





PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 1

Not yet
answered

Marked out of
2.00

Flag
question

Rockwell test utilizes _____ as a measure of hardness.

- ☐ a. Load
- ☐ b. Diameter of indentation
- ☐ c. Time of loading
- ☒ d. Depth of indentation

[Clear my choice](#)

[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:29:10



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 2

Not yet
answered

Marked out of
2.00

Flag
question

The method that you used to construct the phase diagram in the lab is:

- ☒ a. The thermal analysis technique
- ☐ b. The grain size calculation technique
- ☐ c. The casting technique
- ☐ d. The mechanical properties technique

[Clear my choice](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	

[Finish attempt ...](#)

Time left 0:28:49



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 3

Not yet
answered

Marked out of
2.00

Flag
question

It is recommended to use silicon carbide wheels to cut:

- ☐ a. Ferrous alloys
- ☒ b. non-ferrous alloys
- ☐ c. Ceramic materials
- ☐ d. Sintered carbide materials

[Clear my choice](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	

[Finish attempt ...](#)

Time left **0:27:57**

[Previous page](#)[Next page](#)



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 4

Not yet
answered

Marked out of
2.00

Flag
question

The degree of segregation is determined by:

- ☐ a. Mechanical testing
- ☐ b. Macroetching
- ☒ c. Microetching
- ☐ d. Carburizing

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:25:52



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 5

Not yet answered

Marked out of 2.00

[Flag question](#)

Defects are revealed, in the radiographic testing, through:

- ☐ a. Shadows on the radiograph
- ☐ b. waves that are introduced to the component under the test and the time which elapses between the transmission signal and the return of the reflected echo form the back wall of the component
- ☐ c. The indication of the transmitted pulses and reflected echoes, and the measurement of the time interval between them
- ☒ d. B and C

[Clear my choice](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	21

[Finish attempt ...](#)

Time left 0:22:56



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 6

Not yet answered

Marked out of 2.00

Flag question

The following tests are not used for micro-hardness testing:

☒ a. Brinell only

☐ b. Knoop only

☐ c. Vickers only

☐ d. B and C

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:20:47



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 7

Not yet answered

Marked out of 2.00

Flag question

What is the disadvantage of the Knoop hardness test?

- ☐ a. Soft indenter
- ☒ b. Cannot use thin specimen
- ☐ c. High load required
- ☐ d. Elastic recovery

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:19:40



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 8

Not yet
answered

Marked out of
2.00

Flag
question

When calculating the case depth for the carburized specimen, the formula in question 8 is used. This means that:

- ☐ a. the temperature is not a factor
- ☒ b. The temperature is implicitly included in D
- ☐ c. A part is included in t and another part is included in D
- ☐ d. The temperature is implicitly included in t

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:18:41



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 9

Not yet
answered

Marked out of
2.00

Flag
question

The grain size number (ASTM method) can be determined by the following formula:

(N - grain size number is, n - the number of grains per square inch area and magnification 100x)

- ☐ a. $N=2^{(n-1)}$
- ☒ b. $N=1 + (\log n)/(\log 2)$
- ☐ c. $n-1=2^N$
- ☐ d. $n=2^N$

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:16:39



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 10

Not yet answered

Marked out of 2.00

Flag question

What is a limitation of the Rockwell test?

- ☐ a. Slow speed
- ☒ b. Bigger size of indentation
- ☐ c. Personal error
- ☐ d. Different indenters

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:15:56



Stay in touch



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 11

Not yet answered

Marked out of 2.00

[Flag question](#)

The grinding direction of successive steps should be:

- ☒ a. perpendicular to each other
- ☐ b. no matter whatever the direction
- ☐ c. Parallel to each other
- ☐ d. opposite to each other

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:15:36



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 12

Not yet answered

Marked out of 2.00

Flag question

Flow lines of material after forging can be examined by

- ☐ a. Sulphur printing
- ☐ b. Cross section through a carburized bar with a case depth of 1mm
- ☐ c. Macro etching examination
- ☒ d. A and C

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	

[Finish attempt ...](#)

Time left 0:13:48



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 13

Not yet answered

Marked out of 2.00

Flag question

Eddy current testing is the most widely used non-destructive testing technique:

- ☐ a. in the non-ferrous wrought metal industries
- ☐ b. the ferrous wrought metal industries
- ☐ c. for the detection of surface and near surface defects in products of uniform section such as bars, rods, tubes and wire
- ☒ d. a and c

[Clear my choice](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	21

[Finish attempt ...](#)

Time left 0:11:59

[Previous page](#)

[Next page](#)



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 14

Not yet answered

Marked out of 2.00

Flag question

Which order is right for dye penetration inspection method?

- ☐ a. Penetrant apply, development, surface preparation, inspection
- ☒ b. Surface preparation, penetrant apply, development, inspection
- ☐ c. Penetrant apply, development, inspection, surface preparation
- ☐ d. Development, surface preparation, penetrant apply, inspection

[Clear my choice](#)

[Previous page](#)

[Next page](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	

[Finish attempt ...](#)

Time left 0:11:03



Stay in touch



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question **15**

Not yet
answered

Marked out of
2.00

Flag
question

The magnetic particle method of inspections is a procedure used to:

- ☐ a. determine the presence of defects near the surface of non ferromagnetic objects
- ☐ b. determine the presence of defects at or near the surface of ceramic objects
- ☐ c. determine the presence of defects at the surface of ferromagnetic objects only
- ☒ d. determine the presence of defects at or near the surface of ferromagnetic objects

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:09:59



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 16

Not yet answered

Marked out of 2.00

[Flag question](#)

The heterogeneous grain structure results from:

- ☒ a. different solidification rates, crystal growth, gas evolvement, or thermal processing
- ☐ b. variations result from segregation due to impurities in the metal or from surface treatments such as carbonizing
- ☐ c. plastic deformation in forged or rolled parts. Such properties greatly affect structure and performance
- ☐ d. the ability to predict the performance of a materials in service

[Clear my choice](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	21

[Finish attempt ...](#)

Time left 0:07:51



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 17

Not yet answered

Marked out of 2.00

Flag question

In Sulphur printing, the paper will darken due to formation of:

- ☐ a. AgBr
- ☒ b. Ag₂S
- ☐ c. HBr
- ☐ d. MnSO₄

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:06:21



Stay in touch



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 18

Not yet answered

Marked out of 2.00

[Flag question](#)

Steels containing _____ carbon are used for carburizing.

☐ a. B and C

☐ b. 0.4-0.6%

☒ c. 0.1-0.2%

☐ d. 0.2-0.35%

[Clear my choice](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:04:52

[Previous page](#)

[Next page](#)



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question 19

Not yet answered

Marked out of 2.00

Flag question

Prevention of carburizing of components can be done by

- ☐ a. Cold working
- ☐ b. Adding water
- ☒ c. Electroplating
- ☐ d. Adding filler

[Clear my choice](#)

[Previous page](#)[Next page](#)

Quiz navigation

1	2	3	4
9	10	11	12
17	18	19	20

[Finish attempt ...](#)

Time left 0:04:25



PROPERTIES OF ENG.MATERIALS LAB.

[Home](#)[My courses](#)[PROPERTIES OF ENG.MATERIALS LAB.](#)[27 December - 2 January](#)[LAB Final exam 2020-2021-1](#)

Question **20**

Not yet
answered

Marked out of
2.00

Flag
question

Removal of hard sample material is done by

- ☒ a. Abrasive cutoff wheel
- ☐ b. Manual hacksawing
- ☐ c. Piercing
- ☐ d. Oxy-fuel burning

[Clear my choice](#)

[Previous page](#)

[Finish attempt ...](#)

Quiz navigation

1	2	3	4	5
9	10	11	12	13
17	18	19	20	

[Finish attempt ...](#)

Time left 0:01:38



Stay in touch

8. Which scale is used to test softer materials?

- a) A
- b) B
- c) C
- d) D

 [View Answer](#)

Answer: b



Figure 8. A typical grinding machine



Figure 9. Polishing machines.

