31. The particles in the wave separated through _____ multiple of ? are out of phase to each other

   A. (n)   B. (n+1)

   C. (n+1/2)   D. both (a) and (c)

   Answer: Option C

32. Waves produced at the surface of water by a pencil executing vibrating motion if held vertically at a frequency of 50Hz are

   A. Longitudinal   B. Transverse

   C. Periodic   D. both (a) and (c)

   Answer: Option D

33. Newton estimated the speed of sound

   A. 281m/sec   B. 333m/sec

   C. 340m/sec   D. all of the above

   Answer: Option A

34. Laplace found that the alternate compressions and rarefactions produced in sound waves follows

   A. isothermal law   B. adiabatic law

   C. isochoric law   D. all of the above

   Answer: Option B

35. For destructive interference of sound waves the path difference between two interfering sounds should be

   A. n?   B. (n+1/2)?

   C. some time n? and some times (n+1/2)?   D. none of these

   Answer: Option B

36. The speed of sound in hydrogen is _____ time than that in oxygen

    A. Two times   B. Three times

    C. Four time   D. Six time

    Answer: Option C

37. The beats frequency (sensible) for a human car is

    A. 42Hz   B. 7 Hz

    C. 256Hz   D. 262Hz

    Answer: Option B

38. The speed of stationary waves in a stretched string are independent of

    A. Number of loops   B. Tension in the string

    C. Point where string is plucked   D. both (a) and (c)

    Answer: Option D

39. Fundamental frequency of stationary waves in open pipe is _____ times the frequency in closed pipe.

    A. One   B. Two

    C. Four time   D. None of these

    Answer: Option B

40. Which phenomena can be applied to estimate the velocity of star with respect to earth

    A. Dopplers effect   B. Interference of waves

    C. Beats phenomena   D. All of these

    Answer: Option A