

BABA FARID UNIVERSITY OF HEALTH SCIENCES, FARIDKOT

Radiotherapy Technician (under Baba Farid University of Health Sciences, Faridkot)

QUESTION BOOKLET

THUMB IMPRESSION OF THE CANDIDATE

OMR ANSWER SHEET

ROLL NO:

FULL SIGNATURE OF THE CANDIDATE

FULL SIGNATURE OF INVIGILATOR

Coordinator stamp

Time Allowed: 2:00 Hour (11:00 AM to 1:00 PM)

Maximum Marks: 100

1. Use BLACK FINE TIP BALL PEN only. Use of pencil is not allowed.
2. Write your Roll number on the OMR answer-sheet and also on the question-booklet only in the space provided for the purpose and at no other place in the question booklets and Answer-sheet
3. Enter the Question Booklet Set and Number on the OMR Answer-sheet and also darken the corresponding bubbles with BLACK FINE TIP BALL PEN.
4. Do not put any marks anywhere in the Question booklet /on the OMR Answer-sheet.
5. **There are 100 objective type questions in all of 1 Mark each.** Before attempting the questions, check that the Question-booklet is complete. In case any question/part of question or page is missing, inform the Centre Superintendent within 5 minutes of the start of the examination. After that no claim will be entertained.
6. **Each question is followed by four alternative responses listed as A), B), C) and D) out of which only one is correct / most correct. In case, all the ovals are left blank, there will be deduction of marks @ 0.25 mark for each such unattempted question. Fifth oval 'E' (introduced for security purpose) is to be darkened in case you do not want to attempt the question to avoid negative marking.**
7. **As per the instructions of Govt. of Punjab, Department of Personnel letter no. 1/2/2022-5PP/659 dated 16/11/2022, the candidate are compulsory required to qualify the Punjabi language Part-A of question paper by scoring atleast 50% marks failing which the candidate will not be eligible.**
8. To open the question booklet, remove the seal gently when asked to do so. Handover the OMR Answer-sheet to the officer on duty on the completion of the time before you leave the examination hall.
9. **The candidates are permitted to carry his/her question booklet after completion of the examination but OMR Sheets are compulsory required to be deposited with the invigilator.**
10. A candidate who create disturbance of any kind or changes his/her seat or is found in possession of any paper possibility of any assistance to him/her or unfair means will be expelled from the examination by the Centre superintendent/Observer, whose decision shall be final. ("Expulsion" for this purpose would mean cancellation of the entire examination of the candidate).
11. **THE CANDIDATES ARE NOT PERMITTED TO CARRY ANY TELECOMMUNICATION EQUIPMENT SUCH AS WATCH, CELLULAR PHONE, WIRELESS SET, SCANNER ETC. INSIDE THE EXAMINATION HALL.**
12. For rough work, use only the blank space of the Question booklet.
13. The candidates will not be allowed to leave the examination hall during the examination.
14. Borrowing any material is not allowed.
15. The answer-sheet is designed for Computer evaluation. If the instructions are not followed properly, the candidate alone shall be responsible for the resultant loss.
16. Smoking/Refreshment shall not be allowed in the Entrance Test Centre/Hall.
17. Male candidates shall affix their Left Thumb Impression (LTI) while Female candidates shall affix Right Thumb Impression (RTI) at the prescribed place on the OMR answer sheet, Question Booklet and attendance sheet. The Centre superintendent shall also obtain and retain it for record.
18. The candidate must fill both the question booklet number and OMR answer sheet number on the attendance sheet.
19. No candidate shall be allowed to leave the centre before **01:00 PM**.

29. ਸ਼ੇਖ ਫਰੀਦ ਜੀ ਦੇ ਮੁਰਸ਼ਦ ਦਾ ਕੀ ਨਾਂ ਸੀ?

- ੳ. ਬਖਤਿਆਰ ਕਾਕੀ
- ਅ. ਇਨਾਇਤ ਸ਼ਾਹ
- ੲ. ਵਾਰਿਸ ਸ਼ਾਹ
- ਸ. ਨਿਜ਼ਾਮੁਦੀਨ ਔਲੀਆ

30. 'ਸੰਮੀ' ਕਿਹੜੇ ਖੇਤਰ ਦਾ ਨਾਚ ਹੈ?

- ੳ. ਮਾਝਾ
- ਅ. ਸਾਂਦਲ ਬਾਰ
- ੲ. ਮਾਲਵਾ
- ਸ. ਦੁਆਬਾ

31. 'ਛਪਾਰ ਦਾ ਮੇਲਾ' ਕਿਹੜੇ ਮਹੀਨੇ ਲੱਗਦਾ ਹੈ?

- ੳ. ਸਾਉਣ ਮਹੀਨੇ
- ਅ. ਫੱਗਣ ਮਹੀਨੇ
- ੲ. ਭਾਦੋਂ ਮਹੀਨੇ
- ਸ. ਚੇਤ ਮਹੀਨੇ

32. 'ਮਾਈਏਂ ਪਾਉਣ' ਦੀ ਰਸਮ ਤੋਂ ਕੀ ਭਾਵ ਹੈ?

- ੳ. ਗੀਤ ਗਾਉਣਾ
- ਅ. ਜਾਗੋ ਕੱਢਣਾ
- ੲ. ਸਿਰ ਪਾਣੀ ਪਾਉਣਾ
- ਸ. ਵਟਣਾ ਮਲਣਾ

33. 'ਝੂਮਰ' ਕਿਸ ਦਾ ਨਾਚ ਹੈ?

- ੳ. ਮਰਦਾ ਦਾ
- ਅ. ਤੀਵੀਆਂ ਦਾ
- ੲ. ਕੁੜੀਆਂ ਦਾ
- ਸ. ਉਪਰੋਕਤ ਵਿਚੋਂ ਕੋਈ ਨਹੀਂ

34. 'ਘੋੜੀ' ਲੋਕ-ਗੀਤ ਕਿਸ ਵੱਲੋਂ ਗਾਇਆ ਜਾਂਦਾ ਹੈ?

- ੳ. ਭਰਜਾਈ ਵੱਲੋਂ
- ਅ. ਪਤੀਸ ਵੱਲੋਂ
- ੲ. ਭੈਣ ਵੱਲੋਂ
- ਸ. ਮਾਸੀ ਵੱਲੋਂ

35. 'ਧੂਧੁ ਮਲਆਨਲੋ ਚਵਰੋ ਕਰੇ
ਸਗਲ ਬਨਰਾਇ ਫੂਲੰਤ ਜੋਤੀ॥' ਖਾਲੀ ਥਾਂ ਭਰੋ।

- ੳ. ਗਗਨ
- ਅ. ਪਵਣੁ
- ੲ. ਦੀਪਕ
- ਸ. ਤਾਰਿਕਾ ਮੰਡਲ

36. ਵਾਕ ਪੂਰਾ ਕਰੋ- ਮਿਠ ਬੋਲੜਾ ਜੀ
.....।

- ੳ. ਓਹ ਕਦੇ ਨਾ ਬੋਲੈ ਕਉਰਾ
- ਅ. ਹਰਿ ਸਜਣੁ ਸੁਆਮੀ ਮੇਰਾ
- ੲ. ਹਰਿ ਸੱਜਣ ਸੁਆਮੀ ਮੇਰਾ
- ਸ. ਹਰਿ ਦਰਸਨੁ ਦੇਖਿ ਅਪਾਰਾ।

37. ਗੁਰੂ ਅਮਰਦਾਸ ਜੀ ਨੇ ਬਾਣੀ ਕਿੰਨੇ ਰਾਗਾਂ ਵਿੱਚ
ਰਚੀ?

- ੳ. 19 ਰਾਗਾਂ ਵਿੱਚ
- ਅ. 17 ਰਾਗਾਂ ਵਿੱਚ
- ੲ. 29 ਰਾਗਾਂ ਵਿੱਚ
- ਸ. 31 ਰਾਗਾਂ ਵਿੱਚ

38. 'ਸੁਰਪਤ ਜੇਹੇ ਲੜ ਹਟੇ ਬੀਰ ਟਲੇ ਨ ਟਾਲੇ॥'
'ਚੰਡੀ ਦੀ ਵਾਰ' ਦੀ ਉਕਤ ਸਤਰ ਵਿੱਚ 'ਸੁਰਪਤ'
ਸ਼ਬਦ ਕਿਸ ਲਈ ਵਰਤਿਆ ਹੈ?

- ੳ. ਇੰਦਰ ਦੇਵਤਾ ਲਈ
- ਅ. ਵਿਸ਼ਨੂੰ ਦੇਵਤਾ ਲਈ
- ੲ. ਦੁਰਗਾ ਮਾਤਾ ਲਈ
- ਸ. ਬ੍ਰਹਮਾ ਜੀ ਲਈ

39. 'ਪਵਣੁ ਗੁਰੂ ਪਾਣੀ ਪਿਤਾ' ਸ਼ਬਦ ਵਿੱਚ ਗੁਰੂ
ਨਾਨਕ ਦੇਵ ਜੀ ਕਿਨ੍ਹਾਂ ਲੋਕਾਂ ਦੀ ਪ੍ਰਸੰਸਾ ਕਰਦੇ
ਹਨ?

- ੳ. ਸੱਚ ਬੋਲਣ ਵਾਲਿਆਂ ਦੀ
- ਅ. ਧਰਮ ਨੂੰ ਮੰਨਣ ਵਾਲਿਆਂ ਦੀ
- ੲ. ਜੁਝਾਰਵਾਦੀਆਂ ਦੀ
- ਸ. ਨਾਮ ਧਿਆਉਣ ਵਾਲਿਆਂ ਦੀ।

40. ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ ਕਿਸ ਕਾਵਿ-ਧਾਰਾ ਦੇ ਕਵੀ
ਹਨ?

- ੳ. ਸੂਫੀ ਕਾਵਿ-ਧਾਰਾ ਦੇ
- ਅ. ਗੁਰਮਤਿ ਕਾਵਿ-ਧਾਰਾ ਦੇ
- ੲ. ਕਿੱਸਾ ਕਾਵਿ-ਧਾਰਾ ਦੇ
- ਸ. ਬੀਰ ਕਾਵਿ-ਧਾਰਾ ਦੇ

41. 'ਏ ਸਰੀਰਾ ਮੇਰਿਆ' ਸ਼ਬਦ ਕਿਸ ਗੁਰੂ ਸਾਹਿਬ ਦੀ ਰਚਨਾ ਹੈ?

- ੳ. ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ
- ਅ. ਗੁਰੂ ਅੰਗਦ ਦੇਵ ਜੀ
- ੲ. ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ
- ਸ. ਗੁਰੂ ਅਮਰਦਾਸ ਜੀ

42. 'ਚੋਟ ਪਈ ਦਮਾਮੇ॥' ਸਤਰ ਪੂਰੀ ਕਰੋ।

- ੳ. ਨਾਲੇ ਕੁੱਕੜੇ
- ਅ. ਸੀਹਣਿ ਸਾਰ ਦੀ
- ੲ. ਦਲਾਂ ਮੁਕਾਬਲਾ
- ਸ. ਮਹਖੇ ਦੈਂਤ ਨੂੰ

43. ਸ. ਭਗਤ ਸਿੰਘ ਦਾ ਜਨਮ ਕਦੋਂ ਹੋਇਆ?

- ੳ. 1909 ਈਸਵੀ ਵਿੱਚ
- ਅ. 1910 ਈਸਵੀ ਵਿੱਚ
- ੲ. 1908 ਈਸਵੀ ਵਿੱਚ
- ਸ. 1907 ਈਸਵੀ ਵਿੱਚ।

44. ਕਰਤਾਰ ਸਿੰਘ ਸਰਾਭਾ ਦਾ ਜਨਮ ਕਿੱਥੇ ਹੋਇਆ ਸੀ?

- ੳ. ਲੁਧਿਆਣਾ
- ਅ. ਪਟਿਆਲਾ
- ੲ. ਰੋਪੜ
- ਸ. ਜਲੰਧਰ

45. ਭੀਮ ਰਾਓ ਨੂੰ ਵਜ਼ੀਰਾ ਕਿਸ ਵੱਲੋਂ ਦਿੱਤਾ ਗਿਆ?

- ੳ. ਕਲੂਸਕਰ
- ਅ. ਬੜੌਦਾ ਰਿਆਸਤ
- ੲ. ਅਧਿਆਪਕ
- ਸ. ਪ੍ਰਿੰਸੀਪਲ

46. ਗਾਂਧੀ ਜੀ ਡਾਂਢੀ ਮਾਰਚ ਕਦੋਂ ਸ਼ੁਰੂ ਕੀਤਾ?

- ੳ. 1920
- ਅ. 1930
- ੲ. 1935
- ਸ. 1942

47. ਭਗਤ ਸਿੰਘ ਨੂੰ ਫਾਂਸੀ ਦੀ ਸਜ਼ਾ ਕਦੋਂ ਦਿੱਤੀ ਗਈ?

- ੳ. 23 ਮਾਰਚ 1941
- ਅ. 24 ਮਾਰਚ 1941
- ੲ. 23 ਮਾਰਚ 1931
- ਸ. 24 ਮਾਰਚ 1931

48. ਡਾ. ਅੰਬੇਦਕਰ ਦਾ ਜਨਮ ਕਿੱਥੇ ਹੋਇਆ?

- ੳ. ਮਹਾਰਾਸ਼ਟਰ
- ਅ. ਮੱਧ ਪ੍ਰਦੇਸ਼
- ੲ. ਕਰਨਾਟਕ
- ਸ. ਗੁਜਰਾਤ।

49. ਸ. ਕਰਤਾਰ ਸਿੰਘ ਸਰਾਭਾ ਦੇ ਪਿਤਾ ਜੀ ਦਾ ਕੀ ਨਾਂ ਸੀ?

- ੳ. ਕਿਸ਼ਨ ਰਾਏ
- ਅ. ਅਜੀਤ ਸਿੰਘ
- ੲ. ਟਹਿਲ ਸਿੰਘ
- ਸ. ਮੰਗਲ ਸਿੰਘ।

50. ਮਹਾਤਮਾ ਗਾਂਧੀ ਦਾ ਜਨਮ ਕਦੋਂ ਹੋਇਆ?

- ੳ. 1869 ਈ:
- ਅ. 1867 ਈ:
- ੲ. 1868 ਈ:
- ਸ. 1866 ਈ:

51. Which of the following is a natural source of γ -rays?
- Radio-Cobalt
 - Radio-phosphorus
 - Radon gas
 - Radio-carbon
52. The emission of electron is possible by
- Photoelectric effect
 - Thermionic emission
 - Both
 - None of above
53. The exposure rate at the table top for the maximum focus to the table top distance must not exceed
- 5 R/min
 - 0.5 R/min
 - 0.005 R/min
 - 20 mR/min
54. Which one is the naturally occurring piezo electric material used in medical ultrasound
- Quartz
 - Barium titanate
 - Lead Zirconate Titanate (PZT)
 - None of these
55. Range of KeV used in mammography is
- 20-40 KeV
 - 10-50 KeV
 - 15-20 KeV
 - 50-100 KeV
56. In some X-rays tubes thin Beryllium window are used for
- Reduce inherent filtration of the X-rays beam
 - Increase inherent filtration of the X-rays beam
 - Reduce scattered radiation
 - Increase the primary
57. What is atomic number (Z) of tungsten?
- 52
 - 73
 - 82
 - 74
58. . What type of material used for X-ray shielding?
- having high density
 - having high atomic number
 - both a & b
59. MRI can be used to scan
- directly in axial.
 - sagittal image
 - coronal image
 - All of above
60. X-rays are produced
- Extra nuclearly
 - Intra nuclearly
 - Inter nuclearly
 - both a & b
61. X-ray radiation are
- Directly Ionizing
 - Indirectly Ionizing
 - Densily ionizing
 - both a & b
62. What is the permissible dose limit for the radiation worker according to AERB(INDIA) in any single year
- 20mSv/yr
 - 50mSv/yr
 - 30mSv/yr
 - 15mSv/yr
- 63 .Which type of radiation effect has Threshold in dose
- Stochastic effect
 - Deterministic effect
 - None of these
 - both a & b
- 64.Which of the following TL material is used in TLD badge
- LiF : Mg
 - Al₂O₃ : C
 - CaSO₄ : Dy
 - CaF₂ : Mn

65. Which is most appropriate imaging technique for investigating the function of Brain?

- a. MRI
- b. PET
- c. CT
- d. Sonography or Ultrasound

66. What is half life of Radium?

- a. 1600 years
- b. 1650 years
- c. 1605 years
- d. 1580 years

67. What is HVL (mm lead) of Co-60?

- a. 12mm
- b. 11mm
- c. 5mm
- d. 7mm

68. What is the dose limit recommended by ICRP (ICRP-60-1990) for lens of eye for Occupational?

- a. 150mSv per year
- b. 500mSv per year
- c. 20mSv per yea
- d. 100mSv per year

69. What is the dose limit recommended by ICRP (ICRP-60-1990) for Skin for Occupational?

- a. 150mSv per year
- b. 500mSv per year
- c. 20mSv per yea
- d. 100mSv per year

70. What is the dose limit recommended by ICRP (ICRP-60-1990) for Hands and Feet for Occupational?

- a. 150mSv per year
- b. 500mSv per year
- c. 20mSv per yea
- d. 100mSv per year

71. Which is the following interaction processes is most likely for a 10 KeV photon in water?

- a. Photoelectric effect
- b. Compton effect
- c. Pair production
- d. coherent (Rayleigh) scattering

72. The threshold energy for a photon to interact by pair production is?

- a. 0.511 MeV
- b. 1.022 MeV
- c. 2.044 MeV
- d. 2 MeV

73. Which type of radiation is primarily used in brachytherapy?

- a) X-rays
- b) Gamma rays
- c) Electrons
- d) Neutrons

74. Grids are used in radiography

- a. To reduce the patient dose
- b. To reduce the exposure time
- c. to reduce the scattered radiation
- d. to reduce the exposure time

75. In the range of X-ray energy used for diagnostic radiology the most important type of interaction is

- a. Compton scattering
- b. Raleigh scattering
- c. Photoelectric interaction
- d. Pair production

76. Full form of LASER

- a. Light after stimulating electron radiation
- b. Light analysis by stimulating electron red
- c. Light amplification by simulated emission of radiation
- d. None of these

77. Field strength of MRI magnets is measured using which unit

- a. Roentgen
- b. Nikol
- c. Sievert
- d. Tesla

78. What is the number of neutrons in the isotope of uranium?

- a. 92
- b. 119
- c. 146
- d. 238

79. The process of destroying cancer cells with the help of radiation is _____

- a. Radiotherapy
- b. Physiotherapy
- c. Uroplasty
- d. Rehabilitation

80. What is suitable shielding material for shielding of fast neutron?

- a. High Z material
- b. Low Z material
- c. Hydrogenous material
- d. None of these

81.. Alpha and Beta radiation belongs to the category of

- a. Particle radiation
- b. Electromagnetic radiation
- c. Light radiation
- d. None

82. Radiation therapy can be delivered ____ or ____.

- a. externally, internally
- b. extrinsically, intrinsically
- c. happily, sadly
- d. None of the answers are correct.

83. The use of a high-energy electron beam in radiotherapy is most effective in treating:

- a) Deep tumors
- b) Tumors near the surface of the skin
- c) Blood cancers
- d) Tumors located in the brain

84. The most important step in radiotherapy treatment planning is:

- a) The choice of radiation dose
- b) The selection of radiotherapy technique
- c) Accurate tumor localization and imaging
- d) Patient education

85. In radiation therapy, the term "conformal radiotherapy" refers to:

- a) A treatment method that delivers a uniform radiation dose to the tumor
- b) The use of multiple radiation beams to conform to the tumor's shape
- c) The use of proton therapy
- d) A new drug delivery method

86. Which of the following methods is used to treat surface tumors?

- a) Electron beam therapy
- b) Gamma knife therapy
- c) Proton therapy
- d) Stereotactic radiotherapy

87. The term "CT simulation" in radiotherapy refers to:

- a) Using CT scans for precise treatment planning
- b) Simulating radiation delivery on a model
- c) Checking the tumor's response to radiation
- d) A form of imaging therapy

88. In radiation therapy, a “boost dose” refers to:

- a) A higher radiation dose given to the tumor after initial treatment
- b) A reduced radiation dose to surrounding tissues
- c) The first dose of radiation
- d) A combination of radiation and chemotherapy

89. In radiotherapy, “palliative treatment” is used to:

- a) Cure the disease
- b) Shrink tumors to relieve symptoms
- c) Prevent side effects
- d) Increase the tumor’s resistance to radiation

90. The process of delivering radiation treatment to the tumor while minimizing damage to surrounding tissues is called:

- a) Radiation planning
- b) Radiation protection
- c) Radiation precision
- d) Radiation optimization

91. Radiotherapy planning involves all of the following except:

- a) Tumor localization
- b) Dosimetry
- c) Tumor excision
- d) Treatment verification

92. The role of a radiation therapist is to:

- a) Administer radiation treatments under the supervision of a radiation oncologist
- b) Develop the radiotherapy treatment plan
- c) Interpret radiology images
- d) Perform surgery on tumors

93. The term “fractionation” refers to:

- a) Giving the total radiation dose in smaller daily doses over several weeks
- b) The fraction of radiation that is absorbed by the body
- c) Dividing the patient into separate parts during treatment
- d) The fraction of healthy tissue exposed to radiation

94. Which of the following is the purpose of using lead shielding in radiotherapy?

- a) To prevent patient movement during treatment
- b) To reduce unnecessary radiation exposure to healthy tissues
- c) To increase the radiation dose to the tumor
- d) To protect the tumor from radiation

95. The concept of “treatment planning” in radiotherapy includes:

- a) Calculating the correct radiation dose for the tumor
- b) Ensuring proper patient positioning
- c) Using imaging to locate the tumor
- d) All of the above

96. In radiotherapy, what does “tumor localization” mean?

- a) Positioning the tumor for surgery
- b) Using imaging techniques to accurately locate the tumor for radiation treatment
- c) Measuring the tumor’s size
- d) Treating the tumor with external radiation

97. Proton therapy is a type of radiation therapy that uses:

- a) High-energy X-rays
- b) High-energy protons
- c) Gamma rays
- d) Beta particles

98. The main purpose of treatment verification in radiotherapy is to:

- a) Confirm the patient's identity
- b) Ensure that the tumor is targeted accurately
- c) Increase the radiation dose
- d) Prevent side effects

99. In radiotherapy, "imaging-guided radiotherapy" (IGRT) refers to:

- a) Using imaging techniques to guide radiation delivery
- b) Using a contrast agent to enhance imaging
- c) Analyzing the tumor's genetics
- d) Performing surgery for tumor removal

100. Which of the following is the most common form of internal radiotherapy?

- a) External beam radiotherapy
- b) Stereotactic radiotherapy
- c) Brachytherapy
- d) Proton therapy

ANSWER KEY								
Recruitment test conducted on 17/05/2025 for post of Radiotherapy Technician under BFUHS, Faridkot								
Part A					Part B			
1	ਸ	26	ਓ		1	C	26	C
2	ਸ	27	ਸ		2	C	27	D
3	ਓ	28	ੲ		3	A	28	C
4	ਸ	29	ਓ		4	A	29	A
5	ੲ	30	ਅ		5	C	30	C
6	ੲ	31	ੲ		6	A	31	A
7	ੲ	32	ਸ		7	D	32	A
8	ਸ	33	ਓ		8	C	33	B
9	ਓ	34	ੲ		9	D	34	C
10	ਸ	35	ਅ		10	A	35	B
11	ਓ	36	ਅ		11	B	36	A
12	ੲ	37	ਅ		12	C	37	A
13	ਸ	38	ਓ		13	B	38	A
14	ਓ	39	ਸ		14	C	39	B
15	ਸ	40	ਅ		15	A	40	C
16	ੲ	41	ਸ		16	A	41	C
17	ਓ	42	ੲ		17	B	42	A
18	ਸ	43	ਸ		18	A	43	A
19	ੲ	44	ਓ		19	B	44	B
20	ੲ	45	ਅ		20	B	45	D
21	ਅ	46	ਅ		21	D	46	B
22	ੲ	47	ੲ		22	B	47	B
23	ੲ	48	ਅ		23	B	48	B
24	ਅ	49	ਸ		24	C	49	A
25	ਸ	50	ਓ		25	C	50	C