Date: 25-04-2019

**Summary Report on WIT & WIL**

**(Daily Report)**

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| **Name of the Faculty: Dr. L. SRINIVASA RAO** | **Name of Subject: ENGINEERING PHYSICS** |
| **Class/Section: I-B.TECH. II SEMESTER (EIE-A)** | |

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|  | Grid Reference No.: | 6.4 | |
|  | Scenario Reference No.  (Mapping with Syllabus) |  | |
|  | Topic covered in every class | 6.4 Solar Cell  6.4.3 V-I Characteristics  6.4.4 Advantages and Disadvantages **(Continued…)** | |
|  | Brief write-up (500 words) for every class:  **V-I characteristics of Solar Cell:**  The Fill Factor (FF) is essentially a measure of quality of the solar cell. It is ability of the cell that how it can convert sun light into useful maximum power. The area under the V-I curve shows the power. But, the maximum area of a rectangle that we can fit under V-I curve is called Maximum power.  Fill factor of the cell, FF = [ Pm/Isc Voc ]........... (i)  Where, Pm = maximum power point, Voc = open circuit voltage and Isc = short circuited current.  Series resistance of the solar cell: RS = [ ∆V/∆I ]........ (ii)  **Applications of Solar Cell:**   1. Solar modules (power stations) that generate electrical power from sunlight. 2. Solar ovens 3. Photo-voltaic cell used in communication for demodulation process. 4. Solar automatic street lights 5. Solar vehicles 6. Solar satellite panels etc. | | |
|  | Relevant additional illustration if any: | | |
|  | Video Links/Web Links if any: | | <https://www.youtube.com/watch?v=Hq5XJmBZcJk>  <https://www.youtube.com/watch?v=hoDnIP11XAg> |
|  | Signature of Repository Administrator: | |  |