

PHY III

1. $5.309469141 \times 10^{24}$
2. -700 J
3. 9.3866°C
4. 1.2680
5. 581.7964g
6. 10 J
7. 0.7964 N
8. $3.7013 \times 10^5 \text{ psi}$
9. 450 J
10. $2.8686 \times 10^8 \text{ molecules}$
11. 370,425 J
12. 17.5823°C
13. 3395.3055 s
14. 866.3265 m
15. 9 g of mercury
16. 1.6915
17. Part A: $V = 0.051 \text{ m}^3$

Part B: The patients density would be measured lower than what it is

Part C: 1.18

Part D: 90 N

Part E: 1 m

18. 1064.8148 kg/m^3 .

19. 2.5669 cm

20. $1.5 \times 10^4 \text{ Pa}$

21. A (the first choice)