Comments:

1. Page 6, Table 1 Resistivity Values of Some Common Materials

Point 1b:

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| b)  | Basalt  | 103 - 106 |

This is basalt resistivity as found in books. However, since this is IS code, we need to consider Indian scenario to avoid any confusion and hence different range is to be used. As per enclosed study, following are observed resistivity values:

Weathered/fractured vesicular basalt saturated with water: 20-45 Ωm; (ii) Moderately weathered/fractured basalt/vesicular basalt saturated with water: 40-70 Ω-m; (iii) Hard and massive basalts: > 70 Ω-m.

The electrical resistivity of different types of basalts can vary. Here are some approximate ranges for the resistivity values of different basalt types:

1. Tholeiitic Basalt: Tholeiitic basalts typically have resistivity values ranging from around 1 ohm-m to 100 ohm-m. However, it's important to note that resistivity can be highly variable depending on factors such as porosity, water content, and temperature.

2. Alkali Basalt: Alkali basalts generally exhibit slightly higher resistivity compared to tholeiitic basalts. Resistivity values for alkali basalts can range from approximately 10 ohm-m to 1,000 ohm-m.

3. Transitional Basalt: Transitional basalts fall between tholeiitic and alkali basalts in terms of composition. Their resistivity values can vary, typically ranging from around 10 ohm-m to 100 ohm-m or higher.

These ranges are approximate and can vary depending on specific geological conditions, mineralogy, and other factors.

We need to put this point across correctly.

2.

Disadvantages of wenner array are mentioned. Same need to be incorporates for other arrays also.

3.

Following equipment related points need discussion as these can create confusion for users:

6.1 For large-scale work, it is preferable to use a motor-generator having a capacity of several hundred watts.

6.2 For penetration of the order of 10 m, a frequency of 100 Hz is suitable. This may be decreased to less than 10 Hz for depths of investigation of about 100 m. For very deep ground penetration, direct current must be used.