

Ans  $\rightarrow$  Earth is a non-inertial frame because it has acceleration due to orbital motion (Rotatory motion) around the sun and spin motion about its own axis. But for describing motion for bodies on earth it is considered as an inertial frame.

① Wien's Displacement law  $\rightarrow$  states

that the black body radiation curve for different temperatures will peak at different wavelengths that are inversely proportional to the temperature. Wien's displacement law may be referred to as Wien's law. A term which is also used for the Wien approximation.

② Newton's ring  $\rightarrow$  concentric circular fringes are formed in the wedge shaped thin film due to interference. These circular fringes of interference are known as Newton's rings.

Application  $\rightarrow$  FRED allows for simulation of physical optic phenomena such as diffraction and interference. With this capability components such as Gaussian laser beams and interferometers can be accurately modeled and incorporated into optical systems.