

51. CFC is used in
- [A.](#) refrigeration
 - [B.](#) aerosol spray
 - [C.](#) plastic foam industry
 - [D.](#) all of above

Answer: Option D

52. Average distance covered by α -particle in air before its ionizing power ceases is called its
- [A.](#) trajectory
 - [B.](#) range
 - [C.](#) firing level
 - [D.](#) limit

Answer: Option B

53. Which one of the following possesses greater penetration power ?
- [A.](#) α -rays
 - [B.](#) β -rays
 - [C.](#) γ -rays
 - [D.](#) neutron-rays

Answer: Option D

54. The most useful tracer is
- [A.](#) Sr-90
 - [B.](#) I-131
 - [C.](#) CA-41
 - [D.](#) C-14

Answer: Option D

55. γ -rays are electromagnetic waves like
- [A.](#) light waves
 - [B.](#) heat waves
 - [C.](#) micro waves
 - [D.](#) x-rays

Answer: Option D

56. Charge on α -particle is

A. 1

B. -1

C. plus two

D. -2

Answer: Option A

57. Why γ -rays are used to kill bacteria to sterilize surgical equipments etc?

A. chargeless

B. massless

C. highly penetrating

D. all of above

Answer: Option C

58. α -particle ionizes an atom

A. due to electrostatic force of attraction

B. due to electrostatic force of repulsion

C. due to direct collision

D. due to gravitational force

Answer: Option B

59. α -particles possess greater penetration power than that of β -particles due to its

A. smaller ionization power

B. greater ionization power

C. neither greater nor smaller ionization power

D. same ionization power

Answer: Option A

60. Pair production cannot take place in vacuum as

A. mass is not conserved

B. energy is not conserved

C. momentum is not conserved

D. charge is not conserved

Answer: Option C

61. Pair production can take place only with

[A.](#) X-rays

[B.](#) γ -rays

[C.](#) UV-rays

[D.](#) IR-rays

Answer: Option B

62. A device for producing high velocity nuclei is

[A.](#) cloud chamber

[B.](#) linear accelerator

[C.](#) a mass spectrograph

[D.](#) Wilson cloud chamber

Answer: Option B

63. Which of the following will be a better shield against γ -rays?

[A.](#) ordinary water

[B.](#) heavy water

[C.](#) lead

[D.](#) aluminum

Answer: Option C

64. The maximum safe limit dose for persons working in nuclear power station are

[A.](#) 1 rem per week

[B.](#) 5 rem per week

[C.](#) 4 rem per week

[D.](#) 3 rem per week

Answer: Option B

65. Radiations are used for the treatment of skin of a patient is

[A.](#) γ -rays

[B.](#) γ -rays

[C.](#) γ -rays

[D.](#) X-rays

Answer: Option B