



CERTIFICATE IN ULTRASOUND TECHNICIAN

S.N.	Subject Code	Subject Name	Internal	External	Total
1	CUS101	Ultrasound	40	60	100
2	CUS102	DOPPLER & ECHO CARDIO GRAPHY	40	60	100
3	CUS103	Basic Patient care and safety	40	60	100
4	CUS104	Radiographic Photography	60	40	100
5	CUS105	Practical	60	40	100
	Total		240	260	500

PAPER-1

ULTRASOUND

Maximum Time : 3 hrs.

University Assessment – 70%

Total Marks : 200 Internal Assessment –30%

Minimum Pass Marks – 40%

1.Ultra Sound

☐ Principle of Ultra Sound

☐ Types of Ultra Sound

☐ Equipments description

☐ Indication and Clinical Application

☐ The physics of ultrasound imaging

- ☒ Types of transducers
- ☒ Ultrasound tissue characterization
- ☒ The potential for three dimensional ultrasound
- ☒ Artifacts in ultrasound
- ☒ Comparison of ultrasound equipment
- ☒ Computerization of data
- ☒ Image recording
- ☒ Safety of ultrasound
- ☒ Medical sonography : reproductive effects and risks
- ☒ Transvaginal ultrasonography
- ☒ The obstetric ultrasound examination
- ☒ Method of gynecologic ultrasound examination
- ☒ Assessment of normal fetal growth
- ☒ Fetal behavior states
- ☒ Fetal breathing movements
- ☒ Fetal activity
- ☒ Twins and twinning
- ☒ Fetal tumors
- ☒ Placenta and umbilical cord
- ☒ Role of ultrasound in the delivery suite
- ☒ Vaginal ultrasonography of the pregnant cervix

☒ Screening for ovarian cancer

☒ Practical: Transvaginal ultrasonography,
Screening for ovarian cancer, ultrasonography
of the pregnant cervix.

PAPER-2

DOPPLER & ECHO CARDIO GRAPHY

Maximum Time : 3 hrs. University Assessment – 70%

Total Marks : 200 Internal Assessment –30%

Minimum Pass Marks – 40%

1. Equipments and description
2. Color Doppler Flow Imaging
3. Indication
4. Preparation and Technique
5. Clinical Application
6. Artifacts of Doppler

PRACTICAL:

Application of various procedures in well equipped
Hospital and Diagnostic Centers

PAPER-3

Basic Patient care and safety

Maximum Time : 3 hrs. University Assessment – 70%

Total Marks : 200 Internal Assessment –30%

Minimum Pass Marks – 40%

1. Basic Patient care and safety in ultrasound and
Doppler imaging

i. Care of Pts Belongings

ii. Body mechanics

iii. Skin Care

iv. Departmental Safety

2. Infection control and institutional Safety

3. Professional issues in Radiologic technology

i. Legal issue

ii. Medical Records and Documentation

iii. Professional ethics

4. Patient care during special Procedures of Ultrasound.

PRACTICAL: Urological Procedure

Ultrasound, Application of various procedures in well

equipped Hospital and Diagnostic Centers