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SARDAR VALLABHBHAI PATEL EDUCATION SOCIETY MANAGED

N. G. PATEL POLYTECHNIC

| 5 | ELECTRICAL | ENGINEERING DEPARTMENT |
|------------|--------------------------------------------------------------------------------------|-----------------------------------------------------|
| | ASSIGN | MENT |
| Course Na | ame (With Code): Electrical Installation, | commissioning & Maintenance - 4360901 |
| Semester / | Year: Sixth/Third | |
| | nt Number: 01 | |
| | nt CO Number:4360901.1 | |
| Sr. No. | | ted to Course Outcomes |
| Part –A | Questions carrying 3 Marks | |
| 1 | Explain method of installation of transform | |
| 2 | Write the properties of alignment of shaft of electrical machine | |
| 3 | Explain factors to be considered in design | ing the foundation of electrical machine. |
| 4 | Differentiate between the foundations for the static and rotating machines. | |
| Part – B | Questions carrying 4 Marks | |
| 1 | Explain how the installation of Induction 1 | notor is done |
| 2 | Write the adverse effect of misalignment of | of shaft of electrical machines. |
| 3 | Define terms Installation, Testing, Commi equipment. | ssioning and Maintenance with respect to electrical |
| Part – C | Questions carrying 7 Marks | |
| 1 | List different lifting equipment used for equipment and explain any three in detail. | r loading and unloading of heavy electrical |
| Dronovad | Nilesh P. Prajapati | Signature of Hood of Donartment |
| signature | By: (Name of Faculty (ies)) with | Signature of Head of Department |

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N. G. PATEL POLYTECHNIC

| Course Ne | ASSIGNMENT me (With Code): Electrical Installation, commissioning & Maintenance - 4360901 | | |
|----------------------|-------------------------------------------------------------------------------------------|--|--|
| | Year: Sixth/Third | | |
| | at Number: 02 | | |
| | at CO Number: 4360901.2 | | |
| Sr. No. | Questions related to Course Outcomes | | |
| Part – A | uestions carrying 3 Marks | | |
| 1 | plain the causes of deterioration of insulating oil. | | |
| 2 | Define polarization index and explain its significance. | | |
| 3 | Prepare a list of commissioning test for Isolator. | | |
| 4 | Explain importance of pneumatic system testing of circuit breaker. | | |
| Part – B | Questions carrying 4 Marks | | |
| 1 | Explain drying of induction motor winding using suitable diagram. | | |
| 2 | Explain BDV test of insulation oil. | | |
| 3 | plain drying of winding by circulating current | | |
| | Questions carrying 7 Marks | | |
| Part – C | | | |
| <u>Part – C</u> 1 | Explain the procedure for commissioning of 3-phase induction motor. | | |
| Part – C 1 | | | |

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ELECTRICAL ENGINEERING DEPARTMENT

| | | ELECTRICAL | ENGINEERING DEFARTMENT |
|------------|------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------|
| | | ASSIGN | MENT |
| Course Na | ame (With Co | de): Electrical Installation, | commissioning & Maintenance - 4360901 |
| Semester / | Year: Sixth/ | Third | |
| Assignmen | nt Number: 03 | 3 | |
| Assignmen | nt CO Numbe | er: 4360901.3 | |
| Sr. No. | | Questions rela | ted to Course Outcomes |
| Part – A | Questions ca | arrying 3 Marks | |
| 1 | Give the mai | ntenance schedule of storage | battery. |
| 2 | Explain the procedure of shutdown for substation. | | |
| 3 | Define term ' | Define term "Overhauling". Prepare list of overhauling activities. | |
| 4 | Explain facto | or to consider while preparati | on of maintenance schedule. |
| Part – B | | arrying 4 Marks | |
| 1 | State advanta | ages of live line maintenance | |
| 2 | Define breakdown maintenance and explain activity performed during breakdown | | |
| 2 | maintenance. | | |
| 3 | Define preve | ntive maintenance and state | the advantages of preventive maintenance. |
| Part – C | Questions ca | arrying 7 Marks | |
| 1 | Prepare the | maintenance schedule for | ransformer having capacity below 1000KVA. |
| | | | |
| | | | |
| | | | |
| | Nilesh l | P. Prajapati | |
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| Dropared | Dy. (Nama of | Foculty (iog)) with | Signature of Hood of Donartment |

Prepared By: (Name of Faculty (ies)) with signature

Signature of Head of Department

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N. G. PATEL POLYTECHNIC

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| | | ASSIGNM | MENT |
| Course Na | ame (With Co | de): Electrical Installation, c | ommissioning & Maintenance - 4360901 |
| Semester / | Year: Sixth/ | Third | |
| Assignmen | nt Number: 04 | 4 | |
| Assignme | nt CO Numbe | r: 4360901.4 | |
| Sr. No. | | Questions relate | ed to Course Outcomes |
| Part – A | Questions carrying 3 Marks | | |
| 1 | Prepare trouble shooting chart for D.C. series motor. | | |
| 2 | Find the probable cause for "squirrel cage induction motor running below rated speed" | | |
| 3 | What is trouble shooting? Write the steps to be taken in trouble shooting. | | <u> </u> |
| 4 | List the equipment required for trouble shooting. | | |
| Part – B | Questions carrying 4 Marks | | |
| 1 | Explain troubleshooting chart of circuit breaker for any four faults. | | |
| 2 | 1 | mon causes of faults in solar p | |
| 3 | Explain trouble shooting chart for transformer. | | |
| Part – C | | arrying 7 Marks | |
| 1 | Explain med | chanical, electrical and magne | etic faults occurring in electrical equipments. |
| | | | |
| | | | |
| | NT'1 1 2 | | |
| | Nilesh | P. Prajapati | |
| Prepared signature | By: (Name of | Faculty (ies)) with | Signature of Head of Department |

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N. G. PATEL POLYTECHNIC

| Course Na | ASSIGNMENT ame (With Code): Electrical Installation, commissioni | ng & Maintenance - 4360901 | |
|---------------|--------------------------------------------------------------------------|--------------------------------------------------------------|--|
| | / Year: Sixth/Third | | |
| Assignmer | nt Number: 05 | | |
| Assignmer | nt CO Number: 4360901.5 | | |
| Sr. No. | Questions related to Course Outcomes | | |
| Part – A | Questions carrying 3 Marks | | |
| 1 | What are objectives of earthing? Write a short note on body earthing. | | |
| 2 | | scribe method of measuring earth resistance by earth tester. | |
| 3 | Describe method of measuring earth resistance by earth | ibe method of measuring earth resistance by earth tester. | |
| 4 | Compare equipment earthing and system grounding. | | |
| Part – B | Questions carrying 4 Marks | | |
| 1 | Explain pipe earthing with neat sketch. | n pipe earthing with neat sketch. | |
| 2 | Explain probable reasons for higher earth resistance. | | |
| 3 | Classify types portable fire extinguishers on base of their applications | | |
| Part – C | Questions carrying 7 Marks | | |
| | hy earthing is necessary? Explain plate earthing with neat sketch. | | |
| 1 | wity carding is necessary. Explain place carding with | ileat sketcii. | |
| 1 | Nilesh P. Prajapati | near sketch. | |