

# Sri Chaitanya IIT Academy, India

A.P, TELANGANA, KARNATAKA, TAMILNADU, MAHARASHTRA, DELHI, RANCHI A right Choice for the Real Aspirant

ICON CENTRAL OFFICE, MADHAPUR-HYD

 Sec: Sr. IPLCO
 JEE ADVANCED
 DATE : 09-08-15

 TIME : 02:00 AM TO 05: 00 PM
 2013\_P2 MODEL
 MAX MARKS : 180

#### **KEY & SOLUTIONS**

#### **PHYSICS**

| 1  | ABD | 2  | ABC | 3  | AC | 4  | BCD | 5   | AC | 6  | BCD |
|----|-----|----|-----|----|----|----|-----|-----|----|----|-----|
| 7  | ABC | 8  | BC  | 9  | A  | 10 | D   | 11  | A  | 12 | D   |
| 13 | D   | 14 | В   | 15 | D  | 16 | В   | 17  | A  | 18 | A   |
| 19 | C   | 20 | A   |    |    |    |     | 100 |    |    |     |

#### **CHEMISTRY**

| 21 | ACD | 22 | ACD | 23 | ABC | 24 | A | 25 | В | 26 | ACD |
|----|-----|----|-----|----|-----|----|---|----|---|----|-----|
| 27 | ABC | 28 | D   | 29 | A   | 30 | A | 31 | D | 32 | D   |
| 33 | D   | 34 | C   | 35 | C   | 36 | В | 37 | C | 38 | D   |
| 39 | C   | 40 | В   |    |     |    |   |    |   |    |     |

## **MATHEMATICS**

| 41 | ABC | 42 | BC | 43 | BD | 44 | ABC | 45 | ABCD | 46 | D |
|----|-----|----|----|----|----|----|-----|----|------|----|---|
| 47 | ABC | 48 | AC | 49 | В  | 50 | C   | 51 | С    | 52 | В |
| 53 | В   | 54 | C  | 55 | В  | 56 | A   | 57 | В    | 58 | D |
| 59 | A   | 60 | C  |    |    |    |     |    |      |    |   |

Sec: Sr.IPLCO Page 1

### **PHYSICS**

- 1. Conceptual
- 2. Conceptual
- 3. Conceptual
- 4. Conceptual
- 5. Conceptual
- 6. Conceptual
- 7. Conceptual
- 8. Conceptual
- 9. Max<sup>m</sup> common acceleration up to time for

$$\mu_s = N = ma_{\text{max}}$$

$$\mu_s mg = m(21 \in t_1)$$

$$\therefore \mu_{s} = \frac{2kt_{1}}{g}$$

- 10. Increase in speed of plank from  $t_1$  to  $t_2$  is same as increase inspeed of block from  $t_1$  to  $t_3$
- 11. Conceptual
- 12. Conceptual
- 13. Conceptual
- 14. Conceptual
- 15. Conceptual
- 16. Conceptual
- 17. Conceptual
- 18. Conceptual
- 19. Conceptual
- 20. Conceptual