

Items & prices (INR):

1. Solar 12 V 20 W — **1,200**
2. Wind 10 W DC motor — **200**
3. Solar charge controller — **500**
4. Wind charge controller — **500**
5. 3 × DC voltage/current sensors — **600**
6. 2 × AC voltage/current sensors — (**estimate**) **1,000** (*₹500 each assumed*)
7. Battery — **2,500** (*your value*)
8. Inverter — **1,000**
9. Microcontroller (ESP32/Arduino) — **500**
10. Relays (**estimate**) — **800** (*4 relay modules @ ₹200 each assumed*)
11. Extra fuses, wires, connectors — **500** (*estimate*)

Now add them step-by-step (digit-by-digit arithmetic):

- Step 1:  $1,200 + 200 = \mathbf{1,400}$
- Step 2:  $1,400 + 500 = \mathbf{1,900}$
- Step 3:  $1,900 + 500 = \mathbf{2,400}$
- Step 4:  $2,400 + 600 = \mathbf{3,000}$
- Step 5:  $3,000 + 1,000 = \mathbf{4,000}$
- Step 6:  $4,000 + 2,500 = \mathbf{6,500}$
- Step 7:  $6,500 + 1,000 = \mathbf{7,500}$
- Step 8:  $7,500 + 500 = \mathbf{8,000}$
- Step 9:  $8,000 + 800 = \mathbf{8,800}$
- Step 10:  $8,800 + 500 = \mathbf{9,300}$

**Subtotal = ₹9,300**

Add contingency (recommended) — **10%** of subtotal:

- 10% of 9,300 = 930
- Total =  $9,300 + 930 = \mathbf{₹10,230}$

**Result (A)** — Minimum budget estimate using your numbers: ~₹10,200.