

**Guidelines for Series Approval of Products for Implementation of  
“Electronics and Information Technology Goods (Requirements for  
Compulsory Registration) Order, 2012”**

These guidelines are issued to facilitate labs / manufacturers in formation of series of products for the purpose of Compulsory Registration under the “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012”.

**1. Definition of Product Family**

A **product family** can be defined by the maximum configuration of components / sub-assemblies plus a description of how the models are constructed from the maximum configuration using these components and sub-assemblies.

All models which are included in the **family** typically have common design, construction, parts, or assemblies essential to ensure conformity with applicable requirements.

If a product standard defines a **product family**, in the context of the specific standard, this definition takes over.

**A. Guidelines for Quantitative Selection of Samples**

Number of samples selected for testing from a series shall be **one for every ten models** in the series. However, **worst case configuration from Safety Design consideration** must be selected for testing.

## **B. Guidelines for Technical / Qualitative Selection of Samples**

### **1. Electronic Games (Video)**

| <b>Basic Configuration</b>                           | <b>Grouping as one series provided product has</b>                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hand held with consumable non-rechargeable battery   | <ul style="list-style-type: none"><li>• Same Power supply layout.</li><li>• Same chassis.</li><li>• Same power requirement and size / type of battery.</li></ul>                                                                                                                                                                                        |
| Rechargeable battery with external charging facility | <ul style="list-style-type: none"><li>• Same chassis.</li><li>• Same re-chargeable battery.</li><li>• Same Charger. Alternate models of charger to be tested with the same electronic Game.</li></ul>                                                                                                                                                   |
| Mains operated with internal re-chargeable battery   | <ul style="list-style-type: none"><li>• Same mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same chassis.</li><li>• Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.)</li><li>• Same processor / speed.</li></ul> |
| Mains operated - without battery                     | <ul style="list-style-type: none"><li>• Same mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same processor / speed.</li></ul>                                                                                                                                                   |

### **2. Laptop / Notebook / Tablets**

| <b>Basic Configuration</b> | <b>Grouping as one series provided product has</b>                                                                                                                                                                                                                                            |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Laptop                     | <ul style="list-style-type: none"><li>• Same voltage and current rating.</li><li>• Same PCB layout.</li><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li></ul> |
| Notebook                   |                                                                                                                                                                                                                                                                                               |
| Tablet                     |                                                                                                                                                                                                                                                                                               |
| Devices as                 |                                                                                                                                                                                                                                                                                               |

|                               |                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| combination of above products | <ul style="list-style-type: none"> <li>Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.)</li> </ul> |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3. **Plasma/LCD/LED Televisions**

| Basic Configuration                      | Grouping as one series provided product has                                                                                                                                                                                       |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plasma TV                                | <ul style="list-style-type: none"> <li>Same Mains layout or same SMPS board layout.</li> <li>Same enclosure except for differences of decoration parts.</li> <li>Power Transformer: Same design and insulation system.</li> </ul> |
| LCD TV                                   |                                                                                                                                                                                                                                   |
| LED TV                                   |                                                                                                                                                                                                                                   |
| Devices as combination of above products |                                                                                                                                                                                                                                   |

### 4. **Optical Disc Players With built in amplifiers**

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                      |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"> <li>Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li> <li>Same enclosure except for differences of decoration parts.</li> <li>Same PCB layout.</li> </ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"> <li>Same Mains layout or same SMPS board layout.</li> <li>Same enclosure except for differences of decoration parts.</li> <li>Power Transformer: Same design and insulation system.</li> </ul>                |

### 5. **Microwave Ovens**

| Basic Configuration | Grouping as one series provided product has                                                                                                                                        |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Microwave Oven      | <ul style="list-style-type: none"> <li>Same Input Power rating.</li> <li>Same Mains layout / Power Supply.</li> <li>Same Enclosure except for differences of decoration</li> </ul> |

|  |                                   |
|--|-----------------------------------|
|  | parts.<br>• Same Magnetron power. |
|--|-----------------------------------|

## 6. Visual Display Units, Video Monitors

| Basic Configuration | Grouping as one series provided product has                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Display Units | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system.</li> </ul> |
| Video Monitors      |                                                                                                                                                                                                                                         |

## 7. Printers, Plotters

| Basic Configuration   | Grouping as one series provided product has                                                                                                                                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Printers and Plotters | <ul style="list-style-type: none"> <li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Same PCB layout.</li> </ul> |
|                       | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system.</li> </ul>                |

## 8. Scanners

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                            |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"> <li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Same PCB layout.</li> </ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system.</li> </ul>                |

## 9. Wireless Keyboards

| Basic Configuration | Grouping as one series provided product has                                                                                                                                                                                            |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wireless Keyboard   | <ul style="list-style-type: none"><li>• Same Enclosure except for differences of decoration parts.</li><li>• Battery to be treated as component (Alternate sources of battery may be evaluated as part of the main product.)</li></ul> |

## 10. Telephone Answering Machines

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same PCB layout.</li></ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li></ul>                |

## 11. Amplifiers

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same PCB layout.</li></ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li></ul>                |

## 12. Electronic Musical Systems

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li></ul> |

### 13. Electronic Clocks with Mains Power

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                                                      |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same PCB layout.</li><li>• Mounting Mechanism.</li></ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li><li>• Mounting Mechanism.</li></ul>                |

### 14. Set Top Boxes

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same PCB layout.</li></ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li></ul>                |

### 15. Automatic Data Processing Machines

| Basic Configuration                       | Grouping as one series provided product has                                                                                                                                                                                                        |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With power adaptor                        | <ul style="list-style-type: none"><li>• Power Adaptor. (Alternate models of power adaptor may be evaluated as part of the main product.)</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Same PCB layout.</li></ul> |
| Mains operated with internal power supply | <ul style="list-style-type: none"><li>• Same Mains layout or same SMPS board layout.</li><li>• Same enclosure except for differences of decoration parts.</li><li>• Power Transformer: Same design and insulation system.</li></ul>                |

**A. Guidelines for series approval of products for implementation of “Electronics and Information Technology Goods (Requirement for Compulsory Registration) Order” 2012- Phase II.**

**1) Item No. 16: Power Adaptors for IT Equipment**

| <b>Product</b>                  | <b>up to a range of output power rating will be accommodated in the series, provided</b>                                                                                   |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Adaptors for IT Equipment | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same class of construction</li> <li>• Same mains PCB design layout and transformer</li> </ul> |

**2) Item No. 17: Power Adaptors for Audio, Video & similar Electronic Apparatus**

| <b>Product</b>                                                  | <b>Up to a range of output power rating will be accommodated in the series, provided</b>                                                                                   |
|-----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power Adaptors for Audio Video and similar Electronic Apparatus | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same class of construction</li> <li>• Same mains PCB design layout and transformer</li> </ul> |

**3) Item No. 18: UPS/Inverters of rating  $\leq$  5KVA**

| <b>Product</b>                      | <b>Up to a range of output power rating will be accommodated in the series, provided</b>                                                                                                                                                                                                                                                                                 |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UPS/Inverters of rating $\leq$ 5KVA | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated output voltage</li> <li>• Same frequency and number of phases at input/output</li> <li>• Same cabinet design and class of construction</li> <li>• Same power transformer rating and design</li> <li>• Same PCB design and layout</li> <li>• Same battery bus voltage.</li> </ul> |

**4) Item No. 19: DC or AC Supplied Electronic Control Gear for LED modules**

| <b>Product</b>                                            | <b>Up to a range of output power rating will be accommodated in the series, provided</b>                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC or AC Supplied Electronic Control Gear for LED modules | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same class of construction</li> <li>• Same class of installation with respect to SELV/Non-SELV</li> <li>• Three samples covering highest, interim and lowest ratings of the range are tested</li> <li>• Different enclosure design (up to 03) are preferably covered when included in the same series.</li> </ul> |

**5) Item No. 20: Sealed Secondary cells/Batteries containing alkaline or other non- acidic Electrolyte for use in portable applications**

| <b>Product</b> | <b>Up to a range of output power rating will be accommodated in the series, provided</b>                                                                      |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Battery        | <ul style="list-style-type: none"> <li>• Same nominal voltage</li> <li>• Cells of same construction design</li> <li>• Same electrodes/electrolytes</li> </ul> |
| Cells          | <ul style="list-style-type: none"> <li>• Same nominal voltage</li> <li>• Cells of same construction design</li> <li>• Same electrodes/electrolytes</li> </ul> |

**6) Item No. 21: Self Ballasted LED Lamps for General Lighting Services**

| <b>Product</b>                                         | <b>Up to a range of output power rating will be accommodated in the series, provided</b>                                                                                                                                |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self-Ballasted LED Lamps for General Lighting Services | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rating of ballast (LED Control Gear)/Driver Circuit</li> <li>• Same mains PCB design and layout</li> <li>• Same cap design</li> </ul> |

**7) Item No. 22: Fixed General purpose LED Luminaries**

| <b>Product</b>                                                       | <b>Up to a range of rated power will be allowed in the series, provided</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixed General purpose LED Luminaries <b>(excluding Fancy Lights)</b> | <ul style="list-style-type: none"> <li>• Same class of construction</li> <li>• Same AC/DC input voltage of Registered Electronic control Gear having R. Number (information to be provided)</li> </ul> <p style="text-align: center;">Or</p> <p>Same AC/DC input voltage (in case of integral type Electronic Control Gear)</p> <p style="text-align: center;">Or</p> <p>Same input rated voltage/rated current (if without Electronic Control Gear)</p> <ul style="list-style-type: none"> <li>• Same material characteristics for enclosure.</li> </ul> |

| <b>Product</b>                                             | <b>Up to a range of rated power will be allowed in the series, provided</b>                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fixed General purpose LED Luminaires <b>(Fancy Lights)</b> | <ul style="list-style-type: none"> <li>• For the electrical part up to driver, if available, of the fancy light/Chandelier: Same AC/DC input voltage of Registered encapsulated drivers used (as mentioned in CDF)</li> </ul> <p style="text-align: center;">Or</p> <p>Same AC/DC input voltage in case of integral type Electronic Control Gear (i.e. without casing)</p> <p style="text-align: center;">Or</p> <p>Same input rated voltage/rated current ( if without Electronic Control Gear)</p> |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Same class of construction</li> <li>• Three samples covering highest, interim and lowest ratings of the range are tested</li> <li>• In addition, in the same series, wherever applicable, samples of three different weights (highest, interim and lowest values) are checked only for the requirements related to suspension/fixing etc. As per the relevant standards IS 10322 (Part 5/Section 1)</li> </ul> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. For considering a model of fancy light/chandelier, the safety design of housing containing and including electrical part upto driver, if available, only shall be considered.</li> <li>2. Since model no. are generally not assigned in this industry Segment, and fancy parts keep on changing frequently, a pictorial view of each electrical fitting (not decorative/fancy part) covered in the series shall be placed in the test report. This would not require submission of actual samples to the labs but could be submitted through documentary evidence.</li> </ol> |
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**8) Item No. 23: Mobile Phones**

| <b>Product</b> | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                    |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mobile Phones  | <ul style="list-style-type: none"> <li>• Same battery capacity</li> <li>• Same battery charging voltage and current</li> <li>• Same battery side PCB Design and layout rated input voltage</li> <li>• Same adaptor</li> <li>• Similar enclosure</li> </ul> |

**9) Item No. 24: Cash Registers**

| <b>Product</b> | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                                                                                                                           |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cash Registers | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current/wattage</li> <li>• Same class of construction</li> <li>• Same mains layout or same SMPS Board layout</li> <li>• Power Transformer: Same design and insulation system</li> <li>• Same enclosure except for differences of decoration parts</li> <li>• Same type of Battery and capacity (if applicable)</li> </ul> |

**10) Item No. 25: Point of Sale Terminals**

| <b>Product</b>          | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                        |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Point of Sale Terminals | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current/wattage</li> <li>• Same class of construction</li> <li>• Same degree of ingress protection</li> <li>• Same mains PCB design and layout</li> <li>• Same type of battery and capacity (if applicable)</li> </ul> |

**11) Item No. 26: Copying Machines / Duplicators**

| <b>Product</b>                 | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copying Machines / Duplicators | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current/wattage</li> <li>• Same system of copying/duplication</li> <li>• Same largest paper size</li> <li>• Same mains layout or same SMPS Board layout</li> <li>• Power Transformer: Same design and insulation system</li> <li>• Same enclosure except for differences of decoration parts</li> </ul> |

**12) Item No. 27: Smart Card Readers**

| <b>Product</b>     | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Smart Card Readers | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current/wattage</li> <li>• Same type (Contact/Contactless)</li> <li>• Same mains layout or same SMPS Board layout</li> <li>• Power Transformer: Same design and insulation system</li> <li>• Same enclosure except for differences of decoration parts</li> <li>• Same type of battery and capacity (if applicable)</li> </ul> |

**13) Item No. 28: Mail Processing / Postage Machines/ Franking Machines**

| <b>Product</b>                                        | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mail Processing / Postage Machines/ Franking Machines | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current / wattage</li> <li>• Same mains layout or same SMPS board layout</li> <li>• Power Transformer: Same design and insulation system</li> <li>• Same enclosure except for differences of decoration parts</li> </ul> |

**14) Item No. 29: Passport Readers**

| <b>Product</b>   | <b>Grouping as one series, provided</b>                                                                                                                                                                                                                                                                          |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Passport Readers | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated current / wattage</li> <li>• Same mains layout or same SMPS board layout</li> <li>• Power Transformer: Same design and insulation system</li> <li>• Same enclosure except for differences of decoration parts</li> </ul> |

**15) Item No.30: Power Bank for use in portable application**

| <b>Product</b>        | <b>Up to a range of capacity rating will be accommodated in the series, provided</b>                                                                                                                                                                                                            |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| With External Adaptor | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same class of construction</li> <li>• Same degree of ingress protection</li> <li>• Same PCB design and layout</li> <li>• Same battery/cell type</li> <li>• Same material characteristics for enclosure</li> </ul>  |
| With in-built Adaptor | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same degree of ingress protection</li> <li>• Same mains PCB design and layout</li> <li>• Same battery/cell type</li> <li>• Same charging circuit</li> <li>• Same material characteristics for enclosure</li> </ul> |

**B. Guidelines for Quantitative selection of Samples**

- A series may consist of 10 models except for Item No. 20 (Sealed Secondary Cells/ Batteries) and ItemNo.22 (Fixed General purpose LED Luminaries).
- For Item No. 20, a series may consist of up to 20 models.
- For Item No. 22 in case of Fancy lights / Chandeliers, a series may consist of up to 50 models.
- Unless specified otherwise, one sample may be tested for each series.
- In any of the above consideration, worst case configuration from safety Design perspective must be selected for testing.

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**Guidelines for Series Approval of Products for Implementation of “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012” – Phase III**

**1. Item No. 32 : Recessed LED Luminaries**

| <b>Product</b>          | <b>Upto a range of rated power will be allowed in the series, provided</b>                                                                                                                                                                                                                                                                |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recessed LED Luminaries | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire.</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> </ul> |

**2. Item No. 33: LED Luminaries for road and street Lighting**

| <b>Product</b>                              | <b>Upto a range of rated power will be allowed in the series, provided</b>                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED Luminaries for road and street lighting | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> <li>• Same ambient temperature rating</li> <li>• Same IP category</li> </ul> |

**3. Item No. 34: LED Flood Lights**

| <b>Product</b>   | <b>Upto a range of rated power will be allowed in the series, provided</b>                                                                                                                                                                                                                                                               |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED Flood Lights | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> </ul> |

|  |                                                                                                                 |
|--|-----------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Same ambient temperature rating</li> <li>• Same IP category</li> </ul> |
|--|-----------------------------------------------------------------------------------------------------------------|

#### 4. Item No. 35: LED Hand Lamps

| Product        | Upto a range of rated power will be allowed in the series, provided                                                                                                                                                                                                                                                                      |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED Hand Lamps | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> </ul> |

#### 5. Item No. 36: LED Lighting Chains

| Product             | Upto a range of rated power will be allowed in the series, provided                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED Lighting Chains | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> <li>• Same IP category</li> </ul> |

#### 6. Item No. 37: LED Luminaries for Emergency Lighting

| Product                               | Upto a range of output power rating will be accommodated in the series, provided                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LED Luminaries for Emergency Lighting | <ul style="list-style-type: none"> <li>• Same class of construction of luminaire</li> <li>• Registered electronic control gear having R.number (information to be provided)</li> <li>• Same AC/DC input voltage in case of integral type electronic control gear (i.e. without casing)</li> <li>• Same material for enclosure</li> <li>• Same type of battery</li> <li>• Same battery nominal voltage &amp; Capacity</li> </ul> |

|  |                                                                                                                              |
|--|------------------------------------------------------------------------------------------------------------------------------|
|  | <ul style="list-style-type: none"> <li>• Same output voltage &amp; current rating of adapter complying to IS 302.</li> </ul> |
|--|------------------------------------------------------------------------------------------------------------------------------|

#### 7. Item No. 38: UPS/Inverters of rating $\leq 10\text{KVA}$

| Basic Configuration                         | Grouping as one series provided product has                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UPS/Inverters of rating $\leq 10\text{KVA}$ | <ul style="list-style-type: none"> <li>• Same rated input voltage</li> <li>• Same rated output voltage</li> <li>• Same frequency and number of phases at input/output</li> <li>• Same cabinet design and class of construction</li> <li>• Same power transformer rating and design</li> <li>• Same PCB design and layout</li> <li>• Same battery bus voltage</li> </ul> |

#### 8. Item No. 39: Plasma/LCD/LED/Television Screen size up-to 32"

| Basic Configuration                                                         | Grouping as one series provided product has                                                                                                                                                                                                                                                                          |
|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Plasma/LCD/LED/Television<br>Screen size up-to 32"<br>With in-built adapter | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system</li> </ul>                                                                               |
| With external adapter                                                       | <ul style="list-style-type: none"> <li>• Registered adaptor of same rated input voltage and output current.</li> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system</li> </ul> |

**9. Item No. 40: Visual Display Units, Video Monitors of Screen Size up-to 32"**

| <b>Product</b>                                                | <b>Grouping as one series provided product has</b>                                                                                                                                                                                     |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Visual Display Units, Video Monitors of Screen Size up-to 32" | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure except for differences of decoration parts.</li> <li>• Power Transformer: Same design and insulation system</li> </ul> |

**10. Item No. 41: CCTV Cameras / CCTV Recorders**

| <b>Product</b>                           | <b>Upto a range of max wattage &amp; maximum IR will be included in series provided</b>                                                                                                                                                        |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CCTV Camera                              | <ul style="list-style-type: none"> <li>• Same voltage</li> <li>• Same IP rating</li> <li>• Same PCB layout</li> <li>• Similar enclosure material except for differences of decoration parts.</li> <li>• Same enclosure shape</li> </ul>        |
| CCTV Recorder with internal power supply | <ul style="list-style-type: none"> <li>• Same Mains layout or same SMPS board layout.</li> <li>• Same enclosure material except for differences of decoration parts</li> <li>• Power Transformer: Same design and insulation system</li> </ul> |

|                                     |                                                                                                                                                                                                                                          |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CCTV recorder with external adapter | <ul style="list-style-type: none"> <li>• Same input voltage &amp; current rating of power source/registered adapter</li> <li>• Same PCB layout</li> <li>• Same enclosure material except for differences of decoration parts.</li> </ul> |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**11.Item No. 42: Adaptors for Household and similar electrical appliances**

| Product                                                  | Grouping as one series provided product has                                                                                                                           |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adaptors for Household and similar electrical appliances | <ul style="list-style-type: none"><li>• Same class of construction</li><li>• Same rated input voltage</li><li>• Same Main PCB design Layout and transformer</li></ul> |

**12.Item No. 43: USB Driven Barcode Reader, Barcode Scanner, Iris scanners, Optical fingerprints scanners**

| Product                                                                                  | Grouping as one series provided product has                                                                                                                                                              |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| USB Driven Barcode Reader, Barcode Scanner, Iris scanners, Optical fingerprints scanners | <ul style="list-style-type: none"><li>• Same input voltage and current</li><li>• Same battery nominal voltage and capacity</li><li>• Same enclosure except for differences of decorative parts</li></ul> |

**13.Item No. 44: Smart Watches**

| Product                                        | Grouping as one series provided product has                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Smart Watches (with or without display)</b> | <ul style="list-style-type: none"><li>• Same input voltage and current</li><li>• Same enclosure except for differences of decorative parts</li><li>• Same battery nominal voltage and capacity</li><li>• Same rated input voltage, class of construction of adapter</li><li>• Adapter to be BIS registered with same rated input voltage with/without display in separate series.</li></ul> |
|                                                | <ul style="list-style-type: none"><li>• Smart watches with SIM are covered under the mobile phones category. <i>However, smart watch, with SIM facility, which do not have text input capability would fall under category of smart watch.</i></li></ul>                                                                                                                                    |

➤ **Guidelines for Quantitative Selection of Samples**

- Number of samples selected for testing from a series shall be **one for every ten models** in the series. However, **worst case configuration from Safety Design consideration** must be selected for testing.
- For Item No. 32-37, a series may consist of upto 20 models.

## **Guidelines for Series Approval of Products for Implementation of “Electronics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012” – Phase IV**

### **1. Item No. 45: Standalone LED Modules for General Lighting:**

- Same Enclosure except for differences of decoration
- Same design and layout of PCB of LED module
- Same Type of LED module e.g. Independent, Built in or Integral
- Same IP category
- Same class of construction (Class I, Class II or Class III)
  - With integral type Electronic Control Gear
    - Same rated input voltage
    - Same rating of ballast (LED Control Gear)/Driver Circuit
    - Same mains PCB design and layout
  - without Integral Electronic Control Gear
    - Same input rated voltage / rated current/ rated power

**Note:** Maximum 20 models can be included in a series

### **2. Item No. 46: Rope Lights**

- Same class of construction of luminaire
- Same AC/DC input voltage of Registered Electronic Control Gear having R. Number (information to be provided)

Or

- Same AC/DC input voltage in case of integral type Electronic Control Gear (i.e. without casing)

Or

- Same input rated voltage / rated current (if without Driver /Electronic Control Gear)
- Same material for enclosure except for differences of decoration parts
- Same IP category

**Note:** Maximum 20 models can be included in a series

### **3. Item No. 47: Keyboard**

- Same Enclosure except for differences of decoration parts
- Same rated Input voltage
- Same PCB design layout
- Same IP rating

**Note:** Maximum 10 models can be included in a series

### **4. Item No. 48: Induction Stove [up to a range of output power rating will be accommodated in the series, provided]**

- Same Input voltage rating.
- Same PCB design layout and class of construction.
- Same Enclosure except for differences of decoration.
- Power transformer: Same design and insulation system (if applicable)
- Same IP rating

**Note:** Maximum 10 models can be included in a series

### **5. Item No. 49: Automatic Teller Cash dispensing machines**

- Same functionalities e.g. cash dispensing, cash deposit etc.
- Same rated input voltage
- Same rated current/wattage
- Same class of construction
- Same mains layout or same SMPS Board layout
- Power Transformer: Same design and insulation system
- Same enclosure except for differences of decoration parts
- Same type and rating of Battery and capacity (if applicable)
- Same IP rating

**Note:** Maximum 10 models can be included in a series

### **6. Item No. 50: USB Type External Hard Disk Drive**

- Same HDD form factor
- Same rated input voltage

- Same Enclosure except for differences of decoration parts.
- Same IP rating.
- Same PCB design.

**Note:** Maximum 10 models can be included in a series

#### **7. Item No. 51: Wireless Headphone and Earphone**

- Same type (over the ear or in the ear )
- Same type of charging (USB /charging case/wireless).
- Same rating of battery [registered batteries for headphone/earphone].
- Same rating of battery of charging case [registered batteries for charging case], if applicable.
- Same Enclosure material except for differences of decoration parts.
- Same IP rating
- Registered power bank/adaptor with the same output rating to input of headphone/earphone.
- The change in location of buttons may be accepted subject to the lab ensures that it does not have effect the safety.

**Note:** Maximum 10 models can be included in a series

#### **8. Item No. 52: USB Type External Solid-State Storage Devices (above 256 GB capacity) [up to a range of current rating will be accommodated in the series, provided]**

- Same SSD form factor
- Same rated input voltage
- Same Enclosure except for differences of decoration parts.
- Same IP rating.
- Same PCB design.

**Note:** Maximum 10 models can be included in a series

#### **9. Item No. 53: Electronic Musical System with input power below 200 Watts**

- Same Mains PCB layout or same SMPS board layout.
- Same enclosure except for differences of decoration parts.
- Power Transformer: Same design and insulation system, if applicable
- Same Class of construction
- Same rating of battery, if applicable
- Same IP rating

- Registered adaptor of same rating, if applicable.
- The change in location of buttons may be accepted subject to the lab ensures that it does not have effect the safety.

**Note:** Maximum 10 models can be included in a series

**10.Item No. 54: Standalone Switch Mode Power Supplies (SMPS) with output voltage 48 V (max) [up to a range of output power rating will be accommodated in the series, provided]**

- Same Input voltage rating
- Same nos and levels of output voltage
- Same mains PCB design layout
- Same enclosure except for differences of decoration parts.
- Power Transformer: Same design, rating and insulation system.
- Same IP rating
- Same Class of construction

**Note:** Maximum 10 models can be included in a series

**11.Item No. 55: Television other than Plasma/ LCD/LED TVs**

- The change in location of buttons may be accepted subject to the lab ensures that it does not have effect the safety.

**[With built in adapter]**

- Same Input voltage rating and current
- Same Mains layout or same SMPS board layout.
- Same enclosure except for differences of decoration parts.
- Power Transformer: Same design and insulation system
- Same IP rating

**[With External adapter]**

- Registered adapter of same rated input voltage and output current.
- same enclosure except for decorative parts.
- Same IP rating

**[CRT]**

- Same Input voltage rating and current
- Same Mains layout or same SMPS board layout

- Power Transformer: Same design and insulation system
- same enclosure except for decorative parts.
- same high voltage layout.
- Same IP rating

**Note:** Maximum 10 models can be included in a series

**12. Item No. 56: Rice Cooker [up to a range of output power rating will be accommodated in the series, provided]**

- Same Input voltage.
- Same PCB design layout and class of construction.
- Same Enclosure except for differences of decoration.
- Power transformer: Same design and insulation system (if applicable)
- Same IP rating

**Note:** Maximum 10 models can be included in a series

**Guidelines for Quantitative Selection of Samples**

- Worst case configuration from Safety Design consideration must be selected for testing.
- Maximum number of models accommodated in a series are given at the end of series guidelines for each product category.

\*\*\*\*\*

## **Series Guidelines for product categories notified under CRO Phase-V:**

### **1. Wireless Microphone**

- Same Type of Microphone based on built-in or external transmitters i.e. Handheld, Clip-on, Body Pack, Headset etc.
- Same Enclosure material except for differences of decorative parts.
- The change in aesthetics & location of buttons may be accepted if the lab ensures that these do not have effect the safety.
- Same design and layout of PCB.
- Same IP rating of transmitter and mic.
- Same Input Voltage of transmitter and mic.
- Same rating of battery (registered batteries).
- Same type of charging (USB/Charging Case/wireless).
- Registered adapter/power bank with the same output rating to input of Wireless Microphone, if applicable.

### **2. Digital Camera**

- Same Enclosure material except for differences of decorative parts.
- Same input voltage.
- Same PCB design layout.
- Same IP rating.
- Same rating of battery (registered batteries), if applicable.
- Same type of functionalities e.g. Printing.
- Registered adapter with the same output rating to input of Digital Camera, if applicable.

### **3. Video Camera**

- Type of Video Camera i.e. with or without display.
- Same Enclosure material except for differences of decorative parts.
- Same class of construction.
- Same input voltage.
- Same PCB design layout.
- Same IP rating.

- Same rating of battery (registered batteries), if applicable.
- Same mounting mechanism e.g. Handheld, Tripod etc.
- Registered adapter with the same output rating to input of Video Camera, if applicable.

#### **4. Webcam (Finished Product)**

- Same Enclosure material except for differences of decorative parts.
- Same PCB design layout.
- Type of Webcam i.e. Webcams with Microphones, Wireless, network etc.
- Same IP rating.
- Same input voltage.
- Same rating of battery (registered batteries), if applicable.
- Registered adapter with the same output rating to input of Webcam, if applicable.
- Same mounting mechanism.

#### **5. Smart Speakers (with and without Display) (Up-to a range of maximum output power will be accommodated in a series, provided)**

- With Display
  - Same type of display (touch, non-touch).
  - Same input voltage.
  - Same class of construction.
  - Same PCB design layout.
  - Same enclosure material except for differences of decorative parts.
  - Same IP rating.
- Without Display:
  - Same input voltage.
  - Same class of construction.
  - Same PCB design layout.

- Same enclosure material except for differences of decorative parts.
- Same IP rating.
- Power Transformer: Same design and insulation system.
- Same rating of battery (registered batteries), if applicable.
- Registered adapter with the same output rating to input of Smart Speakers, if applicable.

**6. Bluetooth Speakers (Up-to a range of maximum output power will be accommodated in a series, provided)**

- Same input voltage.
- Same class of construction.
- Same PCB design layout.
- Same enclosure material except for differences of decorative parts.
- Power Transformer: Same design and insulation system.
- Same rating of battery (registered batteries), if applicable.
- Registered adapter with the same output rating to input of Bluetooth Speakers, if applicable.

**7. Dimmers for LED products**

- Same input voltage.
- Same class of construction.
- Power Transformer: Same design and insulation system.
- Same enclosure material except for differences of decorative parts.
- Same mains PCB design and layout.
- Same IP Rating.

**Note: Maximum 10 models can be included in a series for all above product categories.**