

- Q.12 Explain properties of X-ray.  
Q.13 Explain does limitations of radiation exposure.  
Q.14 Explain five radiation quantity used in Diagnostic Radiology and its unit.  
Q.15 Explain Thermo Luminescent Dosimeter and Pocket dosimeter.  
Q.16 Write the constitution of fixer solution.  
Q.17 Write the factors which affect X-rays quality and quantity.  
Q.18 Explain working of proportional counters.

### SECTION-C

- Note:** Long answer questions. Attempt any one questions out of two questions. (1x10=10)
- Q.19 Explain Thermo Luminescent Dosimeter and Pocket dosimeter.  
Q.20 a.Explain construction of fluoroscopic screen and related accessories.  
b.Explain Basic principles of cine fluoroscopy and angiography use of grid-controlled x-ray tube

No. of Printed Pages : 2  
Roll No. .... 188541  
**DVOC (Level 4)**  
**2nd Sem. / Trade: D.Voc.**  
**(Medical Imaging Tech)**  
**Subject : Physics & Technology in Imaging**

Time : 2 Hrs. M.M. : 50

### SECTION-A

**Note:** Very short questions. Attempt all ten questions. (10x1=10)

- Q.1 Heat (HU) = ..... x heat (J)  
Q.2 Define Milliampere-seconds.  
Q.3 Write the SI unit for exposure.  
Q.4 Define does equivalent.  
Q.5 Define alkalinity.  
Q.6 Define the heel effect.  
Q.7 Define Phosphorescence.  
Q.8 What is photon flux.  
Q.9 Define radiation intensity.  
Q.10 What is fixer solution.

### SECTION-B

**Note:** Short answer type questions. Attempt any six questions out of eight questions. (6x5=30)

- Q.11 Explain GM Counter and Scintillation Counter.

(80) (2) 188541 (1) 188541