

124-NR

M.D. DEGREE EXAMINATION – APRIL, 2013 RADIO DIAGNOSIS Paper-I – Basic Sciences

Time: 3 Hours Max. Marks: 100

Note: Answer all questions

All questions carry equal marks

WRITE SHORT ESSAYS ON THE FOLLOWING:

- 1. Discuss the principles, construction and functionalities of individual components of an image intensifier. Briefly describe the fluoroscopic imaging unit assembly.
- 2. Discuss the principles and applications of Multislice volumetric spiral CT.
- 3. Discuss the imaging anatomy of the shoulder joint
- 4. Write short note on:
 - a) High KV techniques in chest X-ray
 - b) Fetal circulation
 - c) Peizo electric effect
 - d) Iohexol
 - e) Thermionic emission
- 5. Describe in detail the structure and principle of intensifying screen. Discuss the newer phosphor technology.
- 6. Discuss in detail digital subtraction angiography.
- 7. Write short note on:
 - a) Craniovertebral junction
 - b) Carpal tunnel view
 - c) Rectification
 - d) Air gap technique
 - e) Sialography
- 8. Discuss in detail the construction of a grid and explain how it helps in improving the radiographic quality.
- 9. Discuss the imaging anatomy of the orbit.
- 10. Discuss the basic principles of MRI

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