CRULP Torwali 2 Level (2L) Keyboard Layout

V1.0 for Windows

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CENTER FOR RESEARCH IN URDU LANGUAGE PROCESSING

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Revision History

Name	Change Date	Version	Description of Changes
Ahmed Muaz	24-03-2010	1.0	Initial document

1. Introduction

The CRULP Torwali 2 Level (2L) Keyboard Layout v1.0 is developed to support Torwali characters to be typed easily along with Urdu characters. This keyboard is based on the "Urdu Phonetic 2 Level (2L) Keyboard Layout v1.0". The layout of the keyboard is similar with the Urdu keyboard. The only difference is support of additional characters for Torwali Language.

Center for Research in Urdu Language Processing (CRULP) released "Urdu Phonetic 2 Level (2L) Keyboard Layout v1.0" for Microsoft platform in December 2009. The layout was based on extended version from InPage to incorporate Unicode character set for Urdu. Same as Urdu, Torwali keyboard has two (Base and Shift) faces. Six Torwali Characters have been mapped on shift face. Currently two characters ڲ (U+0772) and ݜ (U+075C)

are not fully supported by rendering engines so temporary Unicode values are assigned to these characters. . It enables user to type these characters as joiners. A new version of NafeesPakistaniWebNaskh (v2.0) has also been released in which support of these characters has been incorporated. This font is downloadable at http://crulp.org/software/localization/Fonts/nafeesPakistaniWebNaskh.html

The users of Windows 2000, Windows XP, Windows Vista and Windows7 can install this keyboard and use it for Torwali Typing.

2. Torwali Support in Nafees Pakistani Web Naskh

Following table elaborates the actual and borrowed Unicode values. The borrowed Unicode values are used in NafeesPakistaniWebNaskh font v2.0 which provides full support of these Torwali characters as joiners.

Table1. Khowar characters and their Unicode values

#	Torwali Character	Actual Unicode	Borrowed Unicode	Shape of Borrowed Unicode
1	أ	0623	supported as non joiner	
2	ݮ	0687	supported	
3	څ	0685	supported	
4	ݲ	**0772**	**069D**	ڝ
5	ژ	0699	supported	
6	ݜ	**075C**	**069C**	ڜ

3. CRULP Torwali Keyboard 2 Level (2L) Layout v1.0

Figure1. Base Version

Figure2. Shift Version