(Annexure H-11)

Computer related Courses

of

Bachelor of Science (Honours) Medical laboratory Technology)

Semester - II

Credit Based Continuous Evaluation Grading System

(CBCEGS)

Session: 2024-25

The Heritage Institution

KANYA MAHA VIDYALAYA JALANDHAR (Autonomous)

Kanya Maha Vidyalaya, Jalandhar (Autonomous)

Bachelor of Science (Honours) Medical laboratory Technology)

Session: 2024-25

Credit Based Continuous Evaluation Grading System (CBCEGS)

Bachelor of Science (Honours) Medical laboratory Technology) Semester II										
Course Code	**Course Title**	**Course Type**	**Hours per week**	**Credit**		**Marks**				**Examination Time (in Hours)**
			L-T-P	**L-T-P**	**Total**	**Total**	**Ext.**		**CA**	
							L	**P**		
BMLM-2136	Fundamentals of Data Analytics	C	2-0-2	2-0-1	3	75	30	30	15	3+3

Bachelor of Science (Honours) Medical Laboratory Technology Semester-I
Session 2024-25
COURSE CODE: BMLM - 2136
FUNDAMENTALS OF DATA ANALYTICS

Course Outcomes:

On Completion of this course, the student will be able to:

CO1: To understand the basic functionality of various parts of computer and terminologies related to computers and peripherals

CO2: To work with Word documents and apply various formatting techniques, page setup, creation of tables and other functions required in day-to-day word processing tasks.

CO3: To be able to make presentations, adding graphics, charts, audio, video and applying various themes and transition effects required for making an effective PowerPoint presentation.

CO4: Calculate Mean and Correlation using statistical techniques.

Bachelor of Science (Honours) Medical Laboratory Technology Semester-I
Session 2024-25
COURSE CODE: BMLM - 2136
FUNDAMENTALS OF DATA ANALYTICS

Examination Time: (3+3) Hours
L-T-P: 2-0-1
Credit: 3

Max. Marks: 75
Theory: 30
Practical: 30
CA: 15

Instructions for Paper Setter -

- Eight questions of equal marks (6 marks each) are to be set, two in each of the four Sections (A-D).
- Questions of Sections A-D should be set from Units I-IV of the syllabus respectively.
- Questions may be subdivided into parts (not exceeding four).
- Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any Section.

UNIT I

Computer Fundamentals: Hardware, Software, Memory, Storage devices, I/O Devices and Output Devices, Introduction to Internet and E-Mail.

Word Processing: Creating, Saving and Printing documents, Page setup, Formatting, Spell check, adding Page numbers, Header and Footer, Macros, Creating Tables, Converting table to text and vice versa.

UNIT II

Spreadsheets: Creating Spreadsheets, using different types of functions and Formulae, Cell referencing, create graphs, various types of charts. Pivot tables, vlookup, hlookup, exporting charts to MS – Word.

Create presentations, Formatting, Adding effects and timings.

UNIT III

Data Collection: Meaning, Primary and secondary sources of Data Collection, Sampling and Methods of Sampling.

Measures of Central Tendency: Mean, Median, Mode.

Correlation: Meaning, types of Correlation, Karl Pearson's method of correlation.

UNIT IV

Data Management: Correlation analysis using Excel, Calculation of Mean, Median and Mode using Excel

Data Visualisation Tools: Google Charts and Data Wrapper.

References / Textbooks:

1. Sinha P.K., "Computer Fundamentals", BPB Publications
2. Norton Peter, "Introduction to Computers", McGraw Hill Education
3. Rajaraman V (Author), Adabala N, "Fundamentals of Computers", Prentice Hall India Learning Private Limited
4. Peter Weverka, "Microsoft Office 2016 All-In-One for Dummies", Wiley
5. Amrinder Pal Sngh, Jaspal Singh, Anshuman Sharma, Fundamentals Of Numerical Methods And Statistical Techniques, Lakhanpal Publishers, 4th edition.
6. Kandasamy P.& et AI., Numerical Methods, S. Chand & Company (2006), Reprint Edn. 2006 Edition.