Started on	Wednesday, 11 September 2024, 2:32 PM
State	Finished
Completed on	Wednesday, 11 September 2024, 2:59 PM
Time taken	27 mins 5 secs
Marks	1.00/3.00
Grade	**1.00** out of 3.00 (**33.36**%)

Information

Information

This page contains all the problems for this test. The very last problem asks you to contact the person in charge of the exam and tell him or her the 4-digit key given in the problem text. In return you will be given a 5-digit signing code which you must give as the answer to the problem.

This problem does not count towards the final score, but **tests missing this code will not count towards the final grade**.

The following rules apply:

- Total time allowed: 30 minutes. The test will automatically close if time runs out.
- UiA's usual rules in regards to cheating on exams apply.

Question **1**

Incorrect

Mark 0.00 out of 1.00

What is the contraposition of the following formula?

$$(p \vee \neg q) \implies (s \vee \neg t)$$

Hints:
$\neg(A \wedge B) = \neg A \vee \neg B$
$\neg(A \vee B) = \neg A \wedge \neg B$
$A \implies B = \neg A \vee B$

Select the precedent and the antecedent of the implication.

¬ p ∧ ¬ q ⟹ ¬ s ∧ ¬ t

Question **2**

Incorrect

Mark 0.00 out of 1.00

Translate the following numbers into the other bases and provide the intermediate division results (in base 10).

2766_{10} = 1383 $_5$ with 2766

2766_{10} = 7468 $_{27}$ with 2766

$25G_{20}$ = 500/3 $_3$ with 25

Example:

$1234_{10} = 86A_{12}$ with [1234, 102, 8, 0]

Your last answer was interpreted as follows:

1383

Your last answer was interpreted as follows:

2766

Your last answer was interpreted as follows:

7468

Your last answer was interpreted as follows:

2766

Your last answer was interpreted as follows:

500/3

Your last answer was interpreted as follows:

25

Question **3**

Correct

Mark 1.00 out of 1.00

Consider the grammar

$$\big(\{a,b,c\},\{S,A,B,C\},S,\{(S,A),(S,AB),(S,AC),(S,B),(A,Aa),(A,aA),(B,bB),(C,c)\}\big).$$

Select all the strings that can be generated by this grammar.

- [ ] c
- [ ] bc
- [ ] acc
- [ ] bb
- [ ] ab
- [ ] abba
- [ ] aaab
- [ ] a
- [ ] abcccc
- [ ] abbbcc
- [x] None of the above

Question **4**

Correct

Mark 0.00 out of 0.00

Signing code

Before closing the test you must answer this problem with a signing code given to you by the person in charge of the test.

Tests missing this signing code will be ignored and will not count towards the final score.

Key: 522

Signing code: 22143

Your last answer was interpreted as follows:

22143

◀ Technical test

Jump to...