**2013 Question 4 Part A**

1. $Ø$ 15 Rising Main
2. 230 L Cistern
3. 45L Cistern / Expansion Tank
4. $Ø$ 22 Feed to W.C., W.H.B. and Bath
5. $Ø $22 Cold Feed to Electric Shower
6. Feed to Twin Coil Hot Water Cylinder (H.W.C)
7. Cold Water Feed to Boiler / Stove
8. Primary Feed from Boiler to H.W.C. (Flow)
9. Primary Return from H.W.C. (Return)
10. Expansion pipe
11. Hot Water Feed to W.H.B. and Bath or Gravity Feed Showers
12. $Ø$ 15 Hot Water from Boiler to Radiators (Flow)
13. Zone Control Central Mechanisms (Motorised Valves)
14. $Ø$ 15 Return from Radiators to Boiler / Stove
15. Pump and Valves
16. Solar Panel, South facing @ 35 – 45 Degrees
17. Flow from the Solar Panel
18. Return from the H.W.C. to the Solar Panel
19. Pump and Valves
20. Expansion Vessel (Closed System)