1. What is Arduino?
   a) Microprocessor
   b) Microcontroller
   c) Simulation software
   d) All of the above
2. How many modes of operation does a 555 timer have?
   a) 555
   b) 2
   c) 3
   d) 5
3. What are the compulsory files in a library?
   a) Header and source code
   b) Source and header code
   c) Keywords, readme and examples
   d) Only readme, everything else is optional
4. What is "Include Guard"?
   a) #ifndef and #endif
   b) #ifdef and #endif
   c) Constructor
   d) Way to secure the Arduino code
5. Pin 8 on Arduino is a PWM pin/
   a) True
   b) False
6. One cannot digitalWrite a component connected to an analog pin.
   a) True
   b) False
7. Who is the best? Exclude Sunks because he doesn't count. Lil bit weak in math.
   a) Naveen
   b) Anisha
   c) Varsha
   d) Vakesan
8. What does GPIO stand for?
   a) General Purpose Inner Outer Propeller
   b) General Purpose Input Output Pins
   c) General Purpose Interested Old People
   d) General Purpose Input Output Processor
9. ____ are pre built circuit boards that fit on top of Arduino.
   a) Sensors
   b) Data types
   c) Breadboards
   d) Shields
10. A function is a series of programming statements that can be called. Which command is called when the program starts?
    a) loop();
    b) setup();

c) (output)
d) (input)

11. What is the microcontroller used in Arduino UNO?
    a) ATmega328p
    b) ATmega2560
    c) ATmega32114
    d) AT91SAM3x8E

12. Which programming language is used for controlling Arduino?
    a) Assembly language
    b) C languages
    c) JAVA
    d) Any language

13. What does 9600 stand for in serial.begin(9600)?
    a) Slew rate
    b) Baud rate
    c) Byte rate
    d) All of the above mean the same thing

14. "Arduino is a real microcontroller" –Sunkeerth
    a) True
    b) False

15. By default, every digital pin of the Arduino is set to be:
    a) Input
    b) Output
    c) Both
    d) None

16. Which among these is not a valid function under the servo library?
    a) attached();
    b) millis();
    c) write();
    d) attach();

17. Arduino can control frequency, volume and duration of a piezo buzzer.
    a) True
    b) False

18. Which among these is a valid function under the IR remote library?
    a) enableIRIn();
    b) irrecv();
    c) Resume();
    d) Decode();

19. Possible values of analogWrite:
    a) 0-1023
    b) 1-1024
    c) 0-256
    d) 0-255

20. When a relay is off, to which port is COM connected?
    a) NO
    b) NC

c) VCC
d) GND

21. "The essence of a circuit lies in the power rails." –Naveen
    a) True
    b) False

22. A light dependent resistor is made of
    a) Low resistance metal
    b) Low resistance semiconductor
    c) High resistance semiconductor
    d) Low conductance metal

23. What does this statement mean: Servo.attach(4);
    a) Connect the wire to 4 GND
    b) Connect the wire for 4 seconds
    c) Connect the wire to 4 volts
    d) Connect the wire to digital pin 4

24. The LED 7 segment display uses seven individual _____
    a) Light Emitting Diodes
    b) Light Restoring Diodes
    c) Light Dependent Resistors
    d) Photodiodes

25. This syntax will move the micro servo properly: myServo.write(200);
    a) True
    b) False

26. Whenever an instruction is sent to LCD, what must be done?
    a) R/W pin should be toggled low to high to low
    b) En pin should be toggled low to high to low
    c) En pin should be toggled high to low to high
    d) R/W pin should be toggled high to low to high

27. "Was I so good or was the topic so easy?" Who uses this line extensively?
    a) Naveen
    b) Vakesan
    c) Anisha
    d) Sunkeerth

28. Data sent/received to/from an LCD is how many bits long?
    a) 16
    b) 4
    c) 8
    d) 1

29. When a PWM signal is given to the En pin of H-bridge,
    a) Nothing happens
    b) the direction of motor changes based on the signal
    c) the speed of the motor changes based on the signal
    d) the En pin can't be given a PWM signal

30. When an interrupt is triggered, the program runs the ISR and then comes back to the usual routine.
    a) True

b) False
31. When using LCD in 4 bit mode, what all pins are required?
    a) RS R/W En D4 D5 D6 D7
    b) RS En D4 D5 D6 D7
    c) RS R/W D4 D5 D6 D7
    d) RS R/W En D0 D1 D2 D3 D4 D5 D6 D7
32. "Do you guys have any questions? Any doubts? Anything to say? Anything at alll?" Who uses this line extensively?
    a) Anisha
    b) Varsha
    c) Naveen
    d) Sunkeerth
33. How to print on the next line in LCD?
    a) lcd.print();
    b) lcd.print("\n");
    c) lcd.setCursor(a,b);
    d) lcd.begin(a,b);
34. How many digital pins are there on the UNO board?
    a) 14
    b) 12
    c) 16
    d) 20
35. What does the 'p' refer to in ATmega328p?
    a) Production
    b) Pico-power
    c) Power-pico
    d) Programmable on-chip
36. Arduino source code is converted to ___(i) using the ___(ii) compiler.
    a) Object code, AVR_Dude
    b) Simple C, AVR_Dude
    c) Simple C, AVR_GCC
    d) Object code, AVR-GCC
37. "Don't blow up your components, kids. Check your connections before you power up." –Vakesan
    a) True
    b) False
38. What will happen?

a) Show an error
b) Show a warning but not an error
c) Execute an infinite loop
d) Print '1'

39. Identify this sensor.

a) Proximity sensor
b) Temperature sensor
c) Moisture sensor
d) Ultrasonic sensor

40. Which segments of the 7 segment display would be required to be HIGH to display decimal digit 2?
a) a, b, c, d and g
b) a, b, d, e and g
c) a, b, c, d, e and f
d) a, c, d, f and g