Total No. of Questions : 8] [Total No. of Printed Pages : 3 Roll No CS-502-CBGS **B.Tech.**, V Semester Examination, June 2020 **Choice Based Grading System (CBGS) Database Management Systems** Time: Three Hours Maximum Marks: 70 *Note:* i) Attempt any five questions. ii) All questions carry equal marks. iii) All parts of each questions to be are attempted at one place. ion should be treated as final. What is Data independence? Why is it essential? 7 b) Discuss in detail about Primary file organization. 7 CS-502-CBGS PTO

2.	a)) Ex	plain	about	various	constraints	used	in]	E-R	model	.7

- b) Why the concurrency control is needed? Explain it. 7
- 3. a) Explain in detail about internal hashing, techniques. 7
 - b) Differentiate Multivalued dependency and Join dependency.
- 4. a) Find the attribute closures of given FDs in relation R.7 (R)

$$() = \{AB \rightarrow C, B \rightarrow D, C \rightarrow E, D \rightarrow A\}$$

7

- b) What do you mean by Schedule?
- 5. a) Differentiate conflict serializability and view serializability with suitable example. 7
 - b) What is Normalization? Why it is required. 7
- 6. a) Explain why 4NF is more desirable than BCNF with the help of an example. 7

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b)	Differentiate	physical	level	and	logical	level	of	data
	abstraction.							7

- 7. a) What is Log? How is it maintained? 7
 - Explain data fragmentation with types. 7
- Explain ACID property in detail. 8. a)
 - Write short note on any three of the following.
 - Three level architecture of DBMS
 - ii) Database recovery
 - iii) Triggers in SQL
 - iv) Cursor in SQL
 - v) Functional dependency

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