

#### (Abstract)

Revised syllabus of *BCA Programme* (6B21BCA -System Software) - under Choice Based Credit Semester System - Implemented with effect from 2014 admissions - Orders Issued.

#### ACADEMIC C SECTION

No. Acad/C2/7857/2014

Dated, Civil Station P.O, 09-02-2017

Read: 1. U.O No. Acad/C2/7857/2014(II) dated 04.07.2014

2. Minutes of the meeting of the BOS in Computer Science (UG) held on 12.01.2017.

### **ORDER**

- 1. As per paper read (1) above, the scheme, syllabus and pattern of question papers for core/open courses in BCA programme were implemented in the university w.e.f 2014 admission.
- 2. As there were certain anomalies in the syllabus of BCA programme implemented w.e.f 2014 admission, the meeting of the BOS in Computer Science (UG) held on 12.01.2017 vide paper read (2) above, has recommended to exclude the topics "Software tools Editor -Debug monitor- Programming environment- User interface" from the 5<sup>th</sup> module of the core course , '6B21BCA System Software' of 6<sup>th</sup> semester BCA programme, implemented w.e.f 2014 admissions.
- 3. The Vice Chancellor, after examining the matter in detail, and in exercise of the powers of the Academic Council as per section 11(1) of Kannur University Act 1996 and all other enabling provisions read together with, has accorded sanction to implement with effect from 2014 admission, the revised syllabus of core course '6B21BCA System Software' of BCA programme incorporating the changes as recommended by the Board of Studies in Computer Science (UG), subject to report to the Academic Council.
  - 4. The modified pages of the syllabus are appended herewith for reference.

- 5. U.O as per the paper read (1) above, stands modified to this extent.
- 6. Orders, are therefore issued accordingly.

# Sd/JOINT REGISTRAR (ACADEMIC) FOR REGISTRAR

To

1. The Examination Branch (through PA to CE)

# Copy To:

- 1. The Chairman, BOS in Computer Science (UG)
- 2. PS to VC/PA to PVC/PA to Registrar
- 3. JR/AR I Academic
- 4. SF/DF/FC.

Forwarded/By Order

**Section Officer** 

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## 6B21BCA - Systems Software

Hours per Week: Theory - 3 Credits: 2

# Objective:

- i. Introduce formal language processing activites.
- ii. Basic idea of assembly language programming and role of assembler.
- iii. Insight into Design of assemblers and macro processors.
- iv. Concept of Macros and Macro preprocessors.
- v. Overview of various aspects of compilers.
- vi. Concepts and design aspects of linkers and loaders.

#### Module I

Introduction – Evolution – Language processing activities – Fundamentals of language processing and specification – Development tools – Data structures for language processing

#### Module II

Scanning and parsing – Elements of ALP – Assembly scheme – Pass structure of assemblers – Two pass assembler – Single pass assembler

#### **Module III**

Macros: Definition and call – Expansion – Nested macro calls - Advanced macro facilities – Macro preprocessor.

#### Module IV

Compiler: Compilation – Memory allocation – Compilation of expressions and control structures – Code optimization – Interpreters.

#### Module V

Linker: Design – Relocation and linking – Self relocating programs – Linker for MS DOS – Linking for Overlays – Loader

#### **Text Book:**

D M Dhamdhere, "Systems Programming and Operating Systems", Tata McGraw-Hill

#### Reference:

John J Donovan, "Systems Programming", Tata McGraw-Hill