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BVOC
(SEM I) THEORY EXAMINATION 2021-22
TOOLS, EQUIPMENT & SAFETY MEASURES –I

Time: 3 Hours**Total Marks: 30****Notes:**

- Attempt all Sections and assume any missing data.
- Appropriate marks are allotted to each question, answer accordingly.

SECTION-A	Attempt All of the following Questions in brief	Marks(6X1=6)
Q1(a)	Discuss the importance of colour codes in electrical wiring.	
Q1(b)	Why is PVC casing-capping preferred over wooden casing-capping wiring?	
Q1(c)	Silver is a good conductor of electricity, but it is rarely used as a wiring material. Why?	
Q1(d)	Differentiate between armoured & unarmoured Cable.	
Q1(e)	Write short note on Twin-Lead Cable and Twin axial Cable.	
Q1(f)	What type of clothing causes static electricity?	

SECTION-B	Attempt ANY THREE of the following Questions	Marks(3X3=9)
Q2(a)	What is conduit wiring? Why is conduit wiring used in homes?	
Q2(b)	Write Short Notes on any two of the following: i) Multi-Conductor Cable ii) Coaxial Cable Connectors iii) Non-Metallic Sheathed Cable	
Q2(c)	What do you mean by Electric Cable? And what are their uses?	
Q2(d)	What are the major components of a cable?	
Q2(e)	What are cable connectors? Explain the types of cable connectors.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q3(a)	What are the basic tools and materials required for fixing the accessories on the board? Also discuss the required precautions.	
Q3(b)	What does it mean by the current loading of an underground cable?	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q4(a)	Explain the configuration of Shielded Twisted Pair (STP) Cable and its application.	
Q4(b)	Explain the Different colors of wires and their purposes in AC and DC circuits?	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q5(a)	Write a short note on optical fiber construction. What are the advantages and limitations of fiber optic system?	
Q5(b)	Explain briefly 'optical fiber communication system', with the help of a block diagram.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q6(a)	What is ESD clothing and how does it work? Explain in detail.	
Q6(b)	What do you understand by ESD? What are the fundamental principles of ESD control?	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q7(a)	What are major steps of the first aid for electrical emergencies? Discuss.	
Q7(b)	What are the three types of electrical accidents? Also discuss the main causes for electrical accidents.	