

[LI 0416]

APRIL 2016

Sub. Code: 3001

**FELLOWSHIP IN ULTRASOUND (OBGYN) EXAMS
FIRST YEAR
PAPER I – BASIC OF ULTRASOUND**

Q.P. Code :233001

Time : Three hours

Maximum : 100 Marks

I. Elaborate on :

(2 x 20=40)

1. Describe the phenomenon of attenuation and enhancement of sound waves with diagrams, and their use in diagnosis of various types of masses.
2. Describe the knobs commonly used in daily practice to optimize images and the physical principles behind the adjustments.

II. Write notes on:

(10 x 6 = 60)

1. How does one assure fetal safety in medical ultrasound?
2. Describe frequency and how it affects medical imaging.
3. What is professionalism? Describe the important aspects of the same with reference to communication with patients.
4. Describe the uses of correlation techniques in statistics.
5. What are the various modes of ultrasound and what are their fields of use?
6. What are the characteristics of a solid mass and how can one differential this from a mixed echogenic mass?
7. What are forms a, b, c, d, e, f, and g with reference to PCPNDT act? Why are they important?
8. Explain maintenance of an ultrasound transducer.
9. Describe four artefacts in ultrasound and their relevance in diagnostics.
10. What are the methods of display of a Doppler shift?
