**[Model Paper](http://www.result.pk)**

**[Physics (10](http://www.result.pk)[th](http://www.result.pk)[)](http://www.result.pk)**

**[Total Time: 3 Hours Max: Marks: 65](http://www.result.pk)**

**[Note:](http://www.result.pk)** **[There are THREE Sections of this Paper i.e. A.B and C, attempt each according to the given instructions.](http://www.result.pk)**

**[Time: 20 Minutes](http://www.result.pk)****[SECTION-A](http://www.result.pk)** **[Marks: 12](http://www.result.pk)**

**[Note:](http://www.result.pk)** [Attempt all parts of Section – A. Section –A must be return to the superintendent after 20 minutes](http://www.result.pk)

[even if you have not attempted any question. Overwriting/ defacing/Cutting etc is prohibited in Section-A](http://www.result.pk)

[and no credit will be given to such answer.](http://www.result.pk)

**[I.](http://www.result.pk)** [http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image001.gif](http://www.result.pk)**[Write the correct option i.e. A/B/C/D in the empty boxes.](http://www.result.pk)**

[i.           In which of the following frequency range is ultrasound \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A2KHz ­­ 10KHz ­­(B) 21KHz 30KHz (C) 2KHz 20KH (D) 11KHz 20KHz](http://www.result.pk)

[ii.         A convex lens is of focal length 10cm. Its power is \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif](http://www.result.pk)

[http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif(A) 20 dioptre (B) . 15 dioptre (C) 50 dioptre (D) 10 dioptre](http://www.result.pk)

[iii.       One volt is \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A) One J/c (B) One wc (C) One N/c (D) . One w/c](http://www.result.pk)

[http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gifiv. Which of the following represent an ohm \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A) V/A (B) J/S (C) W/A (D) . J/C](http://www.result.pk)

[http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image001.gif](http://www.result.pk)

[v.         Lenz’s law follows the law of conservation of \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A) Mass (B) Charge (C) Energy (D) Momentum](http://www.result.pk)

[vi.       Which of the following in not a correct formula \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif](http://www.result.pk)

[(A) Li=Lr (B) f= R/2 (C) n=SinLi/SinL2r(D) M=q/p](http://www.result.pk)

[vii.     Which type of wave is longitudinal \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif](http://www.result.pk)

[(A) Light wave (B) Radio wave (C) Sound wave (D) . Water wave](http://www.result.pk)

[viii.   The frequency of A.C in Pakistan is \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A) 40Hz (B) 50Hz (C) 60Hz (D) 70Hz](http://www.result.pk)

[ix.       Which one of the following is also called inverter \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image003.gif](http://www.result.pk)

[(A) NAND gate (B) OR (C) NOT (D) NOR](http://www.result.pk)

[x.         Is really a versatile radio \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif](http://www.result.pk)

[(A) Cell phone (B) Computer (C) Telephone (D) Fax Machine](http://www.result.pk)

[xi.       Which nuclide has a mass no of 8 \_\_\_\_\_\_\_\_\_\_\_\_\_.](http://www.result.pk)

[(A) 2He](http://www.result.pk)[6](http://www.result.pk) [(B) 4Be](http://www.result.pk)[8](http://www.result.pk) [(C) 7N](http://www.result.pk)[5](http://www.result.pk) [(D) 8O](http://www.result.pk)[16](http://www.result.pk)

[xii.     Radio active nuclei Y](http://www.result.pk)[123](http://www.result.pk) [decay to give](http://www.result.pk) [58](http://www.result.pk)[Z](http://www.result.pk)[119](http://www.result.pk) [what types of radian is being](http://www.result.pk)

[emitted \_\_\_\_\_\_\_\_\_\_\_\_\_.http://www.bisess.edu.pk/model_papers_ssc/PHYSICS_files/image002.gif](http://www.result.pk)

[(A) α\_particle only (B) β-particles only (C) ϒ-particles only(D) Both A and B](http://www.result.pk)

**[Model Paper](http://www.result.pk)**

**[Physics (10](http://www.result.pk)[th](http://www.result.pk)[)](http://www.result.pk)**

**[Note:](http://www.result.pk)****[Time allowed for section B and C is 2 hours and 40 minutes.](http://www.result.pk)**

**[SECTION “B” Marks: 32](http://www.result.pk)**

[II.                Attempt any EIGHT Parts out of the following. Each Part carries equal marks.](http://www.result.pk)

[i. Why sound cannot be heared on moon?](http://www.result.pk)

[ii. How bats able to fly at night without colliding with other objects?](http://www.result.pk)

[iii. Give at least three uses of concave mirror?](http://www.result.pk)

[iv. Define snell’s law of refraction?](http://www.result.pk)

[v. What is meant by electrostatic induction?](http://www.result.pk)

[vi. State how the resistance of wire a would change if (I) its length is increases (II) its](http://www.result.pk)

[diameter is decreased?](http://www.result.pk)

[vii. What would happen if the primary winding of a transformer is connected to a battery?](http://www.result.pk)

[viii. What is Fleming left hand rule?](http://www.result.pk)

[ix. Name five digital devices that are commonly used in everyday life?](http://www.result.pk)

[x. What do you mean by graphic designing?](http://www.result.pk)

[xi. Which type of charge is present on](http://www.result.pk)

[α-particle b) β-particle c) ϒ-particles](http://www.result.pk)

**[SECTION “C” Marks: 21](http://www.result.pk)**

**[Note: Attempt any THREE questions of the following. Each question carries equal Marks.](http://www.result.pk)**

**[III.](http://www.result.pk)** [(a) Write a detailed note on ultrasonic. Describe different applications on ultrasonic.](http://www.result.pk)

[(b) When a +5uc charge is placed at a point in an electric field it experience a force of 10](http://www.result.pk)[-6](http://www.result.pk) [N.](http://www.result.pk)

[Find the value of electric intensity at that point.](http://www.result.pk)

**[IV.](http://www.result.pk)** [(a) State and explain Ohm’s law what are its limitations.](http://www.result.pk)

[(b) An electric Iron of resistance 15Ω takes a current of 4A.Calculate the thermal energy, in](http://www.result.pk)

[joules devolved in 25 seconds.](http://www.result.pk)

**[V.](http://www.result.pk)** [(a) Sketch and describe A.C generator.](http://www.result.pk)

[(b) How many turns are required on the secondary of a 240 volt mains transformer which has](http://www.result.pk)

[4000 turns on the primary and is to operate 6 volt lamp](http://www.result.pk)

**[VI.](http://www.result.pk)** [(a) What is a radio Isotope? How radio isotope help us in our daily life.](http://www.result.pk)

[(b) Find the energy produce from 400kg of uranium if it is completely changed into energy.](http://www.result.pk)