

NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

APPLIED PHYSICS DEPARTMENT

SUPPLEMENTARY EXAMINATION

SRA 3212 RADIOGRAPHY PRACTICE AND DIFFERENT USER GROUPS

BSc HONOURS RADIOGRAPHY PART 111

AUGUST 2013

DURATION: 3 HOURS

ANSWER **ALL** PARTS OF QUESTION **ONE** IN SECTION **A** AND ANY **THREE** QUESTIONS FROM SECTION **B**. SECTION **A** CARRIES 40 MARKS AND SECTION **B** CARRIES 60 MARKS.

SECTION A

- 1a) Analyse how patients waiting time in an imaging department may be kept to a minimum. [6]
- ii) Evaluate any two sociological aging theories and their relevance during the imaging of elderly patients. [10]
- b) Explain the psychological preparation necessary for a woman undergoing breast screening by ultrasound scan and mammography. [8]
- c) Describe the radiation protection measures to be undertaken during chest radiography of a pregnant woman. [6]
- e) Justify the radiographic technique modifications on an old lady with severe osteoarthritis of the spine. [10]

SECTION B

- 2) Explain the modifications necessary during a barium meal examination of a neonatal old male patient with suspected duodenal atresia. [10]
- b) Explain the factors to be considered when designing an imaging department in a new busy central hospital. [10]

- 3a) Compare and contrast the radiological imaging methods of trachea-oesophageal fistula in infant patients and those of inguinal hernia in geriatric patients. [10]
- b) Describe any two theories on the psychological care necessary for paediatric patients attending the radiology department. [10]
- 4) Discuss the extended role of radiographers in the imaging department during the management of the following cases;
- i) a paediatric patient with radiological findings suspicious of non accidental injury,
 - ii) radiography of a raped teenage patient from a case of incest,
 - iii) a less privileged homeless man involved in a road traffic accident and
 - iv) a hemaphrodite patient for a hysterosalpingogram examination. [4x5marks]
5. Explain the measures that can be taken to make an imaging department suitable for the blind and partially blind patients. [10]
- ii) Discuss the necessity of an imaging department to have correct full staffing levels. [10]
6. Evaluate the relevance of any 4 aging theories to the imaging of geriatric patients. [4x5marks]