Title of the Programme:

NATIONAL CONFERENCE ON –
"NEW ADVANCES IN PROGRAMMING LANGUAGES AND THEIR
IMPLEMENTATIONS"

Scope and area to be covered:

Due to explosive growth of computing as well as applications particularly in automation, spread of Internet in business trade, computer based education as well as interface of computers with every field, there is a dominant role of diverse programming languages and their implementation.

Due to openness of Internet, sharing information through e-mail, World Wide Web (www) and huge volume of commercial transactions on the Net due to money, finances and trade, as well as due to social networks, the security aspect of implementation of these languages have become very important.

It has been realized that many aspects of computer languages are in parallel with human languages in respect of the syntax and semantic of these languages, translation of languages, extensibility of languages as well as evolution of languages.

Consequently, many researchers pursue the research in languages and there are only finer distinctions whether they are applied for computer understanding or human understanding. It is estimated that future machines will be much more intelligent than present day computers, capable of analyzing and understanding as well as generating the natural languages texts at speed, which are presently only the domain of human being. This will open abundant areas for expansion of knowledge, learning, and overall sharing of knowledge without any boundaries of culture, and linguistics prevalent in different regions.

Looking to above scenario, the Department of Computer Science & Engineering is proposing to hold a conference which will cover the domains of computer as well as the human languages and sharing of research ideas in these area among the participants both from the computer science, linguistics and languages, both from academics and industry.

Thrust areas:

It is expected that Conference submissions will contain elements of all above modalities. Specific topics of interest include, but are not limited to,
Part (A):
- Programming languages Design and implementation
- Object oriented programming system languages and application
- Principles of programming languages
- Dynamic languages
- Principles and practice of parallel programming
- Virtual executive environment
- Languages, compilers and implementation
- Functional programming languages
- Generative programming and component engineering
- Architectural support for programming languages and operating system

PART (B):
- Unification of human and computer languages
- Evolution of Machine and Human Languages
- Generative Grammars
- Language Structures
- Future of Language Evolution
- Paninian Grammars
- Machine Translation of languages
- Machine learning
- Cognition
- Natural Language understanding and generation
- Speech Recognition and Processing
- Chomskian Grammars
- Generative programming
- Other relevant areas

(b) Objective of the Programme:

The conference aims to share the knowledge about the research going on in academics and industry in the areas of computer languages and their implementation in the perspective of emerging scenario where there is openness of knowledge on the Internet, as well as every business and trade activity is migrating to Internet – requiring security of these information; in addition about the ongoing trend of unification of human and machine languages.