

## Level 6 Test

1. B. 4
2. A. Analog to Digital
3. D. Joystick
4. A. Seven Segment Display
5. C. 40
6. D. && operator
7. A. 2 & 1
8. A. Set port pin as input or output
9. D. 2.4 GHz
10. Interrupt Service Routine
11. B. OR
12. A. decreases
13. C.  $\text{DDRB} = 0x04$
14. C. 16 MHz
15. B. 6
16. B. Ensure sufficient current for motors
17. C. 16
18. C. while (1)
19. C. 256
20. A. PC0 is set as input
21. C. 8 MHz
22. B. Voltage gets divided and current stays the same
23. D. 11
24. A. 16
25. B. Ground
26. D. 6

27	X	Y	Z
	0	0	1
	0	1	0
	1	0	0
	1	1	0

28.

Output LED-Red	Output LED-Green
OFF	ON
OFF	ON
OFF	ON
OFF	ON

29.

Frequency - Hz

Power - W

Resistance - Ohms  $\Omega$ 

Current - mA

Torque - Nm

Speed - m/s

Force - N

Voltage - V

30. int main (void)

{

DDRD = 0b00010000DDRB = 0b00000000

while (1)

{

if (checkbit (PINB, bit(1)))

{

angle(90);\_delay\_ms(2000);

}

else

{

angle(0);

}

}

}



31. a) C. LED - Blue

b) A. When  $x < 100$

c) C. None of the LEDs will glow