**INDICES MARKING SCHEME**

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| 1. |   ÷  4  =  = **1989Q4** | 2M |
| 2. |   = =  = 5= 5 x =  x = 2.193  **1990Q4** | 3M |
| 3. | = 32= 25 2x -2 =5 2x =5 + 2 2x = 7 x= or 3.5  **1991Q4** | 3M |
| 4. | + = 53 + 1+ = 54=54Let be yy + y =542y =54 y = 27 =27 = 332x = 3x= **1993Q8** | 3M |
| 5. | + = 350+ = 350 + = 350Let be y 49y +y =350 50y = 350 y = 7 = 7 2x = 1  x=  **1995Q5** | 4M |
| 6. | = =  = 12x -9– 12x + 9 = 0– 6x – 6x + 9 =0  = (2x –3) (2x – 3) =0 x = 11/2 **1996Q9** | M1M1A13M |
| 7. |   =  = -3m 4 =5-3m =9 m = 3  **1997Q7** | M1M1A1 |
| 8. | 3p2 + = 1 = p2 + 2p – 3 = 0 (p-1) (p+3) = 0 P = 10 p= 3  31/2 y = 1  **1998Q10** | B1M1A1B14M |
| 9. |       = **1999Q4** | M1A1 |
| 10. | Let y = y2 - 6y + 5 = 0 (y – 5) (y – 1) = 0y = 5 or y = 151 = and 50 = x= 1 or x = 0  **2000Q12** | M1A1M1A14M |
| 11. |  = ÷  5(x – 3) + 3(x + 4) = 6 x =1  **2001Q2** | M1M1A1 |
| 12. | =  8x + 3x – 2x = 69x =6x =2/3 **2002Q7** | M1M1A13 M |
| 13. |   = 81 = =   =  =   3 -2+3y =35Hence 3y -2 = 53y = 7y = 7/3 = 21/3 **2005Q1**  |  M1M1A1 |
| 14. | =  = = 9/2 or 4.5   **2008Q2** | M1M1A13M |
| 15.  | = == 1/8 x 900 x 16/25  = 72 **2009Q5**  | M1M1M1A1 |
|  16. |  = = =6  **2010Q8** | M1M1 |
| 17. | 92y 2*x* = 9 x 8 (32)2y 2*x* = 32 x 23 (32)2y = 3 and 2*x* = 23 4y = 2 and *x* = 3 Y = ½ and *x* = 3  **2012Q5** |  M1M1A13 |