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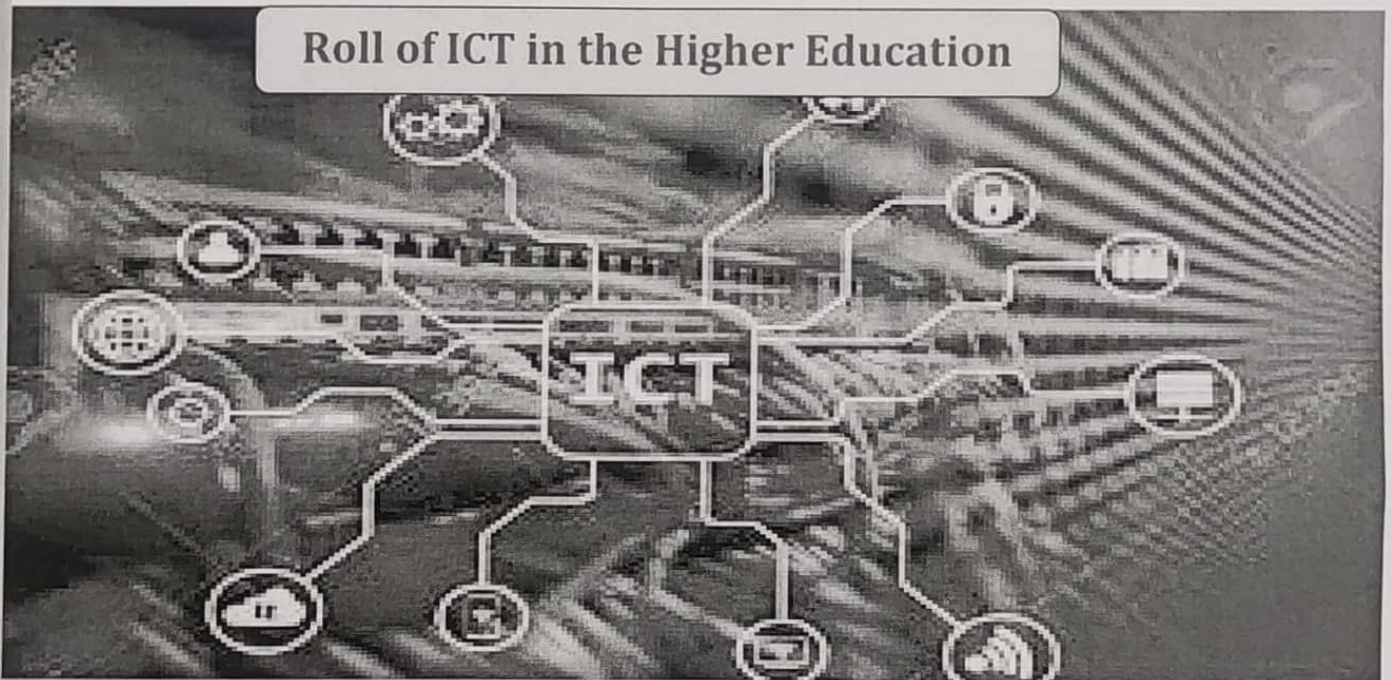
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## Open Educational Resources in Physics

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### Abstract:

*Now a day in the modern era of information technology, digital resources of teaching and learning are mandatory for teachers and learners. One of these which is very important learning resource is OER (Open Educational Resources). Another reason to use this kind of sources is day by day cost of reference books is increased due to increase in cost of paper and printing material, due to this students are turned towards the open educational sources which are totally free of cost. In this paper we are going to discuss some open educational sources in physics.*

**Key Words:** OER, Physics.

### Introduction:

It is observed that textbook costs have risen tremendously over the past three decades. Consequently, many students in a national study did not purchase textbooks and most of students agreed that free online access to textbooks would help them do "significantly better" in their courses.

Open Educational Resources (OER) in Physics are free learning resources which are available on the Internet. These are openly licensed or in the public domain, and can be used or reused for free. These exist in many forms: text (either print or digital); audio, video, multimedia or hypermedia; or various combinations of these. They can be based on a single learning point, a lesson, a series of lessons (a module), a whole course or even an entire programme of study [1]. They can support a specific learning methodology or approach whether that be behaviorist, constructivist etc. or any combination of methodologies or approaches.

The aim of the Open Educational Resources movement is to provide open access to high Quality digital educational materials[2]. OER has some characteristics, it is open access, its format is open format so that we can easily reuse it, open license-we can use this without license and lastly they are produced with open source softwares. In this paper in second section discussed open educational resources in physics, in third section some websites related to OER in Physics, in the fourth section some benefits of OER for Physics. Finally in the fifth section we have concluded the article.

### Open Educational Resources in Physics:

#### PhET:

Free interactive physics simulations, which help students visually, comprehend concepts. PhET sims are based on extensive education research and engage students through an intuitive, game-like environment where students learn through exploration and discovery. These simulations are free for instructors to use, distribute, and modify - even in commercial ways. PhET simulations animate what is invisible to the eye through the use of graphics and intuitive controls such as click-and-drag manipulation, sliders and radio buttons.