

[LF 1014]

OCTOBER 2014

Sub. Code: 3001

**FELLOWSHIP IN ULTRASOUND (OBGYN) EXAMS
FIRST YEAR
(Candidates admitted 2013-2014)
PAPER I – BASIC OF ULTRASOUND**

Q.P. Code :233001

Time : Three hours

Maximum : 100 marks

I. Elaborate on :

(2 x 20=40)

1. What is an artefact? Describe in detail the types of artefact with suitable examples.
2. Discuss in detail about Picture Archiving and Communication System (PACS).

II. Write notes on:

(10 x 6 = 60)

1. Explain about correlation and regression with illustrations.
2. Discuss in detail the various types of transducers used for imaging.
3. Describe gain, depth, focus, frequency and harmonics with suitable illustrations.
4. Define amplitude, wavelength, period, acoustic impedance and interface.
5. What are the bioeffects of ultrasound? Explain in detail.
6. Describe the imaging techniques used to improve the quality of imaging.
7. Describe in detail the sterilization methods and maintenance of transducers.
8. Draw the diagram of transducer and describe its components in detail.
9. What is peizo electric effect? How ultrasound waves are produced? Describe with diagram.
10. Discuss about PC and PNDDT Act.
