $t_c = RC\log_e (V_0/(V_0-V_d))$
- $t_c = RC\log_e ((V_0-V_d)/V_d)$
- $t_c = RC\log_e ((V_0-V_d)/V_0)$

No, the answer is incorrect.
Score: 0
Accepted Answers:
$t_c = RC\log_e (V_0/(V_0-V_d))$