

41. Sterilization of surgical instruments medical supplies and bandages can be done by exposing them to a beam of

[A.](#) γ -rays

[B.](#) β -rays

[C.](#) α -rays

[D.](#) b and c have equal antiseptic properties

Answer: Option c

42. Charge on β -particles is

[A.](#) plus one

[B.](#) plus two

[C.](#) minus two

[D.](#) minus one

Answer: Option B

43. β -particle ionizes an atom

[A.](#) through direct collision

[B.](#) through electrostatic attraction

[C.](#) through electrostatic repulsion

[D.](#) all of above

Answer: Option c

44. T.V sets and microwave ovens emits

[A.](#) X-rays

[B.](#) γ -rays

[C.](#) β -rays

[D.](#) α -rays

Answer: Option A

45. A β -particle in a single encounter

[A.](#) loses a small fraction of its energy

[B.](#) losses most of its energy

[C.](#) loses no energy at all

[D.](#) loses all of its energy

Answer: Option B

46. Strontium-90 is used as

[A.](#) β -particle source

[B.](#) γ -particle source

[C.](#) γ -rays source

[D.](#) neutron source

Answer: Option A

47. The penetration power of α -particle as compared to β -particle is

[A.](#) 10 times more

[B.](#) 100 times more

[C.](#) 100 times less

[D.](#) 10 times less

Answer: Option B

48. Geiger counter is suitable for

[A.](#) fast counting

[B.](#) extremely fast counting

[C.](#) slow counting

[D.](#) all situations

Answer: Option C

49. A β -particle can produce fluorescence in

[A.](#) ZnS

[B.](#) barium platinocyanide

[C.](#) calcium tungstate

[D.](#) all of above

Answer: Option D

50. Pair production cannot take place in vacuum as _____ is not conserved

[A.](#) energy

[B.](#) charge

[C.](#) mass

[D.](#) momentum

Answer: Option D