## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

### CO's to PO's & PSO's mapping

Name of the course : **Storage Area Networks**        Sub Code : 18CS822

Name of the Faculty/s : **Prof. Smitha N., Dr. Shanthi M. B.**        Sem & Sec : 8th  B &C

| Course Outcomes | | Modules covered | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 | PO 9 | PO 10 | PO 11 | PO 12 | PS O1 | PS O2 | PS O3 | PS O4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | Identify key challenges in managing information and analyze different storage networking technologies and virtualization | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| CO2 | Explain components and the implementation of NAS | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| CO3 | Describe CAS architecture and types of archives and forms of virtualization | 2,3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 |
| CO4 | Illustrate the storage infrastructure and management activities | 5 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 |

| COGNITIVE LEVEL | REVISED BLOOMS TAXONOMY KEYWORDS |
|---|---|
| L1 | List, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc. |
| L2 | summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend |
| L3 | Apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover. |
| L4 | Analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer. |
| L5 | Assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize. |

| PROGRAM OUTCOMES (PO), PROGRAM SPECIFIC OUTCOMES (PSO) | | | | CORRELATION LEVELS | |
|---|---|---|---|---|---|
| PO1 | Engineering knowledge | PO7 | Environment and sustainability | 0 | No Correlation |
| PO2 | Problem analysis | PO8 | Ethics | 1 | Slight/Low |
| PO3 | Design/development of solutions | PO9 | Individual and team work | 2 | Moderate/ Medium |
| PO4 | Conduct investigations of complex problems | PO10 | Communication | 3 | Substantial/ High |
| PO5 | Modern tool usage | PO11 | Project management and finance | | |
| PO6 | The Engineer and society | PO12 | Life-long learning | | |
| PSO1 | Design and develop applications using different stacks of web and programming technologies | | | | |
| PSO2 | Design and develop secure, parallel,  distributed, networked, and digital systems | | | | |
| PSO3 | Apply software engineering methods to design, develop,  test and manage software systems. | | | | |
| PSO4 | Design and develop  intelligent applications for business and industry | | | | |

## 1.        Justification for levels of correlation for COs & POs/PSOs ( )

**PO1: Engineering Knowledge:** Engineering Knowledge of various storage, networking , backup recovery, and allocation strategies help students to identify, analyze and design solutions as it belong to the core principles of computer science.; hence correlation level is **Medium** to all Cos i.e 2

**PO2: Problem Analysis:** Ability to analyze the storage and networks related issues when it occurs in the industry/College. Correlation level is **Medium** for all COs. i.e 2

**PO3: Design/development of solutions:** Subject is dealing with different protocols and architecture, hence the correlation is slightly low i.e., 1

**PO4: Conduct investigations of complex problems:** Storage Are Network is used in day to day life to store and process the data, hence the correlation is slightly low i.e., 1

**PSO2**:  SAN deals with different types of Networks and securing and monitoring the networks hence the correlation is level is **low** for all COs, i.e. 1

**PSO3:** Business Application can be maintained through cloud by using certain SAN technologies and frameworks, hence the co relation is **low**, i.e. 1

*Note: Other PO's/PSO's have no correlation (or very low correlation) with respect to CO's of this Course.*

## 2. Analysis on previous attainments for setting targets on CO attainments for current semester subjects.

Storage Area network is a newly introduced subject. So previous attainment can not be taken for setting the current target.
Hence, the  Target for current  target  values for Storage Area network was set as follows :

| Couse Outcome | Attainment Level for  last year | Target  for current  exam | Attainment  Level of  current year | Gap | Gap Analysis |
|---|---|---|---|---|---|
| CO1 | 2.8 | 3 | | | |
| CO2 | 3.0 | 3 | | | |
| CO3 | 3.0 | 3 | | | |
| CO4 | 2.7 | 3 | | | |
| CO5 | 2.9 | 3 | | | |

**CO-PO attainment computation formula along with Rubrics**

## 3. Final CO attainment w.r.t PO and PSO

| Final CO attainment value | CO-PO and CO-PSO attainment | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CO-PO1 | CO-PO2 | CO-PO3 | CO-PO4 | CO-PO5 | CO-PO6 | CO-PO7 | CO-PO8 | CO-PO9 | CO-PO10 | CO-PO11 | CO-PO12 | CO-PSO1 | CO-PSO2 | CO-PSO3 | CO-PSO4 |
| | | | | | | | | | | | | | | | | |