**1.** Consider the following statements about two velocity-time graphs for objects P and Q:

(i) Object P shows uniform acceleration.  
(ii) Object Q shows decreasing acceleration.  
(iii) Object P has an initial velocity of 2 m/s.  
(iv) Object Q reaches maximum velocity at t = 6s.

(A) Only (i)  
(B) (i) and (iii)  
(C) (i), (ii) and (iv)  
(D) (i), (iii) and (iv)

**2.** Consider the following statements about two displacement-time graphs for bodies A and B:

(i) Body A moves with constant velocity.  
(ii) Body B shows non-uniform motion.  
(iii) Body A covers 20m in 5 seconds.  
(iv) Body B has zero velocity at t = 3s.

(A) Only (ii)  
(B) (i) and (ii)  
(C) (ii), (iii) and (iv)  
(D) (i), (ii) and (iv)

**3.** Analyze the following statements regarding two acceleration-time graphs for vehicles X and Y:

(i) Vehicle X undergoes constant acceleration.  
(ii) Vehicle Y shows variable acceleration.  
(iii) Vehicle X accelerates at 3 m/s² throughout.  
(iv) Vehicle Y comes to rest at some point.

(A) (i) and (iii)  
(B) (i), (ii) and (iii)  
(C) Only (ii) and (iv)  
(D) (i), (ii), (iii) and (iv)

**4.** Consider these statements about two position-time graphs for particles M and N:

(i) Particle M has uniform motion.  
(ii) Particle N shows accelerated motion.  
(iii) Particle M travels 15m in 3 seconds.  
(iv) Particle N changes direction during motion.

(A) Only (i)  
(B) (i) and (ii)  
(C) (i), (ii) and (iii)  
(D) (ii), (iii) and (iv)

**5.** Examine these statements about distance-time graphs for two cyclists R and S:

(i) Cyclist R maintains constant speed.  
(ii) Cyclist S shows increasing speed.  
(iii) Cyclist R travels at 8 m/s.  
(iv) Cyclist S covers more distance than R after 10 seconds.

(A) (i) and (iii)  
(B) (i), (ii) and (iv)  
(C) Only (ii) and (iv)  
(D) (i), (iii) and (iv)

**6.** Consider these statements about velocity-time graphs for trains T1 and T2:

(i) Train T1 shows uniform retardation.  
(ii) Train T2 has variable acceleration.  
(iii) Train T1 decelerates at 2 m/s².  
(iv) Train T2 reaches zero velocity twice.

(A) Only (i) and (ii)  
(B) (i), (ii) and (iii)  
(C) (ii), (iii) and (iv)  
(D) (i), (ii), (iii) and (iv)

**7.** Analyze these statements about displacement-time curves for objects J and K:

(i) Object J has periodic motion.  
(ii) Object K shows simple harmonic motion.  
(iii) Object J returns to its starting position.  
(iv) Object K has maximum displacement of 5m.

(A) (i) and (iii)  
(B) (ii) and (iv)  
(C) (i), (ii) and (iii)  
(D) (i), (iii) and (iv)

**8.** Consider these statements about speed-time graphs for cars C1 and C2:

(i) Car C1 accelerates uniformly.  
(ii) Car C2 shows variable acceleration.  
(iii) Car C1 reaches 20 m/s in 4 seconds.  
(iv) Car C2 has periods of constant speed.

(A) Only (i) and (iii)  
(B) (i), (ii) and (iv)  
(C) (ii), (iii) and (iv)  
(D) (i), (ii), (iii) and (iv)

**9.** Examine these statements about distance-time graphs for runners U and V:

(i) Runner U moves with uniform velocity.  
(ii) Runner V shows accelerated motion.  
(iii) Runner U covers 50m in 10 seconds.  
(iv) Runner V overtakes Runner U at t = 8s.

(A) (i) and (ii)  
(B) (i), (ii) and (iii)  
(C) (ii), (iii) and (iv)  
(D) (i), (ii), (iii) and (iv)

**10.** Consider these statements about acceleration-time graphs for motorcycles W and Z:

(i) Motorcycle W has constant acceleration.  
(ii) Motorcycle Z shows decreasing acceleration.  
(iii) Motorcycle W accelerates at 4 m/s² initially.  
(iv) Motorcycle Z reaches zero acceleration at t = 6s.

(A) Only (i)  
(B) (i) and (ii)  
(C) (i), (ii) and (iv)  
(D) (i), (ii), (iii) and (iv)