



BVOC
(SEM I) THEORY EXAMINATION 2021-22
SOLDERING & DE-SOLDERING OF COMPONENTS & EMERGENCY ACTIONS

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)	How to prepare component for soldering.	
Q1(b)	List out different solder materials and their grading.	
Q1(c)	Define components mounted circuit boards.	
Q1(d)	Define De soldering using Pump and wick.	
Q1(e)	Define SMD Components.	
Q1(f)	Highlight the emergency actions taken during soldering and de soldering.	

SECTION-B	Attempt ANY THREE of the following Questions	Marks(3X3=9)
Q2(a)	Examine the different types of soldering guns related to temperature and wattages.	
Q2(b)	Write Short Notes on any two of the following: (i). PCB Applications (ii). Types of PCB	
Q2(c)	How to make the necessary settings on SMD soldering station to solder various ICs of different packages by choosing proper clamping tools, Explain.	
Q2(d)	Explain De solder on the SMD components from the given PCB.	
Q2(e)	Explain the methods used to join the broken PCB track and test.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q3(a)	Illustrate the solder materials used also explain their grading.	
Q3(b)	Illustrate the soldering and De Soldering Stations and their Specifications.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q4(a)	Explain the soldering basic components used on PCB.	
Q4(b)	Explain the identification of loose/dry solder, broken tracks on printed wire assemblies & discrete components mounted circuit boards.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q5(a)	Explain the safety precautions while soldering & De soldering.	
Q5(b)	Explain the identification of 2, 3, 4 terminal SMD components.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q6(a)	Explain the term reliable soldering practices.	
Q6(b)	Explain how to De solder the SMD components from the given PCB.	

SECTION-C	Attempt ANY ONE following Question	Marks (1X3=3)
Q7(a)	Explain the identification of crimping tools for various IC packages.	
Q7(b)	How to make a panel board using different types of switches for a given application, Explain.	