Q.1 A square loop of edge a = 20 cm made of uniform wire is as shown in the figure below. If current i = 5 A is entering into the system at Aand leaves at C. Find the magnetic field (approximately) at point P which is on the perpendicular bisector of *AB* at a distance 5 cm from it.



Q.2 Magnetic field due to regular polygon of side n made up of total length 2πR which carries current I. Find the magnetic field at the centre of the polygon.



Q.3 A regular polygon of 4 sides is formed by bending wires of total length 1 m which carries a current of 10 A. If the same polygon is reshaped into a circle with the same center, then find the change in magnetic field at the center of the polygon '0'.



Q.4 Find the magnetic field at a point which is at 2 m on a perpendicular bisector of finite current carrying wire of length 6 m. If the currAent of 10 A is flowing as shown in the figure, then which of the following options is the correct magnetic field at that point.



Q.5 An infinitely long wire carrying current I, is bent at right angle as shown in figure. Find the magnetic field at point P located x distance from O as shown in the figure.



Q.6 Which of the following graphs represent the variation of magnetic field (B) with distance (R) from an infinitely long straight conductor?



Q.7 If the point P lies outside the line of straight finite wire AB, as shown in the figure, then the magnitude of magnetic field at point P is:



Q.8 The figure shows two long parallel currents carrying wires separated by a distance 5 m. The magnetic field at a point P, situated midway between the two wires will be



Q.9 A long straight wire carries a current i = 2 A. A particle having a positive charge q = 1 C and mass 5 mg, kept at a distance $x_0 = 5$ cmfrom the wire is projected towards it with a speed v = 20 cm/s. Find the minimum separation between the wire and the particle.



(A) 10 mm(B) 20 mm(C) 14.3 mm(D) 17.6 mmQ.10Two long straight wires carrying current of 5 A each. Find the point for which magnetic field is zero



ANSWER KEY

				(D)
				(-)