2

2204_2009_1_S42

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. Radiography Degree Examination – Feb - 2010

Time: Three Hours **Max. Marks: 80**
Marks

RADIATION PHYSICS & MEDICAL PHYSICS

Q.P. CODE: 2204

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe in detail various quality control checks for a diagnostic X ray machine
2. Explain 3 phase X ray generator used in the diagnostic department. Describe how constant potential can be obtained
3. Write in detail biological effects of radiation

SHORT ESSAYS (Answer any Ten) **10 x 5 = 50 Marks**

4. Grids
5. mA meter
6. Earthing
7. Control of filament cement
8. Flurosocpic screen
9. Rapid film changes
10. Rating of X ray tubes
11. Annual dose equivalent limits in radiation protection
12. Area monitoring
13. Gm counter
14. Half wave rectifiers
15. Maximum permissible limits

SHORT ANSWERS **5 x 2 = 10 Marks**

16. What is lead equivalence?
17. What is radiologisis of water?
18. Insulators
19. Absorbed dose
20. Distribution of electrical energy – explain

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3

2206_2009_1_S43

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. Radiography Degree Examination – Feb - 2010

Time: Three Hours **Max. Marks: 80 Marks**

RADIOGRAPHIC PHOTOGRAPHY – DARK ROOM TECHNIQUE - I

Q.P. CODE: 2206

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Describe in detail the chemistry of image formation
2. Describe in detail the layout of a darkroom for a major hospital
3. Describe in detail the various steps of film processing

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. X-ray cassettes
5. Replenisher
6. Film faults
7. Safety lights in dark room
8. FOG
9. Scattered radiation
10. Intensifying screens
11. Umbra and penumbra
12. Pass box and lead box
13. Characteristic curves

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Single emulsion films
15. X-ray viewing equipment
16. Rinsing
17. Rare earth screens
18. Hangers
19. Speed of films
20. Film faults
21. Latent image
22. Drier
23. Image contrast

2205_2009_1_S49

Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Sc. Radiography Degree Examination – Feb - 2010

Time: Three Hours **Max. Marks: 80 Marks**

RADIOGRAPHY - I

Q.P. CODE: 2205

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two) **2 x 10 = 20 Marks**

1. Anatomy of GIT and radiography in acute abdomen
2. Role of radiographer in reducing radiation to patients
3. Computerized radiography

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Intra ocular foreign body localization
5. Radiographic accessories for image quality
6. Beam limiting devices
7. Dental and occusal x-rays
8. Dark adoptation
9. Projections for mandible x-ray
10. High KV technique
11. Radiography of mastoids
12. Anatomy of knee joint
13. Nasal bone fracture

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Film focus distance
15. Back ground radiation
16. Radiation effect to lens and projection
17. Rad, rem and sievert
18. Radiation monitoring devises
19. Cone down view of sella
20. X-ray pelvis for SI joints
21. Dark room accessories for film handling
22. Grids – types and advantages
23. Swimmer's view

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