

VIRTUAL UNIVERSITY OF PAKISTAN

A Good Education is a Foundation For a Better Future
CORRECT ANSWER SOLVED BY HADI
EMAIL: hadirajputofficial@gmail.com
WHATSAPP& CALL: 03087122922
TEAM HADI(VU LAHORE)

MID TERM PAST PAPER

We Deal All Kind of VU Project
(PHP, .NET, ANDROID, PYTHON)

MADE AND SOLVED BY HADI

WARNING: Team HADI is not responsible for any mistake or wrong answer. All students reading and using this document may check and confirm the answers at their own.



WhatsApp: 03087122922



FACEBOOK ID: <https://www.facebook.com/hadipastpapers/>

Best of luck!



Question No : 1 of 26

Marks: 1 (Budgeted Time 1 Min)

In compilers, linear analysis is also called _____.

Answer (Please select your correct option)

☐ Lexical analysis

☐ Scanning

☒ Lexical analysis and scanning

☐ None of the given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

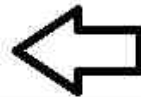
Question No : 2 of 26

Marks: 1 (Budgeted Time 1 Min)

Back End of two-pass compiler uses _____ algorithm.

Answer (Please select your correct option)

- ☐ $O(n)$
- ☐ $O(n \log n)$
- ☐ NP Complete
- ☐ None of the Given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

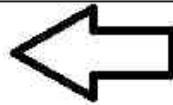
Question No : 3 of 26

Marks: 1 (Budgeted Time 1 Min)

The Back End of a compiler consist of _____

Answer (Please select your correct option)

☐ Instruction selection



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ Register allocation

☐ Instruction scheduling

☐ All of the given

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 4 of 26

Marks: 1 (Budgeted Time 1 Min)

In Back End module of compiler, optimal register allocation uses _____.

Answer (Please select your correct option)

☐ $O(\log n)$

☐ $O(n \log n)$

☒ NP-Complete

☐ None of the given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

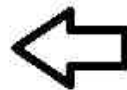
Question No : 5 of 26

Marks: 1 (Budgeted Time 1 Min)

A lexeme is a sequence of characters in the source program that is matched by the pattern for a _____.

Answer (Please select your correct option)

- ☐ Linker
- ☐ Token
- ☐ Control flow
- ☐ None of given



Correct Ans
usmanraj2
0322804

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 6 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ is a regular expression for the set of all strings over the alphabet $\{a\}$ that has an even number of a 's.

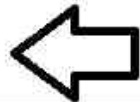
Answer (Please select your correct option)

☐ aa^*

☐ $(aa)^*$

☐ aa^*a

☐ $a(aa)^*$



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

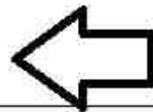
Question No : 7 of 26

Marks: 1 (Budgeted Time 1 Min)

What kind of abstract machine can recognize strings in a regular set?

Answer (Please select your correct option)

☐ DFA



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ NFA

☐ PDA

☐ None of the given

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 8 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ algorithm is used in DFA minimization.

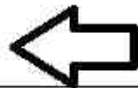
Answer (Please select your correct option)

☐ James's

☐ Robert's

☐ Hopcroft's

☐ None of given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122922 (Team Hadi Lahore)

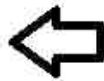
Question No : 9 of 26

Marks: 1 (Budgeted Time 1 Min)

In DFA minimization, we construct one _____ for each group of states from the initial DFA.

Answer (Please select your correct option)

- ☐ State
- ☐ NFA
- ☐ PDA
- ☐ None of given



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 10 of 26

Marks: 1 (Budgeted Time 1 Min)

In Flex specification file, different sections are separated by _____.

Answer (Please select your correct option)

☐ %%



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ &&

☐ ##

☐ None of given

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122922 (Team Hadi Lahore)

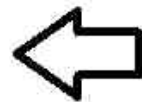
Question No : 11 of 26

Marks: 1 (Budgeted Time 1 Min)

Recursive ____ parsing is done for LL(1) grammar.

Answer (Please select your correct option)

☐ Decent



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ Ascent

☐ Forward

☐ None of the given

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

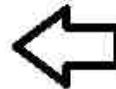
Question No : 12 of 26

Marks: 1 (Budgeted Time 1 Min)

Parser takes tokens from scanner and tries to generate _____.

Answer (Please select your correct option)

- ☐ Binary Search tree
- ☐ Parse tree.
- ☐ Binary Search tree and Parse tree.
- ☐ None of the given



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 13 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ is an important component of semantic analysis.

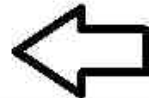
Answer (Please select your correct option)

☐ Code checking

☒ type checking

☐ Flush checking

☐ None of the given



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

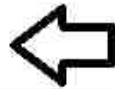
Question No : 14 of 26

Marks: 1 (Budgeted Time 1 Min)

In predictive parsing table, the rows represents _____.

Answer (Please select your correct option)

- ☐ Terminals
- ☐ Both non-terminal and terminals
- ☒ Non-terminals
- ☐ None of the given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

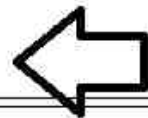
Question No : 15 of 26

Marks: 1 (Budgeted Time 1 Min)

In LL(1) parsing algorithm, ____ contains a sequence of grammar symbols.

Answer (Please select your correct option)

☐ Stack



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ Link List

☐ Array

☐ None of the given.

MADE BY HADI

Email: hadirajputofficial@gmail.com WhatsApp: 0308 7122 922 (Team Hadi Lahore)

Question No : 16 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

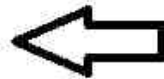
$$A \rightarrow B C D$$

$$B \rightarrow h B \mid \varepsilon$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

Answer (Please select your correct option)

☐ h, g, i



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

☐ g

☐ h

☐ None of the given.

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid \varepsilon$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

first of B is

Answer (Please select your correct option)

☐ h, i

☐ h, ε

☐ g

☐ None of the given.



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 17 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B \mid \varepsilon$
 $C \rightarrow C g \mid g \mid C h \mid i$
 $D \rightarrow A B \mid \varepsilon$

First of B is _____.

Answer (Please select your correct option)

☐ h, i

☐ h, ε

☐ g

☐ None of the given.



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122922 (Team Hadi Lahore)

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid \varepsilon$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

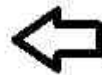
Answer (Please select your correct option)

☐ h, g

☐ h

☐ h, g, i, ε

☐ None of the given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 18 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B | \epsilon$
 $C \rightarrow C g | g | C h | i$
 $D \rightarrow A B | \epsilon$

First of D is _____.

Answer (Please select your correct option)

- ☐ h, g
- ☐ h
- ☒ h, g, i, ϵ
- ☐ None of the given



Correct Answer Solved By Hadi

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

Consider the grammar

$$A \rightarrow B C D$$

$$B \rightarrow h B \mid \varepsilon$$

$$C \rightarrow C g \mid g \mid C h \mid i$$

Answer (Please select your correct option)

☐ h, \$

☐ i

☐ g, \$

☐ None of the given.

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 19 of 26

Marks: 1 (Budgeted Time 1 Min)

$A \rightarrow B C D$
 $B \rightarrow h B \mid \epsilon$
 $C \rightarrow C g \mid g \mid C h \mid i$
 $D \rightarrow A B \mid \epsilon$

Follow of D is ____.

Answer (Please select your correct option)

☐ h, \$

☐ i

☐ g, \$

☐ None of the given.

MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

Question No : 20 of 26

Marks: 1 (Budgeted Time 1 Min)

_____ parsers never shifts into an error state.

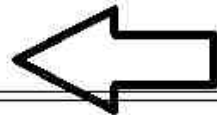
Answer (Please select your correct option)

☐ LS

☐ LT

☒ LR

☐ LP



Correct Answer Solved By Hadi
usmanraj20@gmail.com
03228043306

MADE BY HADI

Question No : 21 of 26

Marks: 2 (Budgeted Time 4 Min)

Write a regular expression for the language of all words that starts and ends with different letters.

Answer ([Please click here to Add Answer](#))



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 22 of 26

Marks: 2 (Budgeted Time 4 Min)

How linker plays an important role with respect to compiler construction?

Answer (Please [click here](#) to Add Answer)



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122922 (Team Hadi Lahore)

Question No : 23 of 26

Marks: 3 (Budgeted Time 6 Min)

Can we call shift-reduce parsing as bottom up parsing? Justify your answer with reason.

Answer ([Please click here to Add Answer](#))



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 24 of 26

Marks: 3 (Budgeted Time 6 Min)

Considering the following grammar, calculate the first set of non-terminals S, A and B.

$S \rightarrow AB$

$A \rightarrow a | \epsilon$

$B \rightarrow b | \epsilon$

Answer (Please [click here to Add Answer](#))



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Question No : 25 of 26

Marks: 5 (Budgeted Time 10 Min)

Suppose that you are going to construct a compiler for a regular language and currently you are constructing a suitable predictive parsing from the grammar. If you have a production rule which is not clear to expand a non-terminal then how will you handle this situation and what will you name this procedure.

Answer (Please [click here](#) to Add Answer)



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 03087122922 (Team Hadi Lahore)

Considering string "ab", show that the following grammar is ambiguous using parse trees. The ϵ below is epsilon.

$$S \rightarrow ABAB$$
$$A \rightarrow aA \mid \epsilon$$
$$B \rightarrow bB \mid \epsilon$$

Answer (Please [click here to Add Answer](#))



MADE BY HADI

Email: hadirajputofficial@gmail.com Whatsapp: 0308 7122 922 (Team Hadi Lahore)

HADI VU PAST PAPER

WE DEAL ALL KIND OF VU PROJECT
(PHP, ANDROID, PYTHON)

DEAR STUDENTS

ARE YOU LOOKING
FOR ASSISTANCE

- 1) ASSIGNMENTS
- 2) QUIZZES
- 3) GDB
- 4) GRAND QUIZZES

We Provide, You Solution
of VU Academic Activities
include Assignments,
Quizzes, GDBs, Grand Quizzes
If You Need Help in Services
Kindly inform us.

TEAM HADI
(VU LAHORE)



TEAM HADI
(VU LAHORE)



HADI TECH

#PAID_TASK

CONTACT US

CALL & WHATSAPP

0308-7122922