

4B19 Numerical answers

- 1 (c) 0.25 MW, 1.16 MW, 2 MW, 2 M", 6.96 GWhr, 39.7%
- 1 (d) 2.74 rads/S, 730 kNm, 29, 0.018, 79.9 rads/S
- 2 (c) Francis turbine: 179 – 1282 rpm, 4-32 pole,  
Propellor turbine: 136 – 390 rpm, 16 – 44 pole
- 2 (d) 8.67 years, 1p
- 3 (a) At least 1470 V
- 3 (b) (i) 1.2 MW, 0.4 MW,  
(ii)  $\pm 16^2/3$  Hz  
(iii) 0.44 MVA
- 3 (c) (ii) 1.6 MW, 0 MW, 1.2 MW, 0.4 MW