

CHAPTER 14 : PHYSICS TO SAVE LIFE**Instructions:**

- ✓ Read the chapter in your book - quickly and thoroughly, preferably more than once.
- ✓ Contact me in case of any difficulties in understanding.

(Questions given in this worksheet are important questions for all exams)

MCQs

(Solve Yourself)

41. Which one is used to test stomach?

- a) CT Scan
- b) Endoscopy
- c) ECG
- d) MRI

42. Which ray is used in radiotherapy to destroy cancer cells?

- a) X-ray
- b) Alpha ray
- c) Beta ray
- d) Gamma ray

43. Which one of the following is used to determine blood cancer?

- a) Radioactive iodine
- b) Radioactive phosphorus
- c) Radioactive bromine
- d) Radioactive strontium

44. Which one is used to determine bone cancer?

- a) Radioactive phosphorus
- b) Radioactive bromine
- c) Radioactive iodine
- d) Radioactive strontium

45. In which case is radioactive iodine used?

- a) To detect blood cancer
- b) To detect bone cancer
- c) To detect skin cancer
- d) To detect thyroid cancer

46. What is the full form of ETT?

- a) Exercise Test Tolerance
- b) Exit Tolerance Test
- c) Exit Test Tolerance
- d) Exercise Tolerance Test

47. Which one of the following is done when patients are doing exercise?

- a) ECG
- b) ETT
- c) MRI
- d) Endoscopy

48. Which one of the following is used to identify disease related to coronary artery?

- a) ECG
- b) Endoscopy
- c) MRI
- d) ETT

49. Which one of the following is used to view the blood vessels of the body?

- a) Endoscopy
- b) Angiography
- c) ECG
- d) ETT

50. What kind of ray is used in angiography test?

- a) Alpha ray
- b) Beta ray
- c) Gamma ray
- d) X-ray

51. The liquid used during angiogram test is called -

- a) mye
- b) dye
- c) tye
- d) kye

52. What are called atoms of the same element having different mass number?

- a) Isotones
- b) Isotopes
- c) Isobar
- d) Isomer

53. Which of the following isotope is used in cancer treatment?

- a) $^{60}_{17}\text{Cl}$
- b) $^{32}_{17}\text{Cl}$
- c) $^{16}_8\text{O}$
- d) $^{40}_{18}\text{Ar}$

54. What kind of ray emits from CO-60?

- a) Alpha
- b) Beta
- c) Gamma
- d) Ultraviolet

55. Which one is used for the treatment of the abnormal growth of the thyroid gland?

- a) Cobalt-60
- b) Iodine-131
- c) Technetium-99
- d) Phosphorus-32

56. Which one is used in the treatment of Leukemia?

- a) Cobalt-60
- b) Iodine-131
- c) Technetium-99m
- d) Phosphorus-32

57. Which isotope is used in the treatment of anemia?

- a) Iodine-131
- b) Cobalt-60
- c) Phosphorus-32
- d) Technetium-99m

58. Which isotope is widely used in the diagnosis of cancer?

- a) Iodine-131
- b) Cobalt-60
- c) Phosphorus-32
- d) Technetium-99m

59. Which isotope is commonly used treating blood cancer?

- a) Cobalt-60
- b) Iodine-131
- c) Phosphorus-32
- d) Technetium-99m

60. Which one of the following is radioactive isotopes?

- a) $^{14}_6\text{C}$
- b) $^{35}_{17}\text{Cl}$
- c) $^{60}_{60}\text{CO}$
- d) $^{13}_6\text{C}$

61. What is used to examine the interior side of hollow organs of our body?

- a) X-ray
- b) ETT
- c) MRI
- d) Endoscopy

62. Which test is extremely valuable test to form extended images of brain?

- a) MRI
- b) CT Scan
- c) Endoscopy
- d) Angiography

63. Which diagnosis method is painless and safe?

- a) ECG
- b) X-ray
- c) ETT
- d) MRI

64. In which diagnosis process Tomography is used?

- a) ECG
- b) MRI
- c) CT Scan
- d) Angiography

65. What is the most widely used radioactive element in nuclear medicine?

- a) Cobalt
- b) Technetium
- c) Iodine
- d) Actinium

66. Which instrument is used to compare with a slice of bread to obtain image?

- a) CT Scan
- b) MRI
- c) ECG
- d) X-ray

67. Partial blockage developed in the coronary arteries of heart is identified by which test?

- a) Angiography
- b) ETT
- c) ECG
- d) CT Scan

68. Gamma ray emitted from Cobalt-60 is used in the diagnosis of which disease?

- a) disease of thyroid gland
- b) to scan the brain
- c) to diagnose cancer
- d) to resolve anaemia

69. Intestinal obstruction can be identified by which instrument?

- a) ECG
- b) Endoscopy
- c) Ultrasonography
- d) X-ray

70. Which one of the following is used to test stomach?

- a) CT Scan
- b) ECG
- c) Endoscopy
- d) MRI

71. Which one is appropriate for determining the heart rate?

- i. ECG
- ii. Ultrasonography
- iii. MRI

Which one is correct?

- a) i and ii
- b) i and iii
- c) ii and iii
- d) i, ii and iii

72. Appropriate for conducting brain test is -

- i. CT Scan
- ii. Ultrasonography
- iii. MRI

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

73. Appropriate for cancer treatment is -

- i. Radiotherapy
- ii. ECG
- iii. CT Scan

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

74. Appropriate for treatment of blood vessels is -

- i. Angiography
- ii. CT Scan
- iii. Ultrasonography

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

75. Endoscopy is used in -

- i. Identifying fetal position
- ii. Stomach
- iii. Treatment of ear

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

76. Appropriate for testing chest pain is -

- i. Endoscopy
- ii. ECG
- iii. Radiotherapy

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

77. Related to ETT test is -

- i. Stationary bicycle
- ii. Catheter
- iii. Treadmill

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii

78. In isotopes -

- i. the number of proton is same
- ii. the number of neutron is different
- iii. the number of mass is same

Which one is correct?

- a) i and ii
- b) ii and iii
- c) i and iii
- d) i, ii and iii