Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

|  |  |  |  |
| --- | --- | --- | --- |
| **Code :** | **18EE1005** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ELECTRICAL WORKSHOP PRACTICES** | **Max. Marks :** | **100** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Q. No.** | **Questions** | **Course Outcome** | **Marks** |
| **PART – A (10X1 = 10 MARKS)** | | | |
| 1. | Draw a IEEE standard diagram of fuse. | CO4 | 1 |
| 2. | The frequency of a.c.supply in India is \_\_\_\_\_\_\_\_\_\_\_\_ Hz. | CO4 | 1 |
| 3. | Indicate the function of filter circuit in the power supply circuit. | CO2 | 1 |
| 4. | Name the tool used to measure the size of electrical wire. | CO4 | 1 |
| 5. | The type of motors generally used in a Mixie is\_\_\_\_\_\_\_\_\_\_\_\_\_. | CO4 | 1 |
| 6. | Mention any one software used to make PCB Layout. | CO3 | 1 |
| 7. | Sine wave is displayed in CRO. RMS value of voltage is 230V. The Maximum value sine wave displayed is \_\_\_\_\_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 8. | Mention the typical value of earth resistance for the domestic applications. | CO6 | 1 |
| 9. | After printing on the copper clad, it is dipped in \_\_\_\_\_\_\_\_\_\_\_ solution to remove the unwanted copper. | CO2 | 1 |
| 10. | Mention the size of the wire used in domestic wiring from switch board to lighting points. | CO4 | 1 |

|  |  |  |  |
| --- | --- | --- | --- |
| **PART – B (6 X 3 = 18 MARKS)** | | | |
| 11. | List down the applications of Uninterrupted Power Supply. | CO1 | 3 |
| 12. | Classify the types of earthing. | CO6 | 3 |
| 13. | Compare normal fuse and HRC Fuse. | CO4 | 3 |
| 14. | Give any three advantages of PCB. | CO3 | 3 |
| 15. | Half-wave rectifiers are generally not used in dc power supply. Why? | CO2 | 3 |
| 16. | List out the tools used for metal fitting. | CO5 | 3 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PART – C (6 X 12 = 72 MARKS)**  **(Answer any five Questions from Q.no 17 to 23. Q.No 24 is a Compulsory Question)** | | | | |
| 17. |  | Explain the construction and important features in Digital Storage Oscilloscope (DSO), with neat block diagram. | CO2 | 12 |
| 18. |  | With relavant block diagrams, elucidate the working of UPS. | CO1 | 12 |
| 19. |  | Explain the principle and working of MEGGER with relevant Circuit diagram. | CO6 | 12 |
| 20. |  | Explain withcircuit diagram the working of12V DC Power supply using Rectifier, filter and LM78XX Series regulator IC. | CO2 | 12 |
| 21. |  | Mention the procedure to create PCB layout for any circuit using EAGLE software. Explain with example. | CO3 | 12 |
| 22. |  | With neat diagram,elucidate the working of Electro Magnetic Relay in detail. | CO4 | 12 |
| 23. |  | With relevant diagram, explain various parts of mixer grinder in detail. Also explain the function of each components. | CO6 | 12 |
|  | | **Compulsory:** | | |
| 24. |  | Draw the simple electrical wiring diagram which connects following eletrcical components. Energy Meter, Main Switch, Distribution Board, 2 No. of Ceiling Fans, 2 No. of fluorescentslamps and a electric bell. Also explain the procedure for the electrical wiring. | CO4 | 12 |