

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code: U8462**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 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. PCB stands for CO1 U  
(a) printed circuit board                      (b) printed copper board  
(c) polymerized copper board                (d) None of these
2. The Selection of resistors depends up on \_\_\_\_\_ CO1 U  
(a) voltage                      (b) current                      (c) both a &b                      (d) None of these
3. The diode used for rectifier circuit is \_\_\_\_\_ CO1 U  
(a) 1N4001                      (b) 1N5001                      (c) 1N 8086                      (d) None of these
4. The transistor is act as a \_\_\_\_\_ CO1 U  
(a) switch                      (b) on a device                      (c) off a device                      (d) None of these
5. The most popular form of IC package is ..... CO1 U  
(a) DIL                      (b) Flatpack                      (c) TO-5                      (d) None of the above
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 CO1 U  
have a value  
(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. Define ohm's law CO1 U  
 (a)  $V=IR$  (b)  $V=I/R$  (c)  $V=R/I$  (d)  $I=VR$
27. Example for semiconductor CO1 U  
 (a) Diode (b) Resistor (c) Capacitor (d) Inductor
28. LM-293(H-bridge) act as a driver circuit for CO1 U  
 (a) Motor (b) Rectifier (c) Condenser (d) None
29. Which controlling the level of voltage CO1 U  
 (a) Potentiometer (b) Diode (c) Rectifier (d) IC
30. Sensors used to detect metallic parts only: CO1 U  
 (a) optical sensors (b) ultrasonic proximity sensors  
 (c) capacitive proximity sensors (d) Inductive proximity sensors

