**GROUP II**

**Detailed Syllabus for ICT Olympiad**

1. **Hardware :** generation and architecture, storage devices, abbreviations, ports, units of measurements ,I/O devices, conversion of units etc.
2. **Operating systems** : types of OS, scheduling algorithms, functions of OS, clock , memory management, process management, features of Linux/ Unix, basic commands of Linux/ Unix, Language Translators, Acronyms, hardware configuration, fragmentation etc.

* Windows : shortcut keys, menu options , etc.

1. **Adobe PageMaker & Adobe Photoshop :**

Tools and techniques, various menus and its options, shortcut keys, toolbox, palettes , working with layers, colour modes, images and its types ,filter, effects, file extensions.

1. **Gimp & Flash:** various menu options, toolbox, general commands, layers, frames, filters, flash panel, shortcut keys, masking, morphing, file extensions.
2. **Programming languages**

Switch case construct, random function, operators and expressions, inheritance, arrays, structure, union, enum, classes and objects, number systems and conversions oops, call by value, call by reference, default arguments, methods in java, operator overloading, built in functions, communications and networks.

1. **Scripting languages**

General scripting concepts and tags (JavaScript , VB Script)

Built-in functions/ methods

1. **Mobile and cloud computing :**

IOS and android mobile platform, concept of cloud, connectivity, cloud service, advantages, environment etc.

1. **MS Office**

MS Word, MS PowerPoint and MS EXCEL - commands, menu(s), shortcut keys, function keys, file extensions, wizards etc.

Formulas and functions is Excel, concept of Workbook and Worksheet and related commands and concepts etc.

Slide transitions, effects, views, formatting features, various menus in PowerPoint etc..

1. **HTML**

HTML Tags and attributes, Concept of URL, Links and Hyperlinks, Tables, Forms,

Lists, Types of Lists, Protocols etc.

1. **Web Browser & Networking**

Abbreviations, types of networks, WIFI, Bluetooth, Wired and Wireless Network etc., Networking devices, HUBS, Routers, Modems, Switches, gateways, etc., types of networking cables, topology, uses and importance, Networking Modals, Layers, etc., Networking protocols, File transfer, Concept of packets, Concept of servers, Types of Servers, Firewall and network security features and tools, IP and MAC address, Web browsers, Shortcut keys, History of browsers, Data transfer, data communication method, Simplex, Half Duplex, Duplex, Cookies, Cyber Crime and related issues etc. Search engines etc.