

## English Language 1, INFORMATION TECHNOLOGIES IN MECHANICAL ENGINEERING: PRACTICE UNITS 1–8: QUESTIONS

PRACTICE UNIT 1	
1.	Describe the process of magnetic levitation and the functioning of the maglev train.
2.	Describe the advantages and downsides of the maglev technology.
3.	Describe the meaning of the words <b>DRAG</b> , <b>RETRACTABLE</b> and <b>TO REPEL</b> .
4.	Compare the benefits and shortcoming of maglev trains and high-speed rail (writing task).
5.	<b>Present Simple</b> (structure, use, examples, solving the tasks from the Practice Book)
6.	<b>Present Progressive</b> (structure, use, examples, solving the tasks from the Practice Book)

PRACTICE UNIT 2	
1.	Define the term CAD and discuss the advantages of using CAD in engineering.
2.	Describe the historical development of CAD.
3.	Describe the SolidWorks software (history, functioning).
4.	Describe the meaning of the words <b>SKETCH</b> , <b>PROTOTYPE</b> and <b>PIONEER</b> .
5.	Describe the possible uses of Catia and nTopology for engineering purposes (writing task).
6.	<b>Countable and uncountable nouns</b> (definitions, examples, solving the tasks from the Practice Book)
7.	Quantifiers <b>a little/little</b> and <b>a few/few</b> (definitions, examples, solving the tasks from the Practice Book)
8.	<b>Past Simple</b> (structure, use, examples, solving the tasks from the Practice Book)
9.	<b>Past Progressive</b> (structure, use, examples, solving the tasks from the Practice Book)
10.	<b>Past Perfect</b> (structure, use, examples, solving the tasks from the Practice Book)

PRACTICE UNIT 3	
1.	Describe the development of the imperial and metric systems.
2.	Describe at least TWO interesting events from Newton's life.
3.	Describe the meaning of the words <b>GALLOWS</b> , <b>BODKIN</b> and <b>PLAGUE</b> .
4.	Report on the importance of Newton's work for modern mechanical engineering (writing task).
5.	<b>Type 0</b> conditional sentences (structure, use, examples, solving the tasks from the Practice Book)
6.	<b>Type 1</b> conditional sentences (structure, use, examples, solving the tasks from the Practice Book)

## English Language 1, INFORMATION TECHNOLOGIES IN MECHANICAL ENGINEERING: PRACTICE UNITS 1–8: QUESTIONS

7.	<b>Type 2</b> conditional sentences (structure, use, examples, solving the tasks from the Practice Book)
8.	<b>Type 3</b> conditional sentences (structure, use, examples, solving the tasks from the Practice Book)

PRACTICE UNIT 4	
1.	Explain how hydrogen can be used as a fuel and define the essence of the three types of hydrogen.
2.	Define the term carbon footprint and explain how it can be calculated.
3.	Explain what can be done in general to reduce carbon footprint.
4.	Compare the richer countries and the poorer countries with regard to their carbon footprint.
5.	Report on the possibilities of reducing the carbon footprint of our country (writing task).
6.	<b>Present Perfect</b> (structure, use, examples, solving the tasks from the Practice Book)
7.	<b>Present Perfect Progressive</b> (structure, use, examples, solving the tasks from the Practice Book)
8.	<b>Expressing the future in English</b> (specific tenses/constructions, use, examples, solving the tasks from the Practice Book)

PRACTICE UNIT 5	
1.	Provide the terms for geometric shapes and figures and provide adjectives derived from these nouns.
2.	Define what a triangle is and provide the definition of the Pythagorean theorem.
3.	State the types of triangles and provide their definitions.
4.	Describe the essence of the Appel and Haken's four-colour theorem.
5.	Elaborate on the work of the Lean community.
6.	Describe the meaning of the words <b>ABACUS</b> , <b>THEOREM</b> and <b>TO MINE</b> .
7.	Report on the importance of mathematics in the engineering profession (writing task).
8.	<b>Tenses in context</b> (solving the tasks from the Practice Book)
9.	<b>Prepositions - revision</b> (solving the tasks from the Practice Book)

PRACTICE UNIT 6	
1.	Describe the difference between ferrous and non-ferrous metals and provide examples.
2.	Describe what superalloys are and elaborate on their origin and properties.

## English Language 1, INFORMATION TECHNOLOGIES IN MECHANICAL ENGINEERING: PRACTICE UNITS 1–8: QUESTIONS

3.	Describe the use of superalloys in aviation.
4.	Describe the meaning of the phrases <b>TO RETAIN</b> , <b>MELTING POINT</b> and <b>A GOLDEN AGE</b> .
5.	Describe the recent advances in materials science (writing task).
6.	<b>Plural of nouns of Greek and Latin origin</b> (rules, examples, solving the tasks from the Practice Book)
7.	<b>Passive voice</b> (structure, use, examples, solving the tasks from the Practice Book)

	<b>PRACTICE UNIT 7</b>
1.	Describe the recent advances in joining processes in mechanical engineering (writing task).
2.	Describe the meaning of the words <b>MACHINERY</b> , <b>COG</b> and <b>FLYWHEEL</b> (literal and extended meanings, examples)
3.	Describe the meaning of the words <b>FLYWHEEL</b> and <b>RUSTY</b> (literal and extended meanings, examples)
4.	Describe the meaning of the word <b>CLOCKWORK</b> , the words <b>NUT</b> and <b>BOLT</b> and the phrase <b>NUTS AND BOLTS</b> (literal and extended meanings, examples)
5.	Comparison of <b>adjectives</b> (rules, regular and irregular comparison, examples, solving the tasks from the Practice Book)
6.	Comparison of <b>adverbs</b> (rules, regular and irregular comparison, examples, solving the tasks from the Practice Book)

	<b>PRACTICE UNIT 8</b>
1.	Describe the essentials of the two-stroke and four-stroke engines and compare them.
2.	Elaborate the issues related to the use of cobalt in lithium-ion batteries.
3.	Elaborate on the possibility of switching to the batteries that use less or no cobalt at all.
4.	Describe the meaning of the words <b>TO RESOLVE</b> , <b>BY-PRODUCT</b> and <b>DEPENDENCY</b> .
5.	Report on the recent advances in electric car development (writing task).
6.	<b>Modal verbs</b> (structure, use, examples, solving the tasks from the Practice Book)
7.	<b>Passive voice with modals</b> (rule, examples, solving the tasks from the Practice Book)