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**Question Paper Code: U8462**

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

One credit

Electronics and communication Engineering

21UEC862 - PCB DESIGN

(Regulations 2021)

(Common to All Branches)

Duration: 1.30 hours

Maximum: 30 Marks

Answer ALL Questions

PART A - (30 x 1 = 30 Marks)

1. IC stands for \_\_\_\_\_ CO1 U  
(a) integrated circuit (b) intelligence circuit  
(c) intensive circuit (d) internal component
2. The transistor is act as a \_\_\_\_\_ CO1 U  
(a) switch (b) on a device (c) off a device (d) none of these
3. Transformer used for 230 to 12 volt conversion is \_\_\_\_\_ CO1 U  
(a) step up (b) step down (c) both a&b (d) none of these
4. Voltage regulator is used for \_\_\_\_\_ CO1 U  
(a) constant voltage (b) constant current (c) both a&b (d) none of these
5. The timer IC is \_\_\_\_\_ CO1 U  
(a) 555 (b) 444 (c) 222 (d) 777
6. The 555 timer is used for \_\_\_\_\_ CO1 U  
(a) pulse generation (b) pulse modulation  
(c) pulse demodulation (d) pulse width modulation
7. The ic 7809 is used for \_\_\_\_\_ CO1 U  
(a) providing constant voltage (b) providing constant current  
(c) both a&b (d) none of these

8. The Varactor diode is usually CO1 U  
 (a) Forward biased (b) Unbiased  
 (c) Holes and Electrons (d) none of these
9. LDR stands for \_\_\_\_\_ CO1 U  
 (a) light dependent resistor (b) light dependent resonator  
 (c) long delay resistor (d) light delay resistor
10. In power supply unit the capacitor is used for \_\_\_\_\_ CO1 U  
 (a) filter (b) drop down noise voltage (c) both a&b (d) none of these
11. Before the iron process the PCB called CO1 U  
 (a) Fixed board (b) brass board (c) Copper clad board (d) silver board
12. Component placed only on top side called CO1 U  
 (a) Multilayer (b) Single layer (c) Double layer (d) Three layer
13. \_\_\_\_\_ Used for soldering CO1 U  
 (a) Ferric chloride (b) Ferrous chloride (c)  $\text{SiO}_2$  (d) carbon
14. Modern devices are used as CO1 U  
 (a) Single (b) Double layer (c) layer (d) Multilayer
15. A resistor with colour bands Red, Violet, Green and Black will have a value CO1 U  
 (a)  $27 \text{ K} \pm 10\% \text{ K}$  (b)  $2.7 \text{ M} \pm 20\% \text{ K}$  (c)  $270 \text{ K} \pm 5\% \text{ K}$  (d)  $2.7 \text{ K} \pm 2\% \text{ K}$
16. If two resistor are connected in series, is the final resistance: CO1 U  
 (a) Higher (b) Lower (c) Same (d) Not determined
17. Thermocouple is a type of \_\_\_\_\_ CO1 U  
 (a) Switch (b) Resistor (c) Rectifier (d) Diode
18. Which switch made an electromagnet CO1 U  
 (a) Transistor (b) MOSFET (c) SCR (d) Relay
19. If we connect the capacitor in parallel ,it act as CO1 U  
 (a) Storage device (b) Filter (c) Switch (d) Charging/Discharging
20. Which produce magnetic flux CO1 U  
 (a) Condensor (b) Iron (c) Inductor (d) Transistor

21. Which chemical is used for etching process\_\_\_\_\_ CO1 U  
 (a) ferric chloride (b) sulphuric acid (c) ferrous sulphate (d) hydrochloric acid
22. IC stands for \_\_\_\_\_ CO1 U  
 (a) integrated circuit (b) intelligence circuit  
 (c) intensive circuit (d) internal component
23. LED stands for\_\_\_\_\_ CO1 U  
 (a) light emitting diode (b) light emitted display  
 (c) liquid emitted display (d) Liquid emitted diode
24. The most popular form of IC package is ..... CO1 U  
 (a)DIL (b) Flat pack (c)TO-5 (d)None of the above
25. In a ac house hold appliance the frequency is in \_\_\_\_\_Hz CO1 U  
 (a) 230 (b) 220 (c) 50 (d) 60
26. What kind of paper is used for PCB layout CO1 U  
 (a) Butter flim (b) A4 (c) Normal paper (d) plastic coated paper
27. After etching the remaining copper path called CO1 U  
 (a) Traces (b) Pad (c) Vias (d) Holes
28. What factors influence PCB fabrication cost CO1 U  
 (a) PCB size (b) Layer count (c) Hole diameter (d) All of the above
29. The component which character is to oppose current flow CO1 U  
 (a) Capacitor (b) Resistor (c) Diode (d) Transistor
30. A rheostat is a form of CO1 U  
 (a) Variable capacitor (b) variable resistor  
 (c) potentiometer (d) Thermocouple

