

Subject No. 2
INTRODUCTION TO COMPUTER SCIENCE

Total Hours: 45

Theory Hours: 15

Practical Hours.30

AIM

- To help the student to improve proficiency in computer technique

OBJECTIVES:

- To enable the students to develop the skill in computer technology.
- Make the student to understand the wide use of computer in learning.
- To equip the students with the knowledge of internet.
- To widen the students horizons through an exposure to computer science.

COURSE CONTENT:

Unit I: Introduction:

- Concept of computers: Hardware and software, trends and technology.
- Application of computer in nursing.

Unit II: Introduction to the disk operating system:

- DOS, Windows (all versions), MS-WORD, MS -EXCEL with pictorial presentation, MS-ACCESS, MS- POWERPOINT.

Unit III: Teaching tools:

- Multimedia: types & uses.
- Computer aided teaching and testing.

Unit IV: Use of internet and email:

- Use of internet and email

Unit V: Statistical Package:

- Types and their features.

Unit VI: Hospital Management System:

- Types, Various Packages and its uses.

INTRODUCTION TO COMPUTER SCIENCE

<i>Unit No. & total hours</i>	<i>Objectives</i>	<i>Contents with distributed hours</i>	
		<i>Must know 60%</i>	<i>Desirable to know 30%</i>
I (3 hours)	At the end of unit students are able to Knowledge: Understands concepts of computers and describe hardware and software.	<ul style="list-style-type: none"> • Concept of computers : (1 hour) • Application of computer in nursing (1 hr) 	<ul style="list-style-type: none"> • Hard ware and soft ware, trends and technology. (1 hr)

Unit I							
Course outcome	Programme outcome						
Students should be able to-	Nurse/instructor	Professional	Communicator	Leader & Member	Lifelong learner	Critical	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: Define computer? block diagram of computer?	1	1	2	3	3	2	1
CO-2: Describe the various ristics of computer? .	1	1	2	3	3	2	1
CO-3: Explain the types of software programme?	1	1	2	3	3	2	1
CO-4: What do you understand by hardware? Explain the various hardware devices?	1	1	2	3	3	2	1
CO-5: What are the advantages of using the computers in nursing?	1	1	2	3	3	2	1
CO-6: Discuss the basic stages of computer to work?	1	1	2	3	3	2	1

<p>II (06 hours)</p>	<p>At the end of unit students are able to Knowledge: Acquire knowledge regarding DOS, Windows, MS-Word, Excel, Power point. Skill: Operate various operating systems. Attitude: Recognizes the importance of computers in nursing.</p>	<ul style="list-style-type: none"> • DOS & Windows (all version) (1 hours) • MS-WORD (1 hour) • MS- POWERPOINT (1 hour) 	<ul style="list-style-type: none"> • MS- ACCESS (1 hour) • MS-EXCEL with pictorial presentation (1 hour) • DOS & Windows (all version) (1hours)
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Unit II							
Course outcome	Programme outcome						
Students should be able to-	Nurse/Clinician	Professional	Communicator	Leader & Member	Lifelong learner	Critical thinker	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: Define Operating system. Explain classification of operating system?	1	1	2	3	3	2	1
CO-2: Define MS-DOS? Explain various types of MSDOS?	1	1	2	3	3	2	1
CO-3: What is MS-Word? Discuss the important features of MS- Word?	1	1	2	3	3	2	1
CO-4: Discuss the various advantages of Word processing?	1	1	2	3	3	2	1
CO-5: . Explain protection feature of MS Excel?	1	1	2	3	3	2	1
CO-6: What are Function? Explain any five function in MS Excel, How you use function ?	1	1	2	3	3	2	1
CO-7: What is MS Power Point? What can you do in Power Point?	1	1	2	3	3	2	1

III (02 hours)	At the end of unit students are able to Knowledge: Describe the types and use of computers in teaching. Skill: Apply multimedia in classroom teaching and in testing of tools. Attitude: Use this knowledge in nursing practice.	• Computer aided teaching and testing. (1 hour)	• Multimedia: types & uses. (1 hour)
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Unit III							
Course outcome	Programme outcome						
Students should be able to-	Nurse/Clinician	Professional	Communicator	Leader & Member	Lifelong learner	Critical thinker	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: Explain the meaning of multimedia?	1	1	3	2	3	2	1
CO-2: What are the characteristics of multimedia?	1	1	3	2	3	2	1
CO-3: How the computer aid learning and teaching is useful in every field?	1	1	3	2	3	2	1
CO-4: What are the uses of Multimedia?	1	1	3	2	3	2	1
CO-5: Enumerate various application of Different multimedia program	1	1	3	2	3	2	1

IV (01 hours)	At the end of unit students are able to Knowledge: Describes use of Internet and email. Skill: Utilize Internet services to improve nursing practice. Attitude: Use this knowledge in nursing practice.	• Use of internet and email (1 hour)	
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Unit IV							
Course outcome	Programme outcome						
Students should be able to-	Nurse/Clinician	Professional	Communicator	Leader & Member	Lifelong learner	Critical thinker	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: What is Internet? Explain the network of computer?	1	1	2	3	3	2	1
CO-2: Discuss the advantages of email?	1	1	2	3	3	2	1
CO-3: Write a short note on network topology?	1	1	2	3	3	2	1
CO-4: . Discuss in detail the five major competing topologies?	1	1	2	3	3	2	1
CO-5: Discuss the advantages and disadvantages of each of topologies?	1	1	2	3	3	2	1
CO-6: Write down the development of Internet?	1	1	2	3	3	2	1
V (02 hours)	At the end of unit students are able to Knowledge: Understands types and features of statistical packages. Skill: Apply statistical packages in analysis.			• Statistical Package. (1 hour)			

Unit V							
Course outcome	Programme outcome						
Students should be able to-	Nurse/Clinician	Professional	Communicator	Leader & Member	Lifelong learner	Critical thinker	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: How the statistical package is useful in nursing?	1	1	2	3	3	2	1
CO-2: Write down the various statistical packages available?	1	1	2	3	3	2	1
CO-3: What is med cal. What all content are present in main menu?	1	1	2	3	3	2	1
VI (01 hour)	At the end of unit students are able to Knowledge: Describes types and uses of hospital management system. Skill: Apply hospital management system while working in various hospital settings. Attitude: Identifies the importance of hospital management system in nursing.			• Hospital Management System; types and uses. (1hr)			

Unit VI							
Course outcome	Programme outcome						
Students should be able to-	Nurse/Clinician	Professional	Communicator	Leader & Member	Lifelong learner	Critical thinker	Researcher
	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO-1: What do you understand by Hospital Management System?	1	1	3	2	3	2	1
CO-2: Write down the salient features of Hospital Management System? .	1	1	3	2	3	2	1
CO-3: Describe the benefits of Hospital Management System?	1	1	3	2	3	2	1
CO-4: Write down the advantages of Hospital Management System?	1	1	3	2	3	2	1
CO-5: What are the advantages of computer based Hospital Management System?	1	1	3	2	3	2	1

LAB HOURS:

<i>Sr. No.</i>	<i>Name of the topic</i>	<i>Total hours</i>
I	Disk operating system <ul style="list-style-type: none"> • DOS. • Windows (all versions) • MS Word • MS Excel • MS Power Point • MS Access. 	20 hours 3 hours 2 hours 4 hours 4 hours 4 hours 3 hours
II	Teaching Tools <ul style="list-style-type: none"> • Types of multimedia • Computer aided teaching and testing 	03 hours 2 hour 1 hour
III	Use of Internet <ul style="list-style-type: none"> • Internet browsing and surfing • Internet mailing 	03 hours 1 hour 2 hours
IV	Statistical packages : <ul style="list-style-type: none"> • SPSS Software 	02 hours 2 hour
V	Hospital management system : <ul style="list-style-type: none"> • Hospital management system 	02 hours 2 hour

TEACHING STRATEGY:Teaching Hours: 45 hours
Hours

Theory : 15 Hours

Lab hrs: 30

METHOD OF TEACHING:

- Lecture, Demonstration, Self activities.

ASSIGNMENTS:**Theory:**

Sr. No	Assignments	No./Quantity	Marks Per Assignment	Total Marks
1	Home assignment	One	20	20

Practical:

Sr. No	Assignments	No./Quantity	Marks Per Assignment	Total Marks
1	Performance Evaluation	One	20	20

Practical:

- In each term one home assignment and one practical performances assessment shall be conducted.

- Marks of Theory and Practical Assignments shall be amalgamated as an Assignment is theory as there is no practical examination for the subject.

LIST OF RECOMMENDED BOOKS:

- Introduction to Computers by Subramanian N.
- Fundamentals of Information Technology by Leon and Leon
- Textbook of Computers in Nursing by Shrinandan Bansal
- Essentials for computers for Nurses by Leslie H. Nicoll
- Microsoft Office 2007 by Gary B. Shelly.
- Fundamentals of Computer by Subramanian.