

**University Institute of Engineering & Technology**

*(Recognised Under Section 2(f) and 12B of UGC)*

**Kurukshetra University, Kurukshetra**

**TIME – 3 Hrs 15 Min**

**THEORY EXAMINATION – JAN 2021**

**B.TECH – CSE**

**SEMESTER – VII**

**M.M. - 56**

**COURSE NO. - CSE415**

**COURSE TITLE - OBJECT ORIENTED SOFTWARE ENGINEERING**

**INSTRUCTIONS TO BE FOLLOWED**

- Allotted time for examination is 3 hours 15 minutes that includes time for downloading the question paper, writing answers, scanning of answer sheets and E-mailing the PDF files to the designated Email ID.
- For CSE-A Regular Students, the Email ID is:- [btech7thcsea@kuk.ac.in](mailto:btech7thcsea@kuk.ac.in)
- For CSE-B Regular and All Reappear Students, the Email ID is:- [btech7thcseb@kuk.ac.in](mailto:btech7thcseb@kuk.ac.in)
- The candidates will be required to attempt 75% of the question paper (maximum) by choosing to their any best questions accumulating 56 marks.
- The PDF files should be saved as Roll No. and Subject Code. Proper attention should be given while sending the email and in the subject line, the Roll Number and Subject Code should be mentioned.
- Maximum Page Limit should be 20 (Twenty) for attempting the question paper on A4 sheets which could be downloaded and printed from the sample sheets given in the Kurukshetra University Examination guidelines.
- Over-attemptation should be avoided.
- Handwriting should be neat and clean and diagrams should be clear and contrasted.
- The candidate should not write their Mobile No. otherwise Unfair Means Case will be made.
- While attempting the paper, the candidate will use blue/black pen only.
- Before attempting the paper, the candidate will ensure that he/she has downloaded the correct question paper. No complaint for attempting wrong question paper by the candidate will be entertained.
- Candidate must ensure that he/she has put his/her signature on each page of the answer sheet used by him/her. Answer sheet without the signature of the candidate will not be evaluated.

## PART-A

**Q. No. – 1 Answer the following questions.**

**15x1=15**

(i)	Modular design unintentionally follows the rules of 'divide and conquer' problem solving strategy. (Y/N)
(ii)	What kind of approach was introduced for elicitation and modelling to give a functional view of the system?
(iii)	When elements of module are grouped because the output of one element serves as input to another element and so on, it is called _____.
(iv)	Aggregation represents _____.
(v)	Reliability is measured by considering processing speed, response time, resource consumption, throughput, and efficiency. (Y/N)
(vi)	Objects are executed in which manner i.e. (Sequential/Parallel/ Both). _____
(vii)	The spell check feature in word processor is a module of software. (Y/N)
(viii)	What are the types of requirement in Quality Function Deployment (QFD)?
(ix)	What are the kinds of actors used in OOSE?
(x)	OOD languages provide a mechanism where methods performing similar tasks but vary in arguments and that can be assigned to the same name is called _____.
(xi)	Refinement is actually a process of elaboration. (True/False)
(xii)	The feature of the object oriented paradigm which helps code reuse is _____.
(xiii)	Which design defines the logical structure of each module and their interfaces that is used to communicate with other modules?
(xiv)	The feature of the object oriented paradigm which helps code reuse is _____.
(xv)	Object that collects data on request rather than autonomously is known as _____.

## PART-B

<b>2</b>	Explain Object Containment, Object Persistence and Meta Classes with example.	<b>5</b>
<b>3</b>	Differentiate patterns and framework. List various components included in pattern template.	<b>5</b>
<b>4</b>	Explain A-Part-of-Relationships and Super Sub class relationship.	<b>5</b>
<b>5</b>	Discuss various Axiom used in design of OO process.	<b>5</b>

## PART-C

<b>6</b>	Discuss various characteristics of OOSE with example.	<b>10</b>
<b>7</b>	Explain OOSD in detail.	<b>10</b>
<b>8</b>	Discuss dynamic diagrams used in UML with example.	<b>10</b>
<b>9</b>	Explain Jacobson Methodology in detail.	<b>10</b>
<b>10</b>	Explain Class, responsibilities and collaborators. Differentiate object and class responsibility.	<b>10</b>
<b>11</b>	Explain Noun Phrase approach in detail.	<b>10</b>
<b>12</b>	Differentiate macro and micro level interface design process. Explain macro level interface design process in detail.	<b>10</b>
<b>13</b>	What is the significance of corollary? Explain various types of corollaries with example.	<b>10</b>