|  |  |
| --- | --- |
| LOGO.jpg | **GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY**  (**AN AUTONOMOUS INSTITUTION**)  **(Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu)**  **(Accredited by NAAC with “A” Grade, NBA (EEE,ECE &ME) & ISO9001:2008CertifiedInstitution)** |
| **QUESTIONBANK(DESCRIPTIVE)**  **Subject Name with Code: Design Thinking & Innovation**  **Course & Branch: B.Tech & CE,ECE.EEE**  **Year& Semester: II &II Regulation: RG23** | |

**UNIT - I**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Question** | **[BT Level] [CO][ Marks]** |
| **2 Marks Questions (Short)** | | |
|  | Define line | **L1 CO1 2M** |
|  | Define Shape | **L1 CO1 2M** |
|  | Define Form | **L1 CO1 2M** |
|  | Define Colour | **L1 CO1 2M** |
|  | Define Texture | **L1 CO1 2M** |
|  | Define space | **L1 CO1 2M** |
|  | List the elements of design | **L1 CO1 2M** |
|  | List the principles of design | **L1 CO1 2M** |
|  | Define design thinking | **L1 CO1 2M** |
|  | What are the six phases of design thinking | **L1 CO1 2M** |
| **Descriptive Questions (Long)** | | |
|  | Explain briefly about design thinking & draw the flow chart | **L1 CO1 10M** |
|  | Discuss about history of design thinking | **L1 CO1 10M** |
|  | Discuss about principles of design | **L1 CO1 10M** |
|  | Explain briefly about elements of design | **L1 CO1 10M** |
|  | Write about the elements of design are line, colour ,shape, Texture, space in detail | **L1 CO1 10M** |
|  | Discuss about Emphasis, balance & alignment , movement, whitespace and proportion | **L1 CO1 10M** |
|  | What is the meaning of elements of design and also draw the flowchart | **L1 CO1 10M** |

**UNIT - II**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Question** | **[BT Level] [CO][ Marks]** |
| **2 Marks Questions (Short)** | | |
|  | Define Empathise | **L1 CO2 2M** |
|  | Define the Problem | **L1 CO2 2M** |
|  | Define ideate | **L1 CO2 2M** |
|  | Define prototype | **L1 CO2 2M** |
|  | What is discovery | **L1 CO2 2M** |
|  | Define iterate | **L1 CO2 2M** |
|  | List out the design thinking in social innovations | **L1 CO2 2M** |
| **Descriptive Questions (Long)** | | |
|  | Discuss five stages of design thinking process | **L1 CO2 10M** |
|  | Explain briefly about frame work of design thinking & Draw a flow chart | **L1 CO2 10M** |
|  | Discuss about Distinctions between Design and design thinking | **L1 CO2 10M** |
|  | Write implementing the process in driving inventions | **L1 CO2 10M** |
|  | Discuss about design thinking in social innovations | **L1 CO2 10M** |
|  | Write in detail about tools of design thinking | **L1 CO3 10M** |
|  | Discuss about key principles of product development and also draw the flow chart | **L1 CO3 10M** |
|  | Define product development & also Discuss major steps & stages in product development | **L1 CO2 10M** |
|  | Discuss about stages of product development & also draw a flow chart | **L1 CO2 10M** |

**UNIT - III**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Question** | **[BT Level] [CO][ Marks]** |
| **2 Marks Questions (Short)** | | |
|  | What is creativity | **L2 CO3 2M** |
|  | What is innovation | **L2 CO4 2M** |
|  | What is creative thinking | **L2 CO3 2M** |
|  | List the types of creativity | **L2 CO3 2M** |
|  | List the types of innovation | **L2 CO4 2M** |
|  | What are benefits of creative thinking | **L2 CO3 2M** |
|  | List the types of thinking | **L2 CO3 2M** |
| **Descriptive Questions (Long)** | | |
|  | Difference between Innovation and Creativity | **L1 CO3 10M** |
|  | Discuss role of innovation in organisation and industry | **L1 CO3 10M** |
|  | Discuss importance of innovation in organisation and industry | **L1 CO3 10M** |
|  | Define creativity and explain types of creativity | **L1 CO3 10M** |
|  | Define innovation and explain types of innovation | **L2 CO4 10M** |
|  | Illustrate to develop creative thinking skills | **L1 CO3 10M** |
|  | Define thinking and explain types of thinking | **L1 CO3 10M** |
|  | Write in detail about creative thinking | **L1 CO3 10M** |

**UNIT - IV**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Question** | **[BT Level] [CO][ Marks]** |
| **2 Marks Questions (Short)** | | |
|  | Define product value | **L1 CO5 2M** |
|  | What is product planning | **L1 CO5 2M** |
|  | What are product strategies | **L1 CO5 2M** |
|  | What are the product specifications | **L1 CO5 2M** |
|  | What is problem function | **L1 CO5 2M** |
|  | How to set specifications | **L1 CO5 2M** |
| **Descriptive Questions (Long)** | | |
|  | Explain briefly about problem function | **L2 CO5 10M** |
|  | Discuss in detail about product design | **L2 CO5 10M** |
|  | Explain about product strategies | **L2 CO5 10M** |
|  | Explain about product value | **L2 CO5 10M** |
|  | Explain about product specifications | **L2 CO5 10M** |
|  | Discuss about innovation towards product design | **L2 CO5 10M** |
|  | Describe any one case study about innovation towards product design | **L2 CO5 10M** |

**UNIT - V**

|  |  |  |
| --- | --- | --- |
| **S.No.** | **Question** | **[BT Level] [CO][ Marks]** |
| **2 Marks Questions (Short)** | | |
|  | What is business economics | **L1 CO6 2M** |
|  | What are the design thinking in business and strategic innovation | **L1 CO6 2M** |
|  | List the ten design thinking principles that redefine business | **L1 CO6 2M** |
|  | List out the various business challenges | **L1 CO6 2M** |
|  | List out the design thinking solutions | **L1 CO6 2M** |
|  | What is startups | **L1 CO6 2M** |
|  | List out the design ladder measures is used in organizations | **L1 CO6 2M** |
|  | Which year start up India launched and also who initiative as taken for start up | **L1 CO6 2M** |
|  | What is big data | **L1 CO6 2M** |
| **Descriptive Questions (Long)** | | |
|  | Discuss about design thinking in business and strategic innovation | **L2 CO6 10M** |
|  | Discuss about design thinking in business process modelling | **L2 CO6 10M** |
|  | Explain in detail design thinking principles that redefine business | **L2 CO6 10M** |
|  | Explain in detail business challenges | **L2 CO6 10M** |
|  | Illustrate design thinking approach for business challenges | **L2 CO6 10M** |
|  | Discuss in detail business challenges in growth & what is interpretation of design thinking to growth challenge | **L2 CO6 10M** |
|  | Discuss in detail business challenges in predictability & what is interpretation of design thinking to predictability challenge | **L2 CO6 10M** |
|  | Discuss in detail business challenges in change & what is interpretation of design thinking to change challenge | **L2 CO6 10M** |
|  | Discuss in detail business challenges in Relevance & what is interpretation of design thinking to Relevance challenge | **L2 CO6 10M** |
|  | Discuss in detail business challenges in Extreme competition & what is interpretation of design thinking to Extreme competition challenge | **L2 CO6 10M** |
|  | Discuss in detail business challenges in Standardization & what is interpretation of design thinking to Standardization challenge | **L2 CO6 10M** |

**Signature of the Staff:**

**Signature of Department Academic Committee Member 1:**

**Signature of Department Academic Committee Member 2:**

**Signature of Department Academic Committee Member 3:**