



National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



SCOPE OF ACCREDITATION

Laboratory Name SIGMA TEST & RESEARCH CENTRE, 99, BADLI INDUSTRIAL AREA PHASE-2, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5369 Page No. : 1 / 136

Validity 27/03/2019 to 26/03/2021 Last Amended on 22/04/2019

| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|---------------------------|-----------------------------|----------------------------|--|---|---------------------------------------|
| Permanent Facility | | | | | |
| 1 | CHEMICAL- BUILDING MATERIAL | Admixtures | Ash Content | IS: 9103 Annex E: 1999 | 1 % to 25.0 % |
| 2 | CHEMICAL- BUILDING MATERIAL | Admixtures | Chloride as Cl | IS: 6925 : 1973 | 0.01 % to 1 % |
| 3 | CHEMICAL- BUILDING MATERIAL | Admixtures | Dry Material Content | IS: 9103 Annex E: 1999 | 15 % to 50 % |
| 4 | CHEMICAL- BUILDING MATERIAL | Admixtures | pH value | IS: 9103 Annex-E: 1999 | 4 to 10 |
| 5 | CHEMICAL- BUILDING MATERIAL | Admixtures | Relative Density | IS: 9103 Annex-E: 1999 | 0.7 to 1.5 |
| 6 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Alkali Content as Sodium Oxide (Na ₂ O) | IS: 4032: 1985 | 0.01 % to 2.0 % |
| 7 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Alumina as Al ₂ O ₃ | IS: 4032, Cl 4.6.1: 1985 | 1.0 % to 10 % |
| 8 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Calcium Oxide (CaO) | IS:4032, Cl.4.7.2: 1985 | 35 % to 70 % |
| 9 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Chloride content | IS:4032: 1985 | 0.01 % to 2 % |
| 10 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Combined Ferric Oxide and Alumina(as R ₂ O ₃) | IS:4032: 1985 | 1.0 % to 20.0 % |
| 11 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Free Lime | IS: 4032: 1985 | 0.01 % to 5 % |
| 12 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Insoluble Residue | IS: 4032, Cl 4.10: 1985 | 0.1 % to 40 % |
| 13 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Iron as Fe ₂ O ₃ | IS: 4032, Cl 4.5.2: 1985 | 0.1 % to 8.0 % |



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| 14 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Loss on ignition (LOI) | IS: 4032: 1985 | 0.5 % to 20 % |
| 15 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Magnesia(as MgO) | IS: 4032, CI 4.8.2: 1985 | 0.5 % to 10 % |
| 16 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Magnesia(as MgO) (For PPC) | IS: 4032, CL.7.2.1: 1985 | 0.1 % to 10.0 % |
| 17 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Silica | IS:4032: 1985 | 10 % to 40 % |
| 18 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Sulphur as Sulphide(S) (For PSC) | IS: 4032, CL. 4.9: 1985 | 0.01 % to 5.0 % |
| 19 | CHEMICAL- BUILDING MATERIAL | Cement (OPC/PPC/PSC/WPC) | Sulphuric anhydride (As SO ₃) | IS: 4032, CI 4.9: 1985 | 0.5 % to 5.0 % |
| 20 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Available Alkali (as Na ₂ O) | IS: 3812 (Pt-1&2) : 2013 | 0.01 % to 10.0 % |
| 21 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Calcium Oxide | IS: 1727 : 1967 | 0.5 % to 20.0 % |
| 22 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Chloride | IS: 4032 : 1985 | 0.01 % to 0.5 % |
| 23 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Combined Ferric oxide and Alumina | IS: 1727 : 1967 | 1 % to 50.0 % |
| 24 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Loss on Ignition | IS: 1727 : 1967 | 0.1 % to 20.0 % |
| 25 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Magnesia | IS: 1727 : 1967 | 0.1 % to 10.0 % |
| 26 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Silica | IS: 1727 : 1967 | 10.0 % to 70.0 % |
| 27 | CHEMICAL- BUILDING MATERIAL | Fly Ash | Sulphuric Anhydride | IS: 1727 : 1967 | 0.01 % to 10.0 % |



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|------|-----------------------------|-----------------------------|--|---|---------------------------------------|
| 28 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Calcium Oxide (as CaO) | IS:1288 (Cl 10.1 KMnO ₄) : 1982 | 10 % to 35 % |
| 29 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Free Lime | IS:2547 (P-1)Appendix-C: 1976 | 0.1 % to 5.0 % |
| 30 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Loss on Ignition | IS: 2547 (P-1) Appendix –B: 1976 | 1 % to 20.0 % |
| 31 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Soluble Magnesium Salt (as MgO) | IS:1288: 1982 | 0.01 % to 0.5 % |
| 32 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Soluble Magnesium Salt (as MgO) | IS:2547(P-1) Appendix-A: 1976 | 0.01 % to 0.5 % |
| 33 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Soluble Sodium Salt (as Na ₂ O) | IS: 4032: 1985 | 0.01 % to 2 % |
| 34 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Soluble Sodium Salt (as Na ₂ O) | IS:2547(P-1),Appendix –A: 1976 | 0.01 % to 2 % |
| 35 | CHEMICAL- BUILDING MATERIAL | Gypsum Building plaster | Sulphur Trioxide (as SO ₃) | IS:1288: 1982 | 15 % to 50 % |
| 36 | CHEMICAL- METALS & ALLOYS | Aluminium & Aluminium Alloy | Silicon | IS 504: 1963 | 0.01 % to 15 % |
| 37 | CHEMICAL- METALS & ALLOYS | Aluminium & Aluminium Alloy | Titanium | IS 504: 1963 | 0.1 % to 2.0 % |
| 38 | CHEMICAL- METALS & ALLOYS | Aluminium Product | Anodic Coating | IS 5523 (Cl. 2.3): 1993 | 1.5 micron to 200 micron |
| 39 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Copper | IS 3685: 1966 | 10 % to 99.99 % |
| 40 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Copper | IS 440: 1964 | 10 % to 99.99 % |
| 41 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Lead | IS 3685: 1966 | 0.5 % to 20 % |



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| 42 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Phosphorous | IS 3685: 1966 | 0.01 % to 1.0 % |
| 43 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Phosphorous | IS 440: 1964 | 0.01 % to 1.0 % |
| 44 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Silicon | IS 440: 1964 | 0.01 % to 10.0 % |
| 45 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Silicon | IS 3685: 1966 | 0.01 % to 10.0 % |
| 46 | CHEMICAL- METALS & ALLOYS | Copper & Copper Alloys | Zinc | IS 3685: 1966 | 0.5 % to 50 % |
| 47 | CHEMICAL- METALS & ALLOYS | GI Sheet & Pipe | Mass of Zinc Coating | IS 6745 (Cl. 3.1.1) (B) (Single spot test): 1972 | 5 g/m2 to 1000 g/m2 |
| 48 | CHEMICAL- METALS & ALLOYS | Lead & Lead Base Alloy | Lead | IS 403: 1964 | 10 % to 99.99 % |
| 49 | CHEMICAL- METALS & ALLOYS | Mild Steel | Carbon | IS 228 (P-1): 1987 | 0.05 % to 2.50 % |
| 50 | CHEMICAL- METALS & ALLOYS | Mild Steel | Carbon Equivalent | IS:1786 (By Calculation): 2008 | 0.1 to 0.7 |
| 51 | CHEMICAL- METALS & ALLOYS | Mild Steel | Carbon Equivalent | IS:2062 (By Calculation): 2011 | 0.1 to 0.7 |
| 52 | CHEMICAL- METALS & ALLOYS | Mild Steel | Manganese | IS: 228 (P-2): 1987 | 0.1 % to 10.0 % |
| 53 | CHEMICAL- METALS & ALLOYS | Mild Steel | Phosphorus | IS: 228 (P-3): 1987 | 0.001 % to 0.2 % |
| 54 | CHEMICAL- METALS & ALLOYS | Mild Steel | Silicon | IS: 228 (P-8): 1989 | 0.05 % to 5.0 % |
| 55 | CHEMICAL- METALS & ALLOYS | Mild Steel | Sulphur | IS 228 (P-9): 1989 | 0.01 % to 0.2 % |



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| 56 | CHEMICAL- METALS & ALLOYS | Mild Steel & Stainless Steel | Copper | IS: 228 (P-15) / AAS: 1992 | 0.05 % to 5 % |
| 57 | CHEMICAL- METALS & ALLOYS | Mild Steel & Stainless Steel | Nitrogen | IS : 228 (P-19): 1998 | 0.01 % to 0.5 % |
| 58 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Carbon | IS: 228 (P-1): 1987 | 0.01 % to 2.0 % |
| 59 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Chromium | IS: 228 (P-6): 1987 | 5.0 % to 30.0 % |
| 60 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Manganese | IS: 228 (P-2): 1987 | 1.0 % to 10.0 % |
| 61 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Molybdenum | IS: 228 (P-7): 1990 | 1.0 % to 4.0 % |
| 62 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Nickel | IS: 228 (P-5): 1987 | 0.5 % to 25.0 % |
| 63 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Phosphorus | IS: 228 (P-3): 1987 | 0.001 % to 0.2 % |
| 64 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Silicon | IS: 228 (P-8): 1989 | 0.05 % to 5.0 % |
| 65 | CHEMICAL- METALS & ALLOYS | Stainless Steel | Sulphur | IS: 228 (P-9): 1989 | 0.01 % to 0.2 % |
| 66 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Component | IEC 62115: 2003 | Qualitative |
| 67 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Component | IS 15644, Cl. 16, 9.3 & 9.4 Annexure C: 2006 | Qualitative |



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| 68 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Construction | IS 15644, Cl. 14: 2006 | Qualitative |
| 69 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Construction | IEC 62115: 2003 | Qualitative |
| 70 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Creepage distances & clearances | IEC 62115: 2003 | 0.5 mm to 150 mm |
| 71 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Creepage distances & clearances | IS 15644, Cl. 18: 2006 | 0.5 mm to 150 mm |
| 72 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Electric Strength at operating temperature | IS 15644, Cl. 10: 2006 | Qualitative |
| 73 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Electric Strength at operating temperature | IEC 62115: 2003 | Qualitative |
| 74 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Electric Strength at room temperature | IS 15644, Cl. 12: 2006 | Qualitative |



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| 75 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Electric Strength at room temperature | IEC 62115: 2003 | Qualitative |
| 76 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Heating and Abnormal Operation | IS 15644, Cl. 9: 2006 | 20 to 200 |
| 77 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Heating and Abnormal Operation | IEC 62115: 2003 | 20 to 200 |
| 78 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Mechanical Strength | IS 15644, Cl. 13: 2006 | Qualitative |
| 79 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Mechanical Strength | IEC 62115: 2003 | Qualitative |
| 80 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Moisture Resistance | IS 15644, Cl. 11: 2006 | Qualitative |
| 81 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Moisture Resistance | IEC 62115: 2003 | Qualitative |



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| 82 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Power Input | IS 15644, Cl. 8: 2006 | 1.2 V to 24 V |
| 83 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Power Input | IEC 62115: 2003 | 1.2 V to 24 V |
| 84 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Power Input (0 to 50 VA) | IEC 62115: 2003 | 0 A to 5 A |
| 85 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Power Input (0 to 50 VA) | IS 15644, Cl. 8: 2006 | 0 A to 5 A |
| 86 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Resistance to heat & fire | IEC 62115: 2003 | Qualitative |
| 87 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Resistance to heat & fire | IEC 60695-2-17 : 2017 | Qualitative |
| 88 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | resistance to heat and fire | IS 15644, Cl. 19: 2003 | Qualitative |



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| 89 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Screws and Connections | IEC 62115: 2003 | Qualitative |
| 90 | ELECTRICAL- DOMESTIC ELECTRICAL APPLIANCES | Safety Testing of Electric Toys | Screws and Connections | IS 15644, Cl. 17: 2006 | Qualitative |
| 91 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Constructions | IS 10322 Part 5/ Sec 1 (Cl. 7): 2012 | Qualitative |
| 92 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Constructions | IEC 60598-2-1 : 1979 | Qualitative |
| 93 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Creepage distances & clearances | IEC 60598-2-1: 1979 | 0 mm to 150 mm |
| 94 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Creepage distances & clearances | IS 10322 Part 5/ Sec 1 (Cl. 8): 2012 | 0 mm to 150 mm |



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| 95 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Endurance Tests and Thermal Tests | IEC 60598-2-1: 1979 | 0 to 200 |
| 96 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Endurance Tests and Thermal Tests | IS 10322 Part 5/ Sec 1 (Cl. 13): 2012 | 0 to 200 |
| 97 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | External & Internal Wiring | IEC 60598-2-1: 1979 | 0 mm to 150 mm |
| 98 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | External & Internal Wiring | IS 10322 Part 5/ Sec 1 (Cl. 11): 2012 | 0 mm to 150 mm |
| 99 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Insulation resistance and electric strength | IEC 60598-2-1: 1979 | 1 M ohm to 40 G ohm |
| 100 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Insulation resistance and electric strength | IS 10322 (Part 5/Sec 1) (Cl. 15): 2012 | 1 to 40 |



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| 101 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Marking | IEC 60598-2-1: 1979 | Qualitative |
| 102 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Marking | IS 10322 Part 5/ Sec 1 (Cl. 6): 2012 | Qualitative |
| 103 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Protection against electric shock | IEC 60598-2-1: 1979 | Qualitative |
| 104 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Protection against electric shock | IS 10322 Part 5/ Sec 1 (Cl. 12): 2012 | Qualitative |
| 105 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Provision for earthing | IS 10322 Part 5/ Sec 1 (Cl. 9): 2012 | 0 V to 99.9 V |
| 106 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Provision for earthing | IEC 60598-2-1: 1979 | 0 A to 50 A |



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| 107 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Provision for earthing | IEC 60598-2-1: 1979 | 0 V to 99.9 V |
| 108 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Provision for earthing | IS 10322 Part 5/ Sec 1 (Cl. 9): 2012 | 0 A to 50 A |
| 109 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Resistance to Dust and Moisture | IEC 60598-2-1: 1979 | Qualitative |
| 110 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Resistance to heat, fire & tracking | IEC 60598-2-1: 1979 | Qualitative |
| 111 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Terminals | IS 10322 Part 5/ Sec 1 (Cl. 10): 2012 | Qualitative |
| 112 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Luminaires-Part 5: Particular Requirements Section 1 Fixed General Purpose Luminaires | Terminals | IEC 60598-2-1: 1979 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|---|---|---|---|---------------------------------------|
| 113 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Cap temperature rise | IEC 62560 : 2011 | 0 to 200 |
| 114 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Cap temperature rise | IS 16102 (P-1) (Cl. 10): 2012 | 0 to 200 |
| 115 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Creepage distances and clearances | IS 16102 (P-1) (Cl. 14): 2012 | 0 mm to 150 mm |
| 116 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Creepage distances and clearances | IEC 62560 : 2011 | 0 mm to 150 mm |
| 117 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Fault Conditions | IEC 62560 : 2011 | Qualitative |
| 118 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Fault Conditions | IS 16102 (P-1) (Cl. 13): 2012 | Qualitative |
| 119 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Insulation resistance and electric strength | IS 16102 (P-1) (Cl. 8): 2012 | 1 M ohm to 40 G ohm |
| 120 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Insulation resistance and electric strength | IEC 62560 : 2011 | 1 M ohm to 40 G ohm |
| 121 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Insulation resistance and electric strength | IS 16102 (P-1) (Cl. 8): 2012 | Qualitative |
| 122 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Interchangeability | IS 16102 (P-1): 2012 (Cl. 6): 2012 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|---|---|---|---|---------------------------------------|
| 123 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Interchangeability | IEC 62560 : 2011 | Qualitative |
| 124 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Marking | IEC 62560 : 2011 | Qualitative |
| 125 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Marking | IS 16102 (P-1): 2012 (Cl. 5): 2012 | Qualitative |
| 126 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Mechanical strength | IS 16102 (P-1) (Cl. 9): 2012 | Qualitative |
| 127 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Mechanical strength | IEC 62560 : 2011 | Qualitative |
| 128 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Protection against accidental contact with live parts | IS 16102 (P-1) (Cl. 7): 2012 | Qualitative |
| 129 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Resistance to Flame and Ignition | IS 16102 (P-1) (Cl. 12): 2012 | Qualitative |
| 130 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Resistance to Flame and Ignition | IEC 62560 : 2011 | Qualitative |
| 131 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Resistance to heat | IEC 62560 : 2011 | 0 mm to 150 mm |
| 132 | ELECTRICAL- LAMPS, LUMINARIES & ACCESSORIES | Self -Ballasted LED Lamps for General Lighting Services | Resistance to heat | IS 16102 (P-1) (Cl. 11): 2012 | 0 mm to 150 mm |



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|------|--|---|-------------------------------------|---|---------------------------------------|
| 133 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Creepage & Clearance Distance | IS 13021 (Part I) (Cl. 10): 1991 | 0 mm to 150 mm |
| 134 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Marking | IS 13021 (Part I) (Cl. 7): 1991 | Qualitative |
| 135 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Abnormal Conditions | IEC 61347-2-3: 2011 | Qualitative |
| 136 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Creepage & Clearance Distance | IEC 60929 & IEC 61347-2-3: 2011 | 0 mm to 150 mm |
| 137 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Current carrying parts & Connection | IS 13021 (Part I) (Cl. 17): 1991 | Qualitative |
| 138 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Current carrying parts & Connection | IEC 60929: 2011 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|-------------------------------------|---|---------------------------------------|
| 139 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Current carrying parts & Connection | IEC 61347-2-3: 2011 | Qualitative |
| 140 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Electric Strength | IEC 60929: 2011 | Qualitative |
| 141 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Electric Strength | IS 13021 (Part I) (Cl. 14): 1991 | Qualitative |
| 142 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Electric Strength | IEC 61347-2-3: 2011 | Qualitative |
| 143 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Fault Conditions | IS 13021 (Part I) (Cl. 16): 1991 | 0 mm to 150 mm |
| 144 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Fault Conditions | IS 13021 (Part I) (Cl. 16): 1991 | 1 M ohm to 40 G ohm |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|---|---|---------------------------------------|
| 145 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Fault Conditions | IEC 60929 & IEC 61347-2-3: 2011 | 1 M ohm to 40 G ohm |
| 146 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Fault Conditions | IEC 60929 & IEC 61347-2-3: 2011 | 0 mm to 150 mm |
| 147 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Marking | IEC 60929: 2011 | Qualitative |
| 148 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Marking | IEC 61347-2-3: 2011 | Qualitative |
| 149 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IEC 60929 & IEC 61347-2-3: 2011 | 27 to 100 |
| 150 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IEC 60929 & IEC 61347-2-3: 2011 | 20 % RH to 95 % RH |



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|------|--|---|---|---|---------------------------------------|
| 151 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IEC 60929 & IEC 61347-2-3: 2011 | 1 M ohm to 40 G ohm |
| 152 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IS 13021 (Part I) (Cl. 13): 1991 | 20 % RH to 95 % RH |
| 153 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IS 13021 (Part I) (Cl. 13): 1991 | 27 to 100 |
| 154 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection Against Electric Shock | IEC 61347-2-3: 2011 | Qualitative |
| 155 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection Against Electric Shock | IEC 60929: 2011 | Qualitative |
| 156 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection Against Electric Shock | IS 13021 (Part I) (Cl. 12): 1991 | Qualitative |



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|------|--|---|---|---|---------------------------------------|
| 157 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection against accidental contact with live parts | IS 13021 (Part I) (Cl. 11): 1991 | Qualitative |
| 158 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection against accidental contact with live parts | IEC 60929: 2011 | Qualitative |
| 159 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Protection against accidental contact with live parts | IEC 61347-2-3: 2011 | Qualitative |
| 160 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Provision for Earthing | IEC 60929 & IEC 61347-2-3: 2011 | 0 V to 99.9 V |
| 161 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Provision for Earthing | IEC 60929 & IEC 61347-2-3: 2011 | 0 A to 50 A |
| 162 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Provision for Earthing | IS 13021 (Part I) (Cl. 9): 1991 | 0 V to 99.9 V |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|-------------------------|---|---------------------------------------|
| 163 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Provision for Earthing | IS 13021 (Part I) (Cl. 9): 1991 | 0 A to 50 A |
| 164 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IS 13021 (P-1), CI 19: 1991 | Qualitative |
| 165 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 60929: 2011 | Qualitative |
| 166 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 61347-2-3: 2011 | Qualitative |
| 167 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 60929: 2011 | 0 Hr to 1 Hr |
| 168 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 61347-2-3: 2011 | 0 Hr to 1 Hr |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|--------------------------------|---|---------------------------------------|
| 169 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to corrosion | IS 13021 (P-1), Cl. 19: 1991 | 0 to 200 |
| 170 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 60929: 2001 | 0 to 200 |
| 171 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to Corrosion | IEC 61347-2-2: 2011 | 0 to 200 |
| 172 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to heat & fire Test | IEC 61347-2-3: 2011 | Qualitative |
| 173 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to heat & fire Test | IEC 60928: 1995 | Qualitative |
| 174 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to heat & fire Test | IS 13021 (Part I) (Cl. 18): 1991 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|--------------------------------|---|---------------------------------------|
| 175 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to heat & fire Test | IEC 60929: 2011 | Qualitative |
| 176 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Resistance to heat & fire Test | IEC 60929: 2011 | Qualitative |
| 177 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Terminal | IEC 60929: 2011 | Qualitative |
| 178 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Terminal | IEC 61347-2-3: 2011 | Qualitative |
| 179 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Terminal | IS 13021 (Part I) (Cl. 8): 1991 | Qualitative |
| 180 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Abnormal Conditions | IEC 60929: 2011 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|---|---|---|---------------------------------------|
| 181 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Abnormal Conditions | IS 13021 (Part I) (Cl. 15): 1991 | Qualitative |
| 182 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | AC Supplied Electronic Ballasts for TFL | Moisture Resistance & Insulation Resistance | IS 13021 (Part I) (Cl. 13): 1991 | 1 M ohm to 40 G ohm |
| 183 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Abnormal Operation | IEC:61347-2-13: 2006 | Qualitative |
| 184 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Abnormal Operation | IS 15885 (Part2/Sec 13) (Cl. 15.2): 2012 | Qualitative |
| 185 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Classification | IS 15885 (Part2/Sec 13) (Cl. 6): 2012 | Qualitative |
| 186 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Classification | IEC:61347-2-13: 2012 | Qualitative |



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|------|--|---|---------------------------------|---|---------------------------------------|
| 187 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Construction | IEC:61347-2-13: 2006 | Qualitative |
| 188 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Creepage distance and clearance | IS 15885 (Part2/Sec 13) (Cl. 17): 2012 | 0 mm to 150 mm |
| 189 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Creepage distance and clearance | IEC:61347-2-13: 2006 | 0 mm to 150 mm |
| 190 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Electric Strength | IS 15885 (Part2/Sec 13) (Cl. 12): 2012 | Qualitative |
| 191 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Electric Strength | IEC:61347-2-13: 2006 | Qualitative |
| 192 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Fault Conditions | IEC:61347-2-13: 2006 | Qualitative |



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|------|--|---|------------------------------------|---|---------------------------------------|
| 193 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Fault Conditions | IS 15885 (Part2/Sec 13) (Cl. 14): 2012 | Qualitative |
| 194 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Marking | IS 15885 (Part2/Sec 13) (Cl. 7): 2012 | Qualitative |
| 195 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Marking | IEC:61347-2-13: 2006 | Qualitative |
| 196 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IS 15885 (Part2/Sec 13) (Cl. 11): 2012 | 20 % RH to 95 % RH |
| 197 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IS 15885 (Part2/Sec 13) (Cl. 11): 2012 | 1 M ohm to 40 G ohm |
| 198 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IEC:61347-2-13: 2006 | 1 M ohm to 40 G ohm |



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|------|--|---|---|---|---------------------------------------|
| 199 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IS 15885 (Part2/Sec 13) (Cl. 11): 2012 | 27 to 100 |
| 200 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IEC:61347-2-13: 2006 | 27 to 100 |
| 201 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Normal Operation | IEC:61347-2-13: 2012 | Qualitative |
| 202 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Normal Operation | IS 15885 (Part2/Sec 13) (Cl. 15.1): 2012 | Qualitative |
| 203 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Protection against accidental contact with live parts | IEC:61347-2-13: 2006 | Qualitative |
| 204 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Protection against accidental contact with live parts | IS 15885 (Part2/Sec 13) (Cl. 8): 2012 | Qualitative |



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|------|--|---|---------------------------------------|---|---------------------------------------|
| 205 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Provisions for protective earthing | IEC:61347-2-13: 2006 | 0 A to 50 A |
| 206 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Provisions for protective earthing | IS 15885 (Part2/Sec 13) (Cl. 10): 2012 | 0 A to 50 A |
| 207 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Provisions for protective earthing | IS 15885 (Part2/Sec 13) (Cl. 10): 2012 | 0 V to 99.9 V |
| 208 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Provisions for protective earthing | IEC:61347-2-13: 2006 | 0 V to 99.9 V |
| 209 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Resistance to corrosion | IS 15885 (Part2/Sec 13) (Cl. 20): 2012 | Qualitative |
| 210 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Resistance to Heat, Fire and Tracking | IEC:61347-2-13: 2006 | 0 mm to 150 mm |



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|------|--|---|---|---|---------------------------------------|
| 211 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Resistance to Heat, Fire and Tracking | IS 15885 (Part2/Sec 13) (Cl. 19): 2012 | 0 mm to 150 mm |
| 212 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Screws, current carrying parts and connection | IS 15885 (Part2/Sec 13): (Cl. 18): 2012 | Qualitative |
| 213 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Screws, current carrying parts and connection | IEC:61347-2-13: 2012 | Qualitative |
| 214 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Terminals | IS 15885 (Part2/Sec 13) (Cl. 9): 2012 | Qualitative |
| 215 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Terminals | IEC:61347-2-13: 2006 | Qualitative |
| 216 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Thermal Endurance Test for Windings of Ballasts | IEC:61347-2-13: 2006 | Qualitative |



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|------|--|---|---|---|---------------------------------------|
| 217 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Thermal Endurance Test for Windings of Ballasts | IS 15885 (Part2/Sec 13) (Cl. 13): 2012 | Qualitative |
| 218 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Transformer Heating | IEC:61347-2-13: 2006 | Qualitative |
| 219 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Transformer Heating | IS 15885 (Part2/Sec 13) (Cl. 15): 2012 | Qualitative |
| 220 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Construction | IS 15885 (Part2/Sec 13) (Cl. 16): 2012 | Qualitative |
| 221 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Moisture resistance and Insulation | IEC:61347-2-13: 2006 | 20 % RH to 95 % RH |
| 222 | ELECTRONICS-ELECTRONIC COMPONENTS & EQUIPMENT SUB ASSEMBLIES | D.C. or A.C. Supplied Electronic Control gear for LED Modules | Resistance to corrosion | IEC:61347-2-13: 2006 | Qualitative |



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|------|---|-----------------------------------|--|---|---------------------------------------|
| 223 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protection of Personnel – Safety interlocks | IEC 62040-1: 2008 | Qualitative |
| 224 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Abnormal operating and fault conditions | IEC 62040-1: 2008 | Qualitative |
| 225 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Abnormal operating and fault conditions | IS 16242 (P-1) (Cl. 8.3): 2014 | Qualitative |
| 226 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | AC & DC Power Isolation | IEC 62040-1: 2008 | Qualitative |
| 227 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | AC & DC Power Isolation | IS 16242 (P-1) (Cl. 5.4): 2014 | Qualitative |
| 228 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Battery Location | IEC 62040-1: 2008 | Qualitative |
| 229 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IEC 62040-1: 2008 | 0 V AC to 750 V AC |
| 230 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IEC 62040-1: 2008 | 0 mm to 150 mm |
| 231 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IS 16242 (P-1) (Cl. 5.7): 2014 | 0 mm to 150 mm |
| 232 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IS 16242 (P-1) (Cl. 5.7): 2014 | 0. 1 mm to 150 mm |



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|------|---|-----------------------------------|--|---|---------------------------------------|
| 233 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IS 16242 (P-1) (Cl. 5.7): 2014 | 0 V AC to 750 V AC |
| 234 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Clearance, Creepage distance and distance through insulation | IEC 62040-1: 2008 | 0 V DC to 1000 V DC |
| 235 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Connection to power | IS 16242 (P-1) (Cl. 6.2): 2014 | Qualitative |
| 236 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Connection to power | IEC 62040-1: 2008 | Qualitative |
| 237 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Connection to Telecommunication Networks | IEC 62040-1: 2008 | Qualitative |
| 238 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Electrical requirements and simulated abnormal conditions | IEC 62040-1: 2008 | Qualitative |
| 239 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Electrical requirements and simulated abnormal conditions | IS 16242 (P-1) (Cl. 8): 2014 | Qualitative |
| 240 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Electrical Strength | IEC 62040-1: 2008 | Qualitative |
| 241 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Electrical Strength | IS 16242 (P-1) (Cl. 8.2): 2014 | Qualitative |
| 242 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Enclosure | IS 16242 (P-1) (Cl. 7.1): 2014 | Qualitative |



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| 243 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Enclosure | IEC 62040-1: 2008 | Qualitative |
| 244 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Marking & Instructions, Power rating | IEC 62040-1: 2008 | Qualitative |
| 245 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Marking & Instructions, Power rating | IS 16242 (P-1) (Cl. 4.7): 2014 | Qualitative |
| 246 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Mechanical Strength | IS 16242 (P-1) (Cl. 7.3): 2014 | Qualitative |
| 247 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Mechanical Strength | IEC 62040-1: 2008 | Qualitative |
| 248 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Over current and earth fault protection | IS 16242 (P-1) (Cl. 5.5): 2014 | Qualitative |
| 249 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Over current and earth fault protection | IEC 62040-1: 2008 | Qualitative |
| 250 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Power interface | IEC 62040-1: 2008 | 0 A to 5 A |
| 251 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Power interface | IEC 62040-1: 2008 | 0 V to 600 V |
| 252 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Power interface | IS 16242 (P-1) (Cl. 4.6): 2014 | 0 A to 5 A |



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|------|---|-----------------------------------|--|---|---------------------------------------|
| 253 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Power interface | IS 16242 (P-1) (Cl. 4.6): 2014 | 0 V to 600 V |
| 254 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protection against electric shock and energy hazards | IS 16242 (P-1) (Cl. 5.1): 2014 | Qualitative |
| 255 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protection against electric shock and energy hazards | IEC 62040-1: 2008 | Qualitative |
| 256 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protection of Personnel – Safety interlocks | IS 16242 (P-1) (Cl. 5.6): 2014 | Qualitative |
| 257 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protective earthing & Bonding | IS 16242 (P-1) (Cl. 5.3): 2014 | 0 V to 99.9 V |
| 258 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protective earthing & Bonding | IS 16242 (P-1) (Cl. 5.3): 2014 | 0 A to 50 A |
| 259 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protective earthing & Bonding | IEC 62040-1: 2008 | 0 A to 50 A |
| 260 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Protective earthing & Bonding | IEC 62040-1: 2008 | 0 V to 99.9 V |
| 261 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Requirement for auxiliary circuits | IS 16242 (P-1) (Cl. 5.2): 2014 | 0 V DC to 1000 V DC |
| 262 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Requirement for auxiliary circuits | IEC 62040-1: 2008 | 0 V AC to 750 V AC |



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|------|---|-----------------------------------|--|---|---------------------------------------|
| 263 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Requirement for auxiliary circuits | IS 16242 (P-1) (Cl. 5.2): 2014 | 0 V AC to 750 V AC |
| 264 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Requirement for auxiliary circuits | IEC 62040-1: 2008 | 0 V DC to 1000 V DC |
| 265 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Resistance to Fire | IEC 62040-1: 2008 | Qualitative |
| 266 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Resistance to Fire | IS 16242 (P-1) (Cl. 7.5): 2014 | Qualitative |
| 267 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Stability | IEC 62040-1: 2008 | Qualitative |
| 268 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Stability | IS 16242 (P-1) (Cl. 7.2): 2014 | Qualitative |
| 269 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Temperature Rise | IS 16242 (P-1) (Cl. 7.7): 2014 | Qualitative |
| 270 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Temperature Rise | IEC 62040-1: 2008 | 27 to 200 |
| 271 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Temperature Rise | IS 16242 (P-1) (Cl. 7.7): 2014 | 27 to 200 |
| 272 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Wiring terminals for external power conductors | IEC 62040-1: 2008 | Qualitative |



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| 273 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Wiring terminals for external power conductors | IS 16242 (P-1) (Cl. 6.3): 2014 | Qualitative |
| 274 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Wiring, Connection and Supply | IS 16242 (P-1) (Cl. 6): 2014 | Qualitative |
| 275 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Wiring, Connection and Supply | IEC 62040-1: 2008 | Qualitative |
| 276 | ELECTRONICS- POWER SUPPLIES & STABILIZERS | Uninterrupted Power Systems (UPS) | Battery Location | IS 16242 (P-1) (Cl. 7.6): 2014 | Qualitative |
| 277 | ELECTRONICS- SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IEC. 60335-2-26: 2002 | 0 W to 5000 W |
| 278 | ELECTRONICS- SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirement | Remote Control device held in hand | IS 616-1 (Cl. 12.3): 2010 | Qualitative |
| 279 | ELECTRONICS- SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Bump test | IS 616-1 (Cl. 12.1.1): 2010 | Qualitative |
| 280 | ELECTRONICS- SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Clearances & Creepage distance Determination of operating voltages | IS 616-1 (Cl. 13): 2010 | 0 mm to 150 mm |



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| 281 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Clearances & Creepage distance Determination of operating voltages | IEC: 60065-1: 2010 | 0 mm to 150 mm |
| 282 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Components | IS 616-1 (Cl. 14): 2010 | Qualitative |
| 283 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Components | IEC: 60065-1: 2005 | Qualitative |
| 284 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Constructional requirements with regard to protection against electric shock | IEC: 60065-1: 2005 | Qualitative |
| 285 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Constructional requirements with regard to protection against electric shock | IS 616-1 (Cl. 8): 2010 | Qualitative |
| 286 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Accessible parts | IEC: 60065-1: 2005 | Qualitative |
| 287 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Accessible parts | IS 616-1 (Cl. 9.1.1.2): 2010 | Qualitative |



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| 288 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Hazardous live parts | IEC: 60065-1: 2005 | 0 V DC to 1000 V DC |
| 289 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Hazardous live parts | IEC: 60065-1: 2005 | 0 V AC to 750 V AC |
| 290 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Hazardous live parts | IS 616-1 (Cl. 9.1.1.1): 2010 | 0 V DC to 1000 V AC |
| 291 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Determination of Hazardous live parts | IS 616-1 (Cl. 9.1.1.1): 2010 | 0 V AC to 750 V AC |
| 292 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Devices forming A part of the mains plug | IEC: 60065-1: 2005 | Qualitative |
| 293 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Drawers | IS 616-1 (Cl. 12.4): 2010 | Qualitative |
| 294 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Drawers | IEC: 60065-1: 2005 | Qualitative |



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|------|-------------------------------------|---|--|---|---------------------------------------|
| 295 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Drop test | IEC: 60065-1: 2005 | Qualitative |
| 296 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Drop test | IS 616-1 (Cl. 12.1.4): 2010 | Qualitative |
| 297 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Electric shock hazard | IS 616-1 (Cl. 11.1): 2010 | Qualitative |
| 298 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Electric shock hazard | IEC: 60065-1: 2005 | Qualitative |
| 299 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Electrical connections & mechanical fixing | IEC: 60065-1: 2005 | Qualitative |
| 300 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Enclosed sealed parts | IS 616-1 (Cl. 13.7): 2010 | -40 °C to 100 °C |
| 301 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Enclosed sealed parts | IEC: 60065-1: 2005 | -40 °C to 100 °C |



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SCOPE OF ACCREDITATION

Laboratory Name SIGMA TEST & RESEARCH CENTRE, 99, BADLI INDUSTRIAL AREA PHASE-2, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5369 Page No. : 39 / 136

Validity 27/03/2019 to 26/03/2021 Last Amended on 22/04/2019

| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|---|---|---|---------------------------------------|
| 302 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Fixing of actuating element | IS 616-1 (Cl. 12.2): 2010 | Qualitative |
| 303 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Fixing of actuating element | IEC: 60065-1: 2005 | Qualitative |
| 304 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Heating under normal operating conditions | IS 616-1 (Cl. 7): 2010 | 25 0C to 200 0C |
| 305 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Heating under normal operating conditions | IEC: 60065-1: 2005 | 25 0C to 200 0C |
| 306 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Humidity treatment | IEC: 60065-1: 2005 | Qualitative |
| 307 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Impact test | IS 616-1 (Cl. 12.1.3): 2010 | Qualitative |
| 308 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Insulation resistance and dielectric strength | IEC: 60065-1: 2005 | 0.25 M ohm to 40 G ohm |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|---|---|---|---------------------------------------|
| 309 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Insulation resistance and dielectric strength | IS 616-1 (Cl. 10.3): 2010 | 0.25 M ohm to 40 G ohm |
| 310 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Marking & Instructions | IS 616-1 (Cl. 5): 2010 | 0 kW to 6 kW |
| 311 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Marking & Instructions | IEC: 60065-1: 2005 | 0 A to 20 A |
| 312 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Marking & Instructions | IS 616-1 (Cl. 5): 2010 | 0 A to 20 A |
| 313 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Measurement of temperature rise | IS 616-1 (Cl. 11.2.1): 2010 | 27 °C to 200 °C |
| 314 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Measurement of transient voltage | IEC: 60065-1: 2005 | Qualitative |
| 315 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Opening of the enclosure | IS 616-1 (Cl. 9.1.3): 2010 | Qualitative |



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|------|-------------------------------------|---|------------------------------------|---|---------------------------------------|
| 316 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Plugs & Sockets | IEC: 60065-1: 2005 | Qualitative |
| 317 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Pre-set controls | IS 616-1 (Cl. 9.1.5): 2010 | Qualitative |
| 318 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Pre-set controls | IEC: 60065-1: 2005 | Qualitative |
| 319 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Provisions for protective earthing | IS 616-1 (Cl. 15.2): 2010 | 0 A to 50 A |
| 320 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Provisions for protective earthing | IEC: 60065-1: 2005 | 0 A to 50 A |
| 321 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Provisions for protective earthing | IS 616-1 (Cl. 15.2): 2010 | 0 V to 99.9 V |
| 322 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Provisions for protective earthing | IEC: 60065-1: 2005 | 0 V to 99.9 V |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|---|------------------------------------|---|---------------------------------------|
| 323 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Remote Control device held in hand | IEC: 60065-1: 2005 | Qualitative |
| 324 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Resistance to external forces | IEC: 60065-1: 2011 | Qualitative |
| 325 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Resistance to external forces | IS 616-1 (Cl. 9.1.7): 2010 | Qualitative |
| 326 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Resistance to fire | IEC: 60065-1,ed 7.1: 2005 | Qualitative |
| 327 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Stability & mechanical hazards | IS 616-1 (Cl. 19): 2010 | Qualitative |
| 328 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Stress relief test | IEC: 60065-1: 2005 | Qualitative |
| 329 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Stress relief test | IS 616-1 (Cl. 12.1.5): 2010 | Qualitative |



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|------|-------------------------------------|---|--|---|---------------------------------------|
| 330 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Surge test | IEC: 60065-1: 2005 | Qualitative |
| 331 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Terminals | IS 616-1 (Cl. 9.1.4): 2010 | Qualitative |
| 332 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Terminals | IEC: 60065-1: 2005 | Qualitative |
| 333 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Terminals for external flexible cords & for permanent connection to the mains supply | IEC: 60065-1: 2005 | Qualitative |
| 334 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Terminals for external flexible cords & for permanent connection to the mains supply | IS 616-1 (Cl. 15.3): 2010 | Qualitative |
| 335 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Vibration test | IS 616-1 (Cl. 12.1.2): 2010 | Qualitative |
| 336 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Wall or ceiling mounting means | IS 616-1 (Cl. 19.6): 2010 | Qualitative |



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|------|-------------------------------------|---|--------------------------------|---|---------------------------------------|
| 337 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Wall or ceiling mounting means | IEC: 60065-1: 2005 | Qualitative |
| 338 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Withdrawal of mains plug | IS 616-1 (Cl. 9.1.6): 2010 | Qualitative |
| 339 | ELECTRONICS-SAFETY TESTING FACILITY | Audio, Video and Similar Electronic Apparatus Safety Requirements | Withdrawal of mains plug | IEC: 60065-1: 2005 | Qualitative |
| 340 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Abnormal Operation | IS 13252 (Part 1) (Cl. 5.3): 2010 | Qualitative |
| 341 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Abnormal Operation | IEC 60950-1: 2005 | Qualitative |
| 342 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Access to ELV wiring | IS 13252 (Part 1) (Cl. 2.1.1.3): 2010 | Qualitative |
| 343 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Access to ELV wiring | IEC 60950-1: 2005 | Qualitative |
| 344 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Access to energized parts | IEC 60950-1: 2005 | Qualitative |
| 345 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Access to energized parts | IS 13252 (Part 1) (Cl. 2.1.1.1): 2010 | Qualitative |



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|------|-------------------------------------|---|--|---|---------------------------------------|
| 346 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Clearances | IS 13252 (Part 1) (Cl. 2.10.3): 2010 | 0 mm to 150 mm |
| 347 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Clearances | IEC 60950-1: 2005 | 0 mm to 150 mm |
| 348 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Clearances | IEC 60950-1: 2005 | 0 mm to 25 mm |
| 349 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Clearances | IS 13252 (Part 1) (Cl. 2.10.3): 2010 | 0 mm to 25 mm |
| 350 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Connection to cable distribution systems | IS 13252 (Part 1) (Cl. 7): 2010 | Qualitative |
| 351 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Connection to cable distribution systems | IEC 60950-1: 2005 | Qualitative |
| 352 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Connection to cable distribution systems | IS 13252 (Part 1) (Cl. 7): 2010 | Qualitative |
| 353 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Creepage distance | IS 13252 (Part 1) (Cl. 2.10.4): 2010 | 0 mm to 25 mm |
| 354 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Creepage distance | IS 13252 (Part 1) (Cl. 2.10.4): 2010 | 0 mm to 150 mm |
| 355 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Creepage distance | IEC 60950-1: 2005 | 0 mm to 25 mm |



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|------|-------------------------------------|---|--------------------------------------|---|---------------------------------------|
| 356 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Creepage distance | IEC 60950-1: 2005 | 0 mm to 150 mm |
| 357 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Design & construction | IEC 60950-1: 2005 | Qualitative |
| 358 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Design & construction | IS 13252 (Part 1) (Cl. 4.3): 2010 | Qualitative |
| 359 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Discharge of capacitors in equipment | IEC 60950-1: 2005 | 0 V DC to 1000 V DC |
| 360 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Discharge of capacitors in equipment | IEC 60950-1: 2005 | 0 V AC to 750 V AC |
| 361 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Discharge of capacitors in equipment | IS 13252 (Part 1) (Cl. 2.1.1.7) : 2010 | 0 V AC to 750 V AC |
| 362 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Discharge of capacitors in equipment | IS 13252 (Part 1) (Cl. 2.1.1.7) : 2010 | 0 V DC to 1000 V DC |
| 363 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Drop test | IEC 60950-1: 2005 | Qualitative |
| 364 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Drop test | IS 13252 (Part 1) (Cl. 4.2.6): 2010 | Qualitative |
| 365 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Edges and corners | IEC 60950-1: 2005 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|---|---------------------------|---|---------------------------------------|
| 366 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Edges and corners | IS 13252 (Part 1) (Cl. 4.3.1): 2010 | Qualitative |
| 367 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Electric strength | IEC 60950-1: 2005 | Qualitative |
| 368 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Electric strength | IS 13252 (Part 1) (Cl. 5.2): 2010 | Qualitative |
| 369 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IS 13252 (Part 1) (Cl. 2.1.1.5): 2010 | 0 W to 300 W |
| 370 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IS 13252 (Part 1) (Cl. 2.1.1.5): 2010 | 0 A to 60 A |
| 371 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IEC 60950-1: 2005 | 0 W to 300 W |
| 372 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IEC 60950-1: 2005 | 0 V to 500 V |
| 373 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IS 13252 (Part 1) (Cl. 2.1.1.5): 2010 | 0 V to 500 V |
| 374 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Energy hazard | IEC 60950-1: 2005 | 0 A to 60 A |
| 375 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Handles & manual controls | IS 13252 (Part 1) (Cl. 4.3.2): 2010 | Qualitative |



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|------|-------------------------------------|---|--|---|---------------------------------------|
| 376 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Handles & manual controls | IEC 60950-1: 2005 | Qualitative |
| 377 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Humidity conditioning | IS 13252 (Part 1) (Cl. 2.9.2): 2010 | Qualitative |
| 378 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Humidity conditioning | IEC 60950-1: 2005 | Qualitative |
| 379 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Impact test | IEC 60950-1: 2005 | Qualitative |
| 380 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Limited current circuits limits values & limited power sources | IS 13252 (Part 1) (Cl. 2.4.2) & (Cl. 2.5): 2010 | 0 VA to 300 VA |
| 381 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Limited current circuits limits values & limited power sources | IEC 60950-1: 2005 | 0 VA to 300 VA |
| 382 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Marking and instructions | IS 13252 (Part 1) (Cl. 1.7): 2010 | Qualitative |
| 383 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Marking and instructions | IEC 60950-1: 2005 | Qualitative |
| 384 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Mechanical Strength | IS 13252 (Part 1) (Cl. 4.2): 2010 | Qualitative |
| 385 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Mechanical Strength | IEC 60950-1: 2005 | Qualitative |



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|------|-------------------------------------|---|---|---|---------------------------------------|
| 386 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Mechanical strength for Wall or ceiling mounted Equipment | IS 13252 (Part 1) (Cl. 4.2.10): 2010 | Qualitative |
| 387 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Mechanical strength for Wall or ceiling mounted Equipment | IEC 60950-1: 2005 | Qualitative |
| 388 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Opening in enclosure | IEC 60950-1: 2005 | Qualitative |
| 389 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Opening in enclosure | IS 13252 (Part 1) (Cl. 4.6): 2010 | Qualitative |
| 390 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Power Interface | IEC 60950-1: 2005 | 0 A to 20 A |
| 391 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Power Interface | IS 13252 (Part 1) (Cl. 1.6.2): 2010 | 0 A to 20 A |
| 392 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection against hazardous moving parts | IS 13252 (Part 1) (Cl. 4.4): 2010 | Qualitative |
| 393 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection against hazardous moving parts | IEC 60950-1: 2005 | Qualitative |
| 394 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection from hazardous voltages | IS 13252 (Part 1) (Cl. 6.1): 2010 | Qualitative |
| 395 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection from hazardous voltages | IEC 60950-1: 2005 | Qualitative |



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|------|-------------------------------------|---|---|---|---------------------------------------|
| 396 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection requirement for safety interlocks | IS 13252 (Part 1) (Cl. 2.8.2): 2010 | Qualitative |
| 397 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Protection requirement for safety interlocks | IEC 60950-1: 2005 | Qualitative |
| 398 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance of earthing conductors and their terminals | IS 13252 (Part 1) (Cl. 2.6.3.4): 2010 | 0 A to 50 A |
| 399 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance of earthing conductors and their terminals | IEC 60950-1: 2005 | 0 A to 50 A |
| 400 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance to abnormal heat | IS 13252 (Part 1) (Cl. 4.5.5): 2010 | 0 °C to 400 °C |
| 401 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance to abnormal heat | IEC 60950-1: 2005 | 0 mm to 150 mm |
| 402 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance to fire | IEC 60950-1: 2005 | Qualitative |
| 403 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Resistance to fire | IS 13252 (Part 1) (Cl. 4.7): 2010 | Qualitative |
| 404 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | SELV circuits | IEC 60950-1: 2005 | Qualitative |
| 405 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | SELV circuits | IS 13252 (Part 1) (Cl. 2.2): 2010 | Qualitative |



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|------|-------------------------------------|---|---|---|---------------------------------------|
| 406 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IS 13252 (Part 1) (Cl. 2.6.3.2/ 2.6.3.3): 2010 | 0 A to 50 A |
| 407 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IS 13252 (Part 1) (Cl. 2.6.3.2/ 2.6.3.3): 2010 | 0 mm to 25 mm |
| 408 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IS 13252 (Part 1) (Cl. 2.6.3.2/ 2.6.3.3): 2010 | 0 mm to 150 mm |
| 409 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IEC 60950-1: 2005 | 0 V to 99.9 V |
| 410 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IEC 60950-1: 2005 | 0 mm to 150 mm |
| 411 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IS 13252 (Part 1) (Cl. 2.6.3.2/ 2.6.3.3): 2010 | 0 V to 99.9 V |
| 412 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IEC 60950-1: 2005 | 0 A to 50 A |
| 413 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Size of protective earthing & bonding conductor | IEC 60950-1: 2005 | 0 mm to 25 mm |
| 414 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Stability | IS 13252 (Part 1) (Cl. 4.1): 2010 | Qualitative |
| 415 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Stability | IEC 60950-1: 2005 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|---|-------------------------|---|---------------------------------------|
| 416 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Steady force test | IEC 60950-1: 2005 | Qualitative |
| 417 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Steady force test | IS 13252 (Part 1) (Cl. 4.2.2, 4.2.3, 4.2.4): 2010 | Qualitative |
| 418 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Steady-state test | IEC 60950-1: 2005 | Qualitative |
| 419 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Steady-state test | IS 13252 (Part 1) (Cl. 6.2.2.2): 2010 | Qualitative |
| 420 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Stress relief test | IS 13252 (Part 1) (Cl. 4.2.7): 2010 | Qualitative |
| 421 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Stress relief test | IEC 60950-1: 2005 | Qualitative |
| 422 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Temperature rise | IEC 60950-1: 2005 | 27 0C to 200 0C |
| 423 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Temperature rise | IS 13252 (Part 1) (Cl. 4.5.2): 2010 | 27 0C to 200 0C |
| 424 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Thermal conditioning | IS 13252 (Part 1) (Cl. 2.10.8.2): 2010 | 0 0C to 100 0C |
| 425 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Thermal conditioning | IEC 60950-1: 2005 | 0 0C to 100 0C |



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|------|-------------------------------------|--|--|---|---------------------------------------|
| 426 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Thermal cycling | IEC 60950-1: 2005 | 0 0C to 100 0C |
| 427 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Thermal cycling | IS 13252 (Part 1) (Cl. 2.10.9): 2010 | 0 oC to 100 oC |
| 428 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | TNV circuits | IEC 60950-1: 2005 | Qualitative |
| 429 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | TNV circuits | IS 13252 (Part 1) (Cl. 2.3): 2010 | Qualitative |
| 430 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Touch current & protective conductor current | IS 13252 (Part 1) (Cl. 5.1): 2010 | 0 mA to 70 mA |
| 431 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Touch current & protective conductor current | IEC 60950-1: 2005 | 0 mA to 70 mA |
| 432 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Wiring connections & supply | IS 13252 (Part 1) (Cl. 3.0): 2010 | Qualitative |
| 433 | ELECTRONICS-SAFETY TESTING FACILITY | Information Technology Equipment Safety | Wiring connections & supply | IEC 60950-1: 2005 | Qualitative |
| 434 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Abnormal Operation | IEC. 60335-2-26: 2002 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|-------------------------------------|--|--|---|---------------------------------------|
| 435 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Abnormal Operation | IS 302-2-26 (Cl. 19): 2014 | Qualitative |
| 436 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Clearance, Creepage Distances and Solid Insulation | IEC. 60335-2-26: 2002 | Qualitative |
| 437 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Clearance, Creepage Distances and Solid Insulation | IS 302-2-26 (Cl. 29): 2014 | Qualitative |
| 438 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Components | IS 302-2-26 (Cl. 24): 2014 | Qualitative |
| 439 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Components | IEC. 60335-2-26: 2002 | Qualitative |



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|------|-------------------------------------|--|-------------------------|---|---------------------------------------|
| 440 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Construction | IS 302-2-26 (Cl. 22): 2014 | Qualitative |
| 441 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Construction | IEC. 60335-2-26: 2002 | Qualitative |
| 442 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Heating | IS 302-2-26 (Cl. 11): 2014 | 27 0C to 200 0C |
| 443 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Heating | IEC. 60335-2-26: 2002 | 27 0C to 200 0C |
| 444 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Internal Wiring | IEC. 60335-2-26: 2002 | Qualitative |



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|------|-------------------------------------|--|--|---|---------------------------------------|
| 445 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Internal Wiring | IS 302-2-26 (Cl.23): 2014 | Qualitative |
| 446 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Leakage current and Electric Strength (After Humidity treatment) | IS 302-2-26 (Cl. 16): 2014 | 0 mA to 250 mA |
| 447 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Leakage current and Electric Strength (After Humidity treatment) | IS 302-2-26 (Cl. 16): 2014 | 0 kV to 5 kV |
| 448 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Leakage current and Electric Strength at Operating Temperature | IEC. 60335-2-26: 2002 | Qualitative |
| 449 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Leakage current and Electric Strength at Operating Temperature | IS 302-2-26 (Cl. 13): 2014 | Qualitative |



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|------|-------------------------------------|--|-------------------------|---|---------------------------------------|
| 450 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Marking & Instructions | IEC. 60335-2-26: 2002 | Qualitative |
| 451 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Mechanical Strength | IEC. 60335-2-26: 2002 | Qualitative |
| 452 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Mechanical Strength | IS 302-2-26 (Cl. 21): 2014 | Qualitative |
| 453 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Moisture Resistance | IS 302-2-26 (Cl. 15): 2014 | Qualitative |
| 454 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Moisture Resistance | IEC. 60335-2-26: 2002 | Qualitative |



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|------|-------------------------------------|--|---|---|---------------------------------------|
| 455 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IS 302-2-26 (Cl. 17): 2014 | 0 W to 5000 W |
| 456 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IEC. 60335-2-26: 2002 | 0 V to 500 V |
| 457 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IEC. 60335-2-26: 2002 | 0 A to 30 A |
| 458 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IS 302-2-26 (Cl. 17): 2014 | 0 A to 30 A |
| 459 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Overload protection of Transformers and Associated Circuits | IS 302-2-26 (Cl. 17): 2014 | 0 V to 500 V |



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|------|-------------------------------------|--|-------------------------|---|---------------------------------------|
| 460 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IS 302-2-26 (CI 10): 2014 | 0 V to 600 V |
| 461 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IS 302-2-26 (CI 10): 2014 | 0 A to 20 A |
| 462 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IS 302-2-26 (CI 10): 2014 | 0 W to 1000 W |
| 463 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IEC. 60335-2-26: 2002 | 0 W to 1000 W |
| 464 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IEC. 60335-2-26: 2002 | 0 V to 600 V |



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|------|-------------------------------------|--|---|---|---------------------------------------|
| 465 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Power Input and Current | IEC. 60335-2-26: 2002 | 0 A to 20 A |
| 466 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Protection against Access to Live Parts | IS 302-2-26 (Cl. 8): 2014 | Qualitative |
| 467 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Protection against Access to Live Parts | IEC. 60335-2-26: 2002 | Qualitative |
| 468 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Provision for Earthing | IEC. 60335-2-26: 2002 | 0 V to 99.9 V |
| 469 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Provision for Earthing | IS 302-2-26 (Cl. 27): 2014 | 0 A to 50 A |



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|------|-------------------------------------|--|-----------------------------|---|---------------------------------------|
| 470 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Provision for Earthing | IS 302-2-26 (Cl. 27): 2014 | 0 V to 99.9 V |
| 471 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Provision for Earthing | IEC. 60335-2-26: 2002 | 0 A to 50 A |
| 472 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Resistance to Heat and Fire | IEC. 60335-2-26: 2002 | Qualitative |
| 473 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Resistance to Heat and Fire | IS 302-2-26 (Cl. 30): 2014 | Qualitative |
| 474 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Resistance to Rusting | IS 302-2-26 (Cl.31): 2014 | Qualitative |



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|------|-------------------------------------|--|---|---|---------------------------------------|
| 475 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Resistance to Rusting | IEC. 60335-2-26: 2002 | Qualitative |
| 476 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Screws and connections | IEC. 60335-2-26: 2002 | Qualitative |
| 477 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Stability and Mechanical Hazards | IS 302-2-26 (Cl. 20) : 2014 | Qualitative |
| 478 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Stability and Mechanical Hazards | IEC. 60335-2-26: 2002 | Qualitative |
| 479 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Supply connection and external flexible cords | IEC. 60335-2-26: 2002 | Qualitative |



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|------|-------------------------------------|---|---|---|---------------------------------------|
| 480 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Supply connection and external flexible cords | IS 302-2-26 (Cl. 25): 2014 | Qualitative |
| 481 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Terminals for external conductors | IS 302-2-26 (Cl. 26): 2014 | Qualitative |
| 482 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Transient Overvoltage | IEC. 60335-2-26: 2002 | Qualitative |
| 483 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks Safety of Household and Similar Electrical Appliances Part 2 Particular Requirements Section 26 Clocks | Terminals for external conductors | IEC. 60335-2-26 : 2002 | Qualitative |



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|------|-------------------------------------|--|-----------------------------|---|---------------------------------------|
| 484 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical AppliancesPart 2 Particular RequirementsSection 26 Clocks | Marking & Instructions | IS 302-2-26 (Cl. 7): 2014 | Qualitative |
| 485 | ELECTRONICS-SAFETY TESTING FACILITY | Safety of Household and Similar Electrical AppliancesPart 2 Particular RequirementsSection 26 Clocks | Screws and connections | IS 302-2-26 (Cl. 28): 2014 | Qualitative |
| 486 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | 10% Fine Value (Ton) | IS:2386(P-4): 1963 | 0.1 Ton to 50 Ton |
| 487 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | 75 micron passing materials | IS:2386(Pt- 1): 1963 | 0.1 % to 6 % |
| 488 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Aggregate Abrasion Value | IS:2386(P-4): 1963 | 1.0 % to 50 % |



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|------|--------------------------------|--|------------------------------------|---|---------------------------------------|
| 489 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Aggregate Crushing Value | IS:2386(P-4): 1963 | 1.0 % to 50 % |
| 490 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Bulk density/ Density | IS:2386(Pt- 3): 1963 | 1 kg/L to 3 kg/L |
| 491 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Combined Flakiness & Elongation | IS:2386(Pt -1): 1963 | 5 % to 80 % |
| 492 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Deleterious materials Clay & Lumps | IS:2386(Pt- 2): 1963 | 0.1 % to 30 % |



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|------|--------------------------------|--|--------------------------------------|---|---------------------------------------|
| 493 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Deleterious materials Coal & Lignite | IS:2386(Pt- 2): 1963 | 0.1 % to 30 % |
| 494 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Elongation index | IS:2386(Pt- 1): 1963 | 1 % to 50 % |
| 495 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Flakiness Index | IS:2386(P-1): 1963 | 1 % to 50 % |
| 496 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Organic Impurities | IS: 2386 (Pt- 2) : 1963 | Qualitative |



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|------|--------------------------------|--|---|---|---------------------------------------|
| 497 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Organic Impurities | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | Qualitative |
| 498 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Particle Size(Sieve analysis)75mm, 63mm, 53mm, 45mm, 40mm, 26.5mm, 22.4mm, 20.0mm, 16.0mm, 13.2mm, 12.5mm, 11.2mm, 10.0mm, 9.5mm, 5.6mm, 4.75mm, 2.36mm, 0.85mm, 0.60mm, 0.425mm, 0.075mm | IS:2386(P-1): 1963 | 0.1 % to 100 % |
| 499 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Soundness | IS:2386(Pt-5): 1963 | 0.1 % to 20 % |
| 500 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Specific Gravity | IS:2386(P-3): 1963 | 1 to 4 |



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|------|--------------------------------|--|-------------------------|---|---------------------------------------|
| 501 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Stripping value | IS: 6241: 1971 | 1 % to 25 % |
| 502 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Surface Moisture | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | 1 % to 10 % |
| 503 | MECHANICAL-BUILDINGS MATERIALS | Aggregates (Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Water Absorption | IS:2386(P-3): 1963 | 0.1 % to 6 % |
| 504 | MECHANICAL-BUILDINGS MATERIALS | Aggregates(Coarse, Graded aggregates, Key aggregate, Stone Metal, Stone Soling, Ballast) Sub Base Non Bituminous: GSB, WBM, WMM | Aggregate Impact Value | IS:2386(P-4): 1963 | 1 % to 50 % |
| 505 | MECHANICAL-BUILDINGS MATERIALS | Autoclave Aerated Concrete Block(AAC) | Block Density | IS: 6441(Pt 1): 2012 | 10 Kg/m3 to 3000 Kg/m3 |



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|------|--------------------------------|---------------------------------------|-------------------------|---|--|
| 506 | MECHANICAL-BUILDINGS MATERIALS | Autoclave Aerated Concrete Block(AAC) | Compressive Strength | IS: 6441(Pt 5): 1972 | 5 kg/cm ² to 200 kg/cm ² |
| 507 | MECHANICAL-BUILDINGS MATERIALS | Autoclave Aerated Concrete Block(AAC) | Dimensions | IS: 2185 (Pt 3): 1984 | 10 mm to 1000 mm |
| 508 | MECHANICAL-BUILDINGS MATERIALS | Autoclave Aerated Concrete Block(AAC) | Drying Shrinkage | IS: 6441(Pt 2): 1972 | 0.01 % to 5 % |
| 509 | MECHANICAL-BUILDINGS MATERIALS | Autoclave Aerated Concrete Block(AAC) | Moisture Movement | IS: 6441 (P-2): 1972 | 0.01 % to 30 % |
| 510 | MECHANICAL-BUILDINGS MATERIALS | Bitumen mix material | Binder content | ASTM D2172 IS : 1195: 2012 | 1 % to 50 % |
| 511 | MECHANICAL-BUILDINGS MATERIALS | Bitumen mix material | Density | ASTMD2726: 2017 | 1 gm/cc to 4 gm/cc |
| 512 | MECHANICAL-BUILDINGS MATERIALS | Bitumen mix material | Gradation (Sieving) | MORTH, IS: 2386: 1963 | 0.1 % to 100 % |
| 513 | MECHANICAL-BUILDINGS MATERIALS | Bitumen mix material | Hardness Number | IS : 1195: 2002 | 1 to 30 |
| 514 | MECHANICAL-BUILDINGS MATERIALS | Bitumen mix material | Thickness | ASTM D3549: 2017 | 0.02 mm to 300 mm |
| 515 | MECHANICAL-BUILDINGS MATERIALS | Bricks (AR Bricks) | Abrasion resistance | IS: 4860: 1968 | 0.1 mm to 8 mm |



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|------|--------------------------------|-------------------------------------|-------------------------|---|---|
| 516 | MECHANICAL-BUILDINGS MATERIALS | Bricks (AR Bricks) | Abrasion resistance | IS: 1237: 2013 | 0.1 mm to 8 mm |
| 517 | MECHANICAL-BUILDINGS MATERIALS | Bricks (AR Bricks) | Resistance to Acid | IS: 4860: 1968 | 0.1 % to 10 % |
| 518 | MECHANICAL-BUILDINGS MATERIALS | Bricks (AR Bricks) | Water absorption | IS: 4860: 1968 | 0.1 % to 20 % |
| 519 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Compressive strength | IS:3495(Pt-1): 1992 | 2 N/mm ² to 50 N/mm ² |
| 520 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Length | IS: 13757: 1993 | 25 mm to 5000 mm |
| 521 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Length | IS: 4885: 1988 | 25 mm to 5000 mm |
| 522 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Length | IS: 1077: 1992 | 25 mm to 5000 mm |
| 523 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Length | IS:12894: 2002 | 25 mm to 5000 mm |
| 524 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Thickness | IS: 4885: 1988 | 25 mm to 2000 mm |
| 525 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Thickness | IS: 13757: 1993 | 25 mm to 2000 mm |



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|------|--------------------------------|-------------------------------------|-------------------------|---|--|
| 526 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Thickness | IS: 1077: 1992 | 25 mm to 2000 mm |
| 527 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Thickness | IS:12894: 2002 | 25 mm to 2000 mm |
| 528 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Width | IS:12894: 2002 | 25 mm to 3000 mm |
| 529 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Width | IS: 1077: 1992 | 25 mm to 3000 mm |
| 530 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Width | IS: 13757: 1993 | 25 mm to 3000 mm |
| 531 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Dimensions Width | IS: 4885: 1988 | 25 mm to 3000 mm |
| 532 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Drying Shrinkage | IS: 4139: 1989 | 0.01 % to 1.0 % |
| 533 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Efflorescence | IS:3495(Pt-3): 1992 | Qualitative |
| 534 | MECHANICAL-BUILDINGS MATERIALS | Bricks (Clay, Fly ash, Lime &Sewer) | Water absorption | IS:3495(Pt-2): 1992 | 0.1 % to 40 % |
| 535 | MECHANICAL-BUILDINGS MATERIALS | Building Chemicals (Integral WPC) | Compressive strength | IS:4031(Pt-6): 1988 | 5 N/mm ² to 100 N/mm ² |



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|------|--------------------------------|-----------------------------------|-------------------------|---|--|
| 536 | MECHANICAL-BUILDINGS MATERIALS | Building Chemicals (Integral WPC) | Setting time | IS:4031(Pt-5): 1988 | 30 mins to 600 mins |
| 537 | MECHANICAL-BUILDINGS MATERIALS | Cement | Compressive Strength | IS: 4031 (P-6): 1988 | 5 MPa to 100 MPa |
| 538 | MECHANICAL-BUILDINGS MATERIALS | Cement | Consistency | IS: 4031 (P-4): 1988 | 20 % to 50 % |
| 539 | MECHANICAL-BUILDINGS MATERIALS | Cement | Degree of Whiteness | IS: 8042: 2015 | 50 % to 98 % |
| 540 | MECHANICAL-BUILDINGS MATERIALS | Cement | Density | ASTM C 188: 2017 | 2.0 g/cm ³ to 3.5 g/cm ³ |
| 541 | MECHANICAL-BUILDINGS MATERIALS | Cement | Density | IS: 4031 (Pt 11): 1988 | 2.0 g/cm ³ to 3.5 g/cm ³ |
| 542 | MECHANICAL-BUILDINGS MATERIALS | Cement | Dry Shrinkage | IS: 4031 (P-10): 1988 | 0.01 % to 5 % |
| 543 | MECHANICAL-BUILDINGS MATERIALS | Cement | Fineness (Blaine Air) | IS: 4031 (P-2): 1999 | 100 m ² /kg to 500 m ² /kg |
| 544 | MECHANICAL-BUILDINGS MATERIALS | Cement | Setting Time Final | IS: 4031 (P-5): 1988 | 10 Minute to 700 Minute |
| 545 | MECHANICAL-BUILDINGS MATERIALS | Cement | Setting Time Initial | IS: 4031 (P-5): 1988 | 10 Minute to 700 Minute |



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|------|--------------------------------|--------------------------------|-------------------------------|---|---------------------------------------|
| 546 | MECHANICAL-BUILDINGS MATERIALS | Cement | Soundness by Le-chatelier | IS: 4031 (P-3): 1988 | 0.5 mm to 10 mm |
| 547 | MECHANICAL-BUILDINGS MATERIALS | Cement | Soundness By-Autoclave | IS: 4031 (P-3): 1988 | 0.01 % to 2 % |
| 548 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Dimension (mm) Length | IS 1237: 2012 | 20 mm to 500 mm |
| 549 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Dimension (mm) Thickness | IS 1237: 2012 | 2 mm to 25 mm |
| 550 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Dimension (mm) Width | IS 1237: 2012 | 10 mm to 500 mm |
| 551 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Flatness of the tiles surface | IS 1237: 2012 | 0.01 mm to 10 mm |
| 552 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Perpendicularity | IS 1237: 2012 | 0.01 % to 10 % |
| 553 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Straightness | IS 1237: 2012 | 0.01 % to 10 % |
| 554 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Thickness of Wearing | IS 1237: 2012 | 0.01 mm to 15 mm |
| 555 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Water absorption | IS 1237: 2012 | 0.01 % to 25 % |



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|------|--------------------------------|---------------------------------|---|---|--|
| 556 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Flooring Tiles | Wet Transverse strength (N/mm ²)(upto size 300 x 300mm) | IS 1237: 2012 | 0.01 N/mm ² to 20 N/mm ² |
| 557 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Dimension (mm)Length | IS 13801: 2013 | 1 mm to 500 mm |
| 558 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Dimension (mm)Thickness | IS 13801: 2013 | 1 mm to 25 mm |
| 559 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Dimension (mm)Width | IS 13801: 2013 | 1 mm to 500 mm |
| 560 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Flatness of the tiles surface | IS 13801: 2013 | 0.01 mm to 10 mm |
| 561 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Perpendicularity | IS 13801: 2013 | 0.01 % to 10 % |
| 562 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Straightness | IS 13801: 2013 | 0.01 % to 10 % |
| 563 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Thickness of wearing layer | IS 13801: 2013 | 0.01 mm to 15 mm |
| 564 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Water absorption | IS 13801: 2013 | 1 % to 25 % |
| 565 | MECHANICAL-BUILDINGS MATERIALS | Cement Concrete Tiles Chequered | Wet transverse strength (N/mm ²)(upto size 300 x 300mm) | IS 13801: 2013 | 0.01 N/mm ² to 20 N/mm ² |



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|------|--------------------------------|--|---------------------------|---|---|
| 566 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Breaking strength, N | IS 4457: 2007 | 10 N to 8000 N |
| 567 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Dimension (mm)Length | IS 4457: 2007 | 1 mm to 300 mm |
| 568 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Dimension (mm)Thickness | IS 4457: 2007 | 1 mm to 22 mm |
| 569 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Dimension (mm)Width | IS 4457: 2007 | 1 mm to 300 mm |
| 570 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Modular of Rupture | IS 4457: 2007 | 1 N/mm ² to 80 N/mm ² |
| 571 | MECHANICAL-BUILDINGS MATERIALS | Ceramic Unglazed Vitreous AcidResistance Tiles | Water absorption | IS 4457: 2007 | 0.01 % to 25 % |
| 572 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Air Content (Pressure) | IS: 1199: 1959 | 0.01 % to 5 % |
| 573 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Air Content (Pressure) | IS: 9103: 1999 | 0.01 % to 5 % |
| 574 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Cube Compressive Strength | IS: 516: 1959 | 5 MPa to 85 MPa |
| 575 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Cube Compressive Strength | IS:9103: 1999 | 5 MPa to 85 MPa |



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|------|--------------------------------|----------------------------|-------------------------|---|---------------------------------------|
| 576 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Drying shrinkage | IS: 9103: 1999 | 0.01 % to 0.2 % |
| 577 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Drying shrinkage | IS: 1199: 1959 | 0.01 % to 0.2 % |
| 578 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Flexural Strength | IS: 516: 1959 | 1 MPa to 10 MPa |
| 579 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Flexural Strength | IS:9103: 1999 | 1 MPa to 10 MPa |
| 580 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Loss of workability | IS: 9103: 1999 | 1 mm to 100 mm |
| 581 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Setting TimeFinal | IS: 8142: 1976 | 1 Hour to 24 Hour |
| 582 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Setting TimeFinal | IS:9103: 1999 | 1 Hour to 24 Hour |
| 583 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Setting TimeInitial | IS: 8142: 1976 | 1 Hour to 24 Hour |
| 584 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Setting TimeInitial | IS:9103: 1999 | 1 Hour to 24 Hour |
| 585 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Slump | IS: 1199: 1959 | 1 mm to 300 mm |



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| 586 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Slump | IS:9103: 1999 | 1 mm to 300 mm |
| 587 | MECHANICAL-BUILDINGS MATERIALS | Concrete (fresh & Harden) | Test for bleeding | IS:9103: 1999 | 1 % to 10 % |
| 588 | MECHANICAL-BUILDINGS MATERIALS | Concrete Block for Paving (Paverblock) | Abrasion Resistance(Loss in volumeafter 16 cycles) | IS : 15658: 2006 | 5000 mm ³ to 50000 mm ³ |
| 589 | MECHANICAL-BUILDINGS MATERIALS | Concrete Block for Paving (Paverblock) | Compressive Strength | IS : 15658: 2006 | 5 N/mm ² to 60 N/mm ² |
| 590 | MECHANICAL-BUILDINGS MATERIALS | Concrete Block for Paving (Paverblock) | Dimensions | IS : 15658: 2006 | 1 mm to 1000 mm |
| 591 | MECHANICAL-BUILDINGS MATERIALS | Concrete Block for Paving (Paverblock) | Thickness of Wearing Layer | IS : 15658: 2006 | 1 mm to 20 mm |
| 592 | MECHANICAL-BUILDINGS MATERIALS | Concrete Block for Paving (Paverblock) | Water absorption | IS : 15658: 1988 | 0.2 % to 20 % |
| 593 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base Non Bituminous: GSB, WBM, WMM | 75 micron passing materials | IS:2386 (Pt. 1): 1963 | 0.01 % to 6 % |
| 594 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base Non Bituminous: GSB, WBM, WMM | Bulk density/ Density | IS:2386, (Pt. 3): 1963 | 1 kg/L to 3 kg/L |



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|------|--------------------------------|--|--|---|---------------------------------------|
| 595 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base Non Bituminous: GSB, WBM, WMM | Particle Size(Sieve analysis)10mm, 4.75mm, 2.36mm, 1.18mm, 0.600mm, 0.300mm, 0.150mm | IS:2386(P-1): 1963 | 0.1 % to 100 % |
| 596 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Bulking | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | 0.1 % to 15 % |
| 597 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Bulking | IS: 2386 (Pt 3): 1963 | 0.1 % to 15 % |
| 598 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Deleterious materials Clay & Lumps | IS:2386, (Pt. 2): 1963 | 0.1 % to 30 % |
| 599 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Deleterious materials Coal & Lignite | IS:2386, (Pt. 2): 1963 | 0.1 % to 30 % |
| 600 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Organic Impurities | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | Qualitative |
| 601 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Organic Impurities | IS: 2386 (Pt-2): 1963 | Qualitative |
| 602 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Silt Content | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | 0.1 % to 15 % |
| 603 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Silt Content | IS: 2386,(Pt 2): 1963 | 0.1 % to 30 % |



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|------|--------------------------------|---|----------------------------------|---|---------------------------------------|
| 604 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Soundness | IS:2386, (Pt. 5): 1963 | 0.1 % to 20 % |
| 605 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Specific Gravity | IS:2386(P-3): 1963 | 1 to 4 |
| 606 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Surface Moisture | STP No. STRC/STP/BM02 Issue No.01 May 5: 2012 | 0.01 % to 10 % |
| 607 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Surface Moisture | IS: 2386 (Pt 2): 1963 | 0.01 % to 10 % |
| 608 | MECHANICAL-BUILDINGS MATERIALS | Fine Aggregates Sub Base NonBituminous: GSB, WBM, WMM | Water Absorption | IS:2386(P-3): 1963 | 0.2 % to 6 % |
| 609 | MECHANICAL-BUILDINGS MATERIALS | Flush Door Shutter | End Immersion | IS 4020 (P-13): 1998 | Qualitative |
| 610 | MECHANICAL-BUILDINGS MATERIALS | Flush Door Shutter | Glue Adhesion | IS 4020 (P-15): 1998 | Qualitative |
| 611 | MECHANICAL-BUILDINGS MATERIALS | Flush Door Shutter | Knife test / Adhesion of Ply | IS 4020 (P-14): 1998 | Qualitative |
| 612 | MECHANICAL-BUILDINGS MATERIALS | Flush Door Shutter | Screw withdrawal resistance test | IS 4020 (P-16): 1998 | 10 N to 3500 N |
| 613 | MECHANICAL-BUILDINGS MATERIALS | Fly Ash | Compressive strength | IS: 1727: 1967 | 50 MPa to 98 MPa |



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|------|--------------------------------|----------------------------|--|---|--|
| 614 | MECHANICAL-BUILDINGS MATERIALS | Fly Ash | Fineness (Specific surface) | IS: 1727: 1967 | 100 m ² /kg to 700 m ² /kg |
| 615 | MECHANICAL-BUILDINGS MATERIALS | Fly Ash | Lime Reactivity | IS: 1727: 1967 | 0.1 MPa to 20 MPa |
| 616 | MECHANICAL-BUILDINGS MATERIALS | Fly Ash | Particles Retained on 45 micron sieve | IS: 1727: 1967 | 0 % to 80 % |
| 617 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Breaking strength, N(upto size 200 x200mm) | IS 13630 (P- 6): 2006 | 10 N to 800 N |
| 618 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Bulk density gm/cc | IS 13630 (P- 2): 2006 | 1 g/cc to 5 g/cc |
| 619 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Chemical resistance (chemicalproperties) | IS: 13630 (P-8): 2006 | Qualitative |
| 620 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Crazing resistance | IS 13630 (P- 9): 2006 | Qualitative |
| 621 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm) Length | IS 13630 (P- 1): 2006 | 20 mm to 1000 mm |
| 622 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm) Thickness | IS 13630 (P- 1): 2006 | 1 mm to 22 mm |
| 623 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm) Width | IS 13630 (P- 1): 2006 | 20 mm to 1000 mm |



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|------|--|----------------------------|---|---|---|
| 624 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm)Length | IS 15622: 2017 | 20 mm to 1000 mm |
| 625 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm)Thickness | IS 15622: 2017 | 1 mm to 22 mm |
| 626 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Dimension (mm)Width | IS 15622: 2017 | 20 mm to 1000 mm |
| 627 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Modulus of rupture N/mm ² (upto size200 x 200mm) | IS 13630 (P- 6): 2006 | 1 N/mm ² to 80 N/mm ² |
| 628 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Moisture expansion(in mm/mtr) | IS 13630 (P- 3): 2006 | 0 % to 10 % |
| 629 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Stair resistance | IS: 13630 (P 7 & 8): 2006 | Qualitative |
| 630 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Thermal shock resistance (upto size550x550mm) | IS 13630 (P- 5): 2006 | Qualitative |
| 631 | MECHANICAL-BUILDINGS MATERIALS | Pressed Ceramic Tiles | Water absorption, % by mass | IS 13630 (P- 2): 2006 | 0.01 % to 25 % |
| 632 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Breaking load | IS: 1608(P-1): 2017 | 1 N to 5 KN |



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|------|--|----------------------------|--|---|---------------------------------------|
| 633 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Diameter of Line wire | IS: 278: 2009 | 0.01 mm to 25 mm |
| 634 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Distance Between two Barbs | IS: 278: 2009 | 0.02 mm to 300 mm |
| 635 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Mass of Completed Barbed wire | IS: 278: 2009 | 1 g to 20 kg |
| 636 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | No oflays between the twoConsecutive Barbs | IS: 278: 2009 | Qualitative |
| 637 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Tensile Strength | IS: 1608(P-1): 2017 | 1 N to 5 KN |
| 638 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wire IS: 278 | Wrapping Test | IS: 1755: 1983 | Qualitative |
| 639 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Barbed wireIS: 278 | Diameter of Point wire | IS: 278: 2009 | 0.01 mm to 25 mm |



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|------|--|--|----------------------------|---|---------------------------------------|
| 640 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipes and pipe fitting for over ground nonpressure pipeline socket and spigot series (IS: 1729-2010) | Brinell Hardness | IS: 1500(P-1): 2013 | 50 to 400 2.5/187.5HBW |
| 641 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipes and pipe fitting for over ground nonpressure pipeline socket and spigot series (IS: 1729-2010) | center to center hole | IS: 1729: 2002 | 0.02 mm to 300 mm |
| 642 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipes and pipe fitting for over ground nonpressure pipeline socket and spigot series (IS: 1729-2010) | Dia of spigot bead of pipe | IS: 1729: 2002 | 20 mm to 700 mm |
| 643 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipes and pipe fitting for over ground nonpressure pipeline socket and spigot series (IS: 1729-2010) | Ear length of flange | IS: 1729: 2002 | 0.02 mm to 300 mm |
| 644 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipes and pipe fitting for over ground nonpressure pipeline socket and spigot series (IS: 1729-2010) | External dia of pipe | IS: 1729: 2002 | 20 mm to 700 mm |



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|------|--|--|-------------------------|---|---------------------------------------|
| 645 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | External diaof socket | IS: 1729: 2002 | 20 mm to 700 mm |
| 646 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | Internal depth | IS: 1729: 2002 | 0.02 mm to 300 mm |
| 647 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | Internal dia of pipe | IS: 1729: 2002 | 20 mm to 700 mm |
| 648 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | Internal dia of socket | IS: 1729: 2002 | 0.02 mm to 300 mm |
| 649 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | Mass | IS: 1729: 2002 | 1 g to 20 kg |



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|------|--|---|-----------------------------|---|---------------------------------------|
| 650 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | thickness of socket | IS: 1729: 2002 | 0.01 mm to 25.0 mm |
| 651 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron ductile iron drainage pipesand pipe fitting for over ground nonpressurepipeline socket and spigotseries (IS: 1729-2010) | wall thickness of pipe | IS: 1729: 2002 | 0.01 mm to 25 mm |
| 652 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Brinell Hardness | IS: 1500(P-1): 2013 | 50 to 400 2.5/187.5HBW |
| 653 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Depth of socket | IS: 1538: 1993 | 0.02 mm to 300 mm |
| 654 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | External diameter of spigot | IS: 1538: 1993 | 20 mm to 700 mm |
| 655 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Internal diameter of socket | IS: 1538: 1993 | 0.02 mm to 300 mm |
| 656 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Mass | IS: 1538: 1993 | 0.1 kg to 20 kg |



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|------|--|---|-------------------------|---|---------------------------------------|
| 657 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Thickness of socket | IS: 1538: 1993 | 0.01 mm to 25 mm |
| 658 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Cast Iron Fitting for pressure pipesfor water , gas and sewage (IS:1538-1993) | Wall thickness of pipe | IS: 1538: 1993 | 0.01 mm to 25 mm |
| 659 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Centrifugally cast (spun) ductile ironpressure pipes for water, gas andsewage (IS: 8329-2000 | Brinell hardness | IS: 1500(P-1): 2013 | 50 to 400 HBW2.5/187.5 |
| 660 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Centrifugally cast (spun) ductile ironpressure pipes for water, gas andsewage (IS: 8329-2000 | External diameter | IS: 8329: 2000 | 20 mm to 700 mm |
| 661 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Centrifugally cast (spun) ductile ironpressure pipes for water, gas andsewage (IS: 8329-2000 | Tensile test | IS: 1608 (P-1): 2017 | 0.1 KN to 1000 KN |
| 662 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Centrifugally cast (spun) ductile ironpressure pipes for water, gas andsewage (IS: 8329-2000) | wall thickness | IS: 8329: 2000 | 0.01 mm to 25 mm |



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|------|--|--|-----------------------------|---|---------------------------------------|
| 663 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | Brinell hardness | IS:1500(P-1): 2013 | 0 mm to 7.0 mm |
| 664 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | Depth of socket | IS: 3989: 2009 | 0.02 mm to 300 mm |
| 665 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | External diameter of barrel | IS: 3989: 2009 | 20 mm to 700 mm |
| 666 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | Internal diameter of socket | IS: 3989: 2009 | 0.02 mm to 300 mm |



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|------|--|--|-----------------------------|---|---------------------------------------|
| 667 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | mass of pipe | IS: 3989: 2009 | 0.01 g to 20 kg |
| 668 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron spigot and socket soil, waste, ventilating and drain water pipes fitting and accessories (IS : 3989-2009) | Wall thickness | IS: 3989: 2009 | 0.01 mm to 25 mm |
| 669 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Depth of socket | IS: 1536: 2001 | 0.02 mm to 300 mm |
| 670 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | External Diameter of barrel | IS: 1536: 2001 | 20 mm to 700 mm |
| 671 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Hardness | IS: 1500(P-1): 2013 | 50 to 400 2.5/187.5 HBW |



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|------|--|--|-----------------------------|---|---------------------------------------|
| 672 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Internal diameter of socket | IS: 1536: 2001 | 0.02 mm to 300 mm |
| 673 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Mass | IS: 1536: 2001 | 0.1 kg to 20 kg |
| 674 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Ring test | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 675 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Tensile test | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 676 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Thickness of barrel | IS: 1536: 2001 | 0.01 mm to 25 mm |
| 677 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Centrifugally Cast (Spun) Iron Pressure Pipes for water, gas and sewage (IS : 1536-2001) | Thickness of socket | IS: 1536: 2001 | 0.01 mm to 25 mm |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 678 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | % Elongation | IS: 1608(P-1): 2018 | 0.02 mm to 300 mm |
| 679 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Bend Test | IS:1599: 2012 | Qualitative |
| 680 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Cupping Test | IS: 10175: 2012 | 0.01 mm to 25.00 mm |
| 681 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Hardness Rockwell | IS: 1586(P-1): 2018 | 45 HRA to 88 HRA |
| 682 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Hardness Rockwell | IS: 1586(P-1): 2018 | 20 HRC to 70 HRC |
| 683 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Hardness Rockwell | IS: 1586(P-1): 2018 | 30 HRB to 100 HRB |
| 684 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Length | IS: 513: 2008 | 1 mm to 5000 mm |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 685 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Tensile Strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 686 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Thickness | IS: 513: 2008 | 0.01 mm to 25 mm |
| 687 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Width | IS: 513: 2008 | 1 mm to 5000 mm |
| 688 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | CRC Sheet | Yield Stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 689 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 690 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Bend Test | IS: 2329: 2005 | Qualitative |
| 691 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Flattening Test | IS: 2328: 2005 | Qualitative |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 692 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Mass | IS: 1239(P-1): 2004 | 1 gm to 20 kg |
| 693 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Outside diameter | IS: 1239(P-1): 2004 | 20 mm to 300 mm |
| 694 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Tensile Strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 695 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | G.I. Pipe | Thickness | IS: 1239(P-1): 2004 | 0.01 mm to 25 mm |
| 696 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 697 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Bend Test | IS: 277: 2018 | Qualitative |
| 698 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Galvanized Steel Sheet | IS: 277: 2018 | 0.02 mm to 300 mm |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 699 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Length | IS: 277: 2018 | 1 mm to 5000 mm |
| 700 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Mass | IS: 277: 2018 | 1 gm to 20 kg |
| 701 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Pitch of Corrugation | IS: 277: 2018 | 0.02 mm to 300 mm |
| 702 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 703 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Thickness | IS: 277: 2018 | 0.01 mm to 25 mm |
| 704 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Width | IS: 277: 2018 | 1 mm to 5000 mm |
| 705 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Galvanized Steel Sheet | Yield stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|--|--|-------------------------|---|---------------------------------------|
| 706 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 707 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | Bend Test | IS: 1599: 2012 | Qualitative |
| 708 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | Mass | IS:1732: 1989 | 1 g to 20 kg |
| 709 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | Tensile Strength | IS: 1608(P-1): 2017 | 1 N to 5 KN |
| 710 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | Yield Stress | IS: 1608(P-1): 2017 | 1 N to 5 KN |
| 711 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | HD steel wire IS: 432 (P-1) | Diameter | IS: 432 (P-1): 1982 | 0.01 mm to 25 mm |
| 712 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement IS:1786: 2008 | TS/YS Ratio | IS:1786: 2008 | 0.1 KN to 1000 KN |



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|------|--|--|------------------------------|---|---------------------------------------|
| 713 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | % Elongation | IS:1608(P-1): 2017 | 0.02 mm to 300 mm |
| 714 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | Bend Test | IS:1599: 2012 | Qualitative |
| 715 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | Mass | IS:1786: 2008 | 1 gm to 20 kg |
| 716 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | Rebend Test | IS:1786: 2008 | Qualitative |
| 717 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | Tensile Strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 718 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement | Yield Stress/0.2%Proofstress | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 719 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | High strength Deformed Steel bars & Wires for Concrete Reinforcement IS:1786: 2008 | % Total Elongation | IS:1608 (P-1): 2017 | 0.02 mm to 300 mm |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 720 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 721 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Depth | IS: 4923: 2017 | 0.02 mm to 300 mm |
| 722 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Length | IS: 4923: 2017 | 1 mm to 5000 mm |
| 723 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Tensile strength | IS: 1608(P-1): 2017 | 0.01 KN to 1000 KN |
| 724 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Thickness | IS: 4923: 2017 | 0.01 mm to 25 mm |
| 725 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Weight | IS: 4923: 2017 | 2 gm to 20 kg |
| 726 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Hollow Steel | Width | IS: 4923: 2017 | 0.02 mm to 300 mm |



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|------|--|--|-------------------------|---|---------------------------------------|
| 727 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hollow Steel | Yield stress | IS: 1608(P-1): 2017 | 0.01 KN to 1000 KN |
| 728 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot rolled carbon steel sheet , plateand strip (IS: 1079-2017) | Bend | IS:1599: 2012 | Qualitative |
| 729 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot rolled carbon steel sheet , plateand strip (IS: 1079-2017) | Cupping | IS:10175: 2012 | 4 mm to 25 mm |
| 730 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot rolled carbon steel sheet , plateand strip (IS: 1079-2017) | Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 731 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot rolled carbon steel sheet , plateand strip (IS: 1079-2017) | Thickness | IS: 1079: 2017 | 0.01 mm to 25 mm |
| 732 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hot rolled carbon steel sheet , plateand strip (IS: 1079-2017) | Yield stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 733 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Hotrolled carbon steel sheet , plateand strip (IS: 1079-2017) | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |



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|------|--|--|---|---|---------------------------------------|
| 734 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mechanical Properties of MetalsMetal & Alloys (Ferrous & Nonferrous) | % Elongation/%Total Elongation atmax force | IS: 1608: (P-1 & 2): 2018 | 3 % to 80 % |
| 735 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mechanical Properties of MetalsMetal & Alloys (Ferrous & Nonferrous) | 0.2% Proof stress | IS: 1608: (P-1 & 3): 2018 | 1 N to 50000 N |
| 736 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mechanical Properties of MetalsMetal & Alloys (Ferrous & Nonferrous) | Tensile Strength | IS: 1608: (P-1 & 3): 2018 | 1 N to 50000 N |
| 737 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mechanical Properties of MetalsMetal & Alloys (Ferrous & Nonferrous) | Yield Stress | IS: 1608: (P-1 & 3): 2018 | 0.1 KN to 1000 KN |
| 738 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mechanical Properties ofMetalsMetal & Alloys (Ferrous &Non ferrous) | Tensile Strength | IS: 1608: (P-1 & 3): 2018 | 0.1 N to 1000 KN |
| 739 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mild Steel Wire (IS 280-2006) | Bend | IS: 280: 2006 | Qualitative |
| 740 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Mild Steel Wire (IS 280-2006) | Diameter | IS: 280: 2006 | 0.01 mm to 25 mm |



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|------|--|-------------------------------|-------------------------|---|---------------------------------------|
| 741 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel Wire (IS 280-2006) | Wrapping Test | IS: 1608(P-1): 2017 | Qualitative |
| 742 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel wire IS: 432(P-2) | 0.2 % proof Stress | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 743 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel wire IS: 432(P-2) | 0.2 % proof Stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 744 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel wire IS: 432(P-2) | Diameter | IS: 432(P-2): 1982 | 0.01 mm to 25 mm |
| 745 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel wire IS: 432(P-2) | Reverse bend Test | IS: 1716: 1971 | Qualitative |
| 746 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel wire IS: 432(P-2) | Tensile Strength | IS: 1608(P-1): 2017 | 1 N to 5 KN |
| 747 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Mild Steel Wire (IS 280-2006) | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |



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|------|--|----------------------------|-------------------------|---|---------------------------------------|
| 748 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 749 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Bend Test | IS: 2329: 2005 | Qualitative |
| 750 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Flattening | IS: 2328: 2005 | Qualitative |
| 751 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Outside diameter | IS: 1161: 2014 | 20 mm to 700 mm |
| 752 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Tensile Strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 753 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Thickness | IS: 1161: 2014 | 0.01 mm to 25 mm |
| 754 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Weight | IS: 1161: 2014 | 1 gm to 20 kg |



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|------|--|--|-------------------------|---|---------------------------------------|
| 755 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | MS. Pipe | Yield Stress | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 756 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | % Elongation | IS: 1608(P-1): 2017 | 01 mm to 25 mm |
| 757 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Cupping Test | IS: 10175: 2012 | 0.01 mm to 25.00 mm |
| 758 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Hardness Rockwell | IS: 1586(P-1): 2018 | 45 HRA to 88 HRA |
| 759 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Hardness Rockwell | IS: 1586(P-1): 2018 | 30 HRB to 100 HRB |
| 760 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Hardness Rockwell | IS: 1586(P-1): 2018 | 20 HRC to 70 HRC |
| 761 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Tensile Strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |



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|------|--|---|----------------------------|---|---------------------------------------|
| 762 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel plate sheet and strip IS: 6911 | Yield Stress | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 763 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel sinks for domestic purposes IS:13983:1994 | Coordinating Size | IS:13983: 1994 | 1 mm to 1000 mm |
| 764 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel sinks for domestic purposes IS:13983:1994 | Depth of bowls | IS: 13983: 1994 | 0.02 mm to 300 mm |
| 765 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel sinks for domestic purposes IS:13983:1994 | Internal dimension of bowl | IS: 13983: 1994 | 0.02 mm to 300 mm |
| 766 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Stainless steel sinks for domestic purposes IS:13983:1994 | Thickness of sheet | IS:13983: 1994 | 0.01 mm to 25 mm |
| 767 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Steel chequered plate IS:3502:2009 | Bend test | IS:1599: 2012 | Qualitative |
| 768 | MECHANICAL-MECHANICAL PROPERTIES OF METALS | Steel chequered plate IS:3502:2009 | Elongation | IS: 1608 (P-1): 2017 | 0.02 mm to 300 mm |



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|------|--|--|-------------------------|---|---------------------------------------|
| 769 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel chequered plate IS:3502:2009 | Tensile strength | IS: 1608 (P-1): 2017 | 0.1 KN to 1000 KN |
| 770 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel chequered plate IS:3502:2009 | Yield stress | IS: 1608 (P-1): 2017 | 0.1 KN to 1000 KN |
| 771 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | %Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 772 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | Flattening | IS: 2328: 2005 | Qualitative |
| 773 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | mass | IS: 3589: 2001 | 10 g to 100 kg |
| 774 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | Outside diameter | IS: 3589: 2001 | 20 mm to 700 mm |



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|------|--|--|--------------------------|---|---------------------------------------|
| 775 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | Tensile strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 776 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | Thickness | IS: 3589: 2001 | 0.01 mm to 25 mm |
| 777 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel pipes for water and sewage(168.3 to 2540m) outside diameterspecification (IS: 3589-2001) | Yield stress | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 778 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 779 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | Flattening | IS: 2328: 2005 | Qualitative |
| 780 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | Mass of plain pipe | IS: 4270: 2001 | 10 g to 100 kg |
| 781 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | outside diameter of pipe | IS: 4270: 2001 | 20 mm to 700 mm |



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|------|--|--|-------------------------|---|---------------------------------------|
| 782 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | thickness of pipe | IS: 4270: 2001 | 0.01 mm to 25 mm |
| 783 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | Tensile strength | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 784 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel tubes used for water wells (IS:4270-2001) | Yield stress | IS: 1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 785 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-1) 2001) | diameter | IS: 4454 (P-1): 2001 | 0.01 mm to 25 mm |
| 786 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-1) 2001) | Torsion | IS: 1755: 1985 | 5 TURNS to 200 TURNS |
| 787 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-1) 2001) | wrapping | IS:1755: 1983 | Qualitative |
| 788 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-2) 2001) | bend | IS: 4454 (P-2): 2001 | Qualitative |



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|------|--|---|-------------------------|---|---------------------------------------|
| 789 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-2) 2001) | diameter | IS: 4454 (P-1): 2001 | 0.01 mm to 25 mm |
| 790 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-2) 2001) | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 791 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-2) 2001) | Torsion | IS: 1755: 1985 | 5 TURNS to 200 TURNS |
| 792 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs (IS:4454 (P-2) 2001) | wrapping | IS:1755: 1983 | Qualitative |
| 793 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Steel wire for mechanical springs(IS:4454 (P-1) 2001 | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 N |
| 794 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | % Elongation | IS:1608(P-1): 2017 | 0.02 mm to 300 mm |
| 795 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Bend Test | IS:1599: 2012 | Qualitative |



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|------|--|--|-------------------------|---|---------------------------------------|
| 796 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Length | IS: 1730: 1989 | 0.02 mm to 300 mm |
| 797 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Mass | IS: 808: 1989 | 1 gm to 20 kg |
| 798 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Tensile Strength | IS:1608(P-1): 2017 | 1 KN to 1000 KN |
| 799 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Thickness | IS: 808: 1989 | 0.01 mm to 25 mm |
| 800 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Width | IS: 1732: 1989 | 0.02 mm to 300 mm |
| 801 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Structural Steel | Yield Stress | IS:1608(P-1): 2017 | 0.1 KN to 1000 KN |
| 802 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes for water, gas and sewage (IS: 1537- 1976) | Depth of socket | IS: 1537: 2001 | 0.02 mm to 300 mm |



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| 803 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Hardness | IS: 1500(P-1): 2013 | 50 to 400 2.5/187.5HBW |
| 804 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Internal diameter of socket | IS: 1537: 2001 | 0.02 mm to 300 mm |
| 805 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Mass of barrel | IS: 1537: 2001 | 1 g to 20 kg |
| 806 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Thickness of barrel | IS: 1537: 2001 | 0.01 mm to 25 mm |
| 807 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Thickness of socket | IS: 1537: 2001 | 0.01 mm to 25 mm |
| 808 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes forwater, gas and sewage (IS: 1537-1976) | Total mass | IS: 1537: 2001 | 10 g to 100 kg |



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|------|--|---|---------------------------|---|---------------------------------------|
| 809 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Vertically cast iron pressure pipes for water, gas and sewage (IS: 1537-1976) | External diameter of pipe | IS: 1537: 2001 | 20 mm to 700 mm |
| 810 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | 0.2 % proof stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 811 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | Elongation | IS: 1608(P-1): 2017 | 0.2 mm to 300 mm |
| 812 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | Thickness | IS: 2673: 2002 | 0.01 mm to 25 mm |
| 813 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | width | IS: 6477: 1983 | 0.02 mm to 300 mm |
| 814 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | 0.2 % proof stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 815 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |



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| 816 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | Thickness | IS: 2676: 1981 | 0.01 mm to 25 mm |
| 817 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | width | IS: 2676: 1981 | 0.02 mm to 300 mm |
| 818 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | width | IS: 2676: 1981 | 0.02 mm to 300 mm |
| 819 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | Wrought aluminium and aluminium alloy sheet and strip (IS: 1285-2002) | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 820 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought aluminium and aluminium alloy sheet and strip (IS: 737-2017) | Tensile strength | IS: 1608(P-1): 2017 | 1 N to 50 KN |
| 821 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS: 733-2017) | % Elongation | IS: 1608(P-1): 2017 | 0.02 mm to 300 mm |
| 822 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS: 733-2017) | 0.2 % proof stress | IS: 1608(P-1): 2017 | 1 N to 50 KN |



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|------|--|---|---|---|---------------------------------------|
| 823 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS:733-2017) | Diameter | IS: 3965: 1981 | 0.01 mm to 25 mm |
| 824 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS:733-2017) | Thickness | IS: 3965: 1981 | 0.01 mm to 25 mm |
| 825 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS:733-2017) | width | IS: 3965: 1981 | 0.02 mm to 300 mm |
| 826 | MECHANICAL- MECHANICAL PROPERTIES OF METALS | Wrought Aluminium and aluminium alloys, bars, rods and sections (IS:733-2017) | Tensile strength | IS: 1608(P-1): 2017 | 10 N to 50 KN |
| 827 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | HDPE Pipe | Dimension Dia | IS: 4984: 2016 | 1 mm to 700 mm |
| 828 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | HDPE Pipe | Dimension Length | IS: 4984: 2016 | 50 mm to 4000 mm |
| 829 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | HDPE Pipe | Dimension Thickness | IS: 4984: 2016 | 0.001 mm to 25 mm |
| 830 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | Plastic Items | MFI (5 kg load and 2.16 Kg at 190± 0.5°C) | IS:2530: 1963 | 1 g/10 Minutes to 100 g/10 Minutes |
| 831 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | Polyethylene | Density | IS:2530: 1963 | 0.1 g/cc to 2 g/cc |



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|------|--|----------------------------|-------------------------|---|---|
| 832 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC Pipe | Dimension Dia | IS: 4985: 2000 | 1 mm to 700 mm |
| 833 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC Pipe | Dimension Thickness | IS: 13592: 2013 | 0.001 mm to 25 mm |
| 834 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC Pipe | Dimension Thickness | IS: 4985: 2000 | 0.001 mm to 25 mm |
| 835 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC Pipe | Dimension Dia | IS: 13592: 2013 | 1 mm to 700 mm |
| 836 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC Pipe | Dimension Length | IS: 4985: 2000 | 50 mm to 4000 mm |
| 837 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC/ HDPE Pipe | Density | IS:12235 (P14): 2004 | 0.1 g/cc to 2 g/cc |
| 838 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC/ HDPE Pipe | Dimension Dia | IS: 12235(P-I): 2004 | 1 mm to 700 mm |
| 839 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC/ HDPE Pipe | Dimension Thickness | IS: 12235(P-I): 2004 | 0.001 mm to 25 mm |
| 840 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC/ HDPE Pipe | Elongation | IS:12235 (P-13): 2004 | 1 % to 100 % |
| 841 | MECHANICAL-PLASTICS AND PLASTIC PRODUCTS | PVC/ HDPE Pipe | Tensile | IS:12235 (P-13): 2004 | 10 N/mm ² to 400 N/mm ² |



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|------|---|--------------------------------------|--|---|---------------------------------------|
| 842 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | PVC/HDPE Pipe | Dimension Length | IS: 12235(P-I): 2004 | 50 mm to 4000 mm |
| 843 | MECHANICAL- PLASTICS AND PLASTIC PRODUCTS | PVC/HDPE Pipe | Length | IS: 13592: 2013 | 50 mm to 4000 mm |
| 844 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Absolute Viscosity at 60°C | IS:1206 (P-2): 1976 | 100 poise to 6000 poise |
| 845 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Density | IS: 2911 (Pt-1, Sec 2): 2010 | 1 gm/cc to 5 gm/cc |
| 846 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Ductility | IS: 1208: 1978 | 1 cm to 100 cm |
| 847 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Flash point and fire Point | IS: 1209: 1978 | 100 °C to 400 °C |
| 848 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Kinematic viscosity at 135°C | IS:1206 (P-3): 1976 | 60 cst to 1000 cst |
| 849 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Liquid Limit | IS: 2720(Pt -5): 1985 | 100 % to 1000 % |
| 850 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Loss on heating | IS: 1212: 1978 | 0.05 % to 5 % |
| 851 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Marsh Viscosity | ASTM D 6910: 2009 | 10 sec to 300 sec |
| 852 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Penetration test at (25°C,100 gm,5sec 0.1mm) | IS: 1203: 1978 | 1 mm to 40 mm |
| 853 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Sand content | IS: 6186: 1986 | 0.1 % to 60 % |
| 854 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Softening point | IS: 1205: 1978 | 25 °C to 100 °C |



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|------|---------------------------|---|---------------------------------|---|---------------------------------------|
| 855 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Solubility in Trichloroethylene | IS: 1216: 1978 | 10 % to 100 % |
| 856 | MECHANICAL- SOIL AND ROCK | Bentonite Bitumen & Allied Materials | Specific gravity | IS: 1202: 1978 | 0.5 gm/cc to 5.0 gm/cc |
| 857 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | CBR | IS: 2720 (Pt-16): 1987 | 1 % to 50 % |
| 858 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test MDD (gm/cc) | IS: 2720 (Pt-2): 1973 | 0 gm/cc to 6 gm/cc |
| 859 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test MDD (gm/cc) | IS: 2720 (Pt-7) (Light): 1980 | 0 gm/cc to 6 gm/cc |
| 860 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test MDD (gm/cc) | IS: 2720 (Pt-8)(Heavy): 1983 | 0 gm/cc to 6 gm/cc |
| 861 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test OMC% | IS: 2720 (Pt-8)(Heavy): 1983 | 0 % to 70 % |
| 862 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test OMC% | IS: 2720 (Pt-2): 1973 | 0 % to 70 % |



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| 863 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Compaction Test OMC% | IS: 2720 (Pt-7)(Light): 1980 | 0 % to 70 % |
| 864 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Field density test(by Core cuttingmethod) | IS: 2720 (Pt-29): 1975 | 0.5 gm/cc to 5 gm/cc |
| 865 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Field density test(by Sandreplacement method) | IS: 2720, (Pt-28): 1974 | 0.5 gm/cc to 5 gm/cc |
| 866 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Grain size analysis | IS: 2720,(Pt- 4): 1985 | 1 % to 100 % |
| 867 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Liquid limit, Plastic limit, Plastic Index | IS: 2720 (Pt-5): 1985 | 0 % to 70 % |
| 868 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Moisture Content | IS: 2720 (Pt-2): 1973 | 0.01 % to 20.0 % |
| 869 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade Sub BaseNon Bituminous: GSB, WBM,WMM | Specific Gravity | IS: 2720 (Pt-3/ Sec-2): 1980 | 1 to 4 |



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| 870 | MECHANICAL- SOIL AND ROCK | Soil Earthwork Sub grade SubBaseNon Bituminous: GSB, WBM,WMM | Free Swell Index | IS: 2720(Pt -40): 1977 | 0.1 % to 100 % |
| 871 | MECHANICAL- SOIL AND ROCK | Stone (Kota) | Porosity | IS:1124: 1974 | 0.1 % to 50 % |
| 872 | MECHANICAL- SOIL AND ROCK | Stone (Kota) | Porosity | IS:13030: 1991 | 0.1 % to 50 % |
| 873 | MECHANICAL- SOIL AND ROCK | Stone (Kota) | Specific gravity | IS:1122: 1974 | 2 to 3.5 |
| 874 | MECHANICAL- SOIL AND ROCK | Stone (Kota) | Water absorption | IS:13030: 1991 | 0.01 % to 20 % |
| 875 | MECHANICAL- SOIL AND ROCK | Stone (Kota) | Water absorption | IS:1124: 1974 | 0.01 % to 20 % |
| 876 | MECHANICAL- SOIL AND ROCK | Stone (Marble) | Apparent Specific Gravity | IS: 1124: 1974 | 1 to 4 |
| 877 | MECHANICAL- SOIL AND ROCK | Stone (Marble) | Moisture Absorption (%) after 24hours immersion in cold water | IS: 1124: 1974 | 0.01 % to 5.0 % |
| 878 | MECHANICAL- SOIL AND ROCK | Stone (Marble) | Specific Gravity | IS: 1122: 1974 | 1 to 4 |
| 879 | MECHANICAL- SOIL AND ROCK | Stones (Granite) | Specific gravity | STP No. STRC/STP/BM25 Issue No.01 July 5: 2012 | 2 to 3.5 |
| 880 | MECHANICAL- SOIL AND ROCK | Stones (Granite) | Specific gravity | IS:1124: 1974 | 2 to 3.5 |
| 881 | MECHANICAL- SOIL AND ROCK | Stones (Granite) | Water Absorption | STP No. STRC/STP/BM25 Issue No.01 July 5: 2012 | 0.01 % to 2 % |



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| 882 | MECHANICAL- SOIL AND ROCK | Stones (Granite) | Water Absorption | IS:1124: 1974 | 0.01 % to 20 % |
| 883 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | 2. Flammability Test relating to beards, moustaches, wigs, etc. which protrude less than 50 mm from the surface of the toy, and full or partial moulded head masks | IS 9873-2 Clause 5.3: 2017 | Qualitative |
| 884 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | 3. Flammability test relating to flowing elements of toys to be worn on the head Rate of Spread of flame | IS 9873-2 Clause 5.4: 2017 | 5.0 mm/s to 200 mm/s |
| 885 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Accessibility of a part or component | IS 9873 (P-1), Cl. 5.7: 2017 | Qualitative |
| 886 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Accessibility of a part or component | ISO 8124-1: 2014 | Qualitative |
| 887 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for mechanically or electrically powered ride-on toys other than toy bicycles | IS 9873 (Part 1), Clause 5.16.2: 2017 | Qualitative |



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|------|---------------------------------------|----------------------------|---|---|---------------------------------------|
| 888 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for mechanically or electrically powered ride-on toys other than toy bicycles | ISO 8124-1: 2014 | Qualitative |
| 889 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for toy bicycles | IS 9873 (Part 1), Clause 5.16.3: 2017 | Qualitative |
| 890 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for toy bicycles | ISO 8124-1: 2014 | Qualitative |
| 891 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for toy scooter | ISO 8124-1: 2014 | Qualitative |
| 892 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Brake performance for toy scooter | IS 9873 (Part 1), Clause 5.28: 2017 | Qualitative |
| 893 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Closures | ISO 8124-1: 2014 | Qualitative |
| 894 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Closures | IS 9873 (Part 1), Clause 5.13.1: 2017 | Qualitative |
| 895 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Compression test | IS 9873 (Part 1), Clause 5.24.7: 2017 | Qualitative |
| 896 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Compression test | ISO 8124-1: 2014 | Qualitative |



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| 897 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of free-wheeling facility | ISO 8124-1: 2014 | Qualitative |
| 898 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of free-wheeling facility | IS 9873 (Part 1), Clause 5.16.1: 2017 | Qualitative |
| 899 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of projectile range | ISO 8124-1: 2014 | Qualitative |
| 900 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of projectile range | IS 9873 (Part 1), Clause 5.35: 2017 | Qualitative |
| 901 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of temperature increase | IS 9873 (Part 1), Clause 5.18: 2017 | Qualitative |
| 902 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Determination of temperature increase | ISO 8124-1: 2014 | Qualitative |
| 903 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Drop Test | ISO 8124-1: 2014 | Qualitative |
| 904 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Drop Test | IS 9873 (Part 1), Clause 5.24.2: 2017 | Qualitative |
| 905 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Durability of mouth actuated toy | ISO 8124-1: 2014 | Qualitative |
| 906 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Durability of mouth actuated toy | IS 9873 (Part 1), Clause 5.20: 2017 | Qualitative |



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| 907 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Durability test for toy chest lids | IS 9873 (Part 1), Clause 5.13.4: 2017 | Qualitative |
| 908 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Durability test for toy chest lids | ISO 8124-1: 2014 | Qualitative |
| 909 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Electric resistance of cords | IS 9873 (Part 1), Clause 5.11 .3: 2017 | Qualitative |
| 910 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Electric resistance of cords | ISO 8124-1: 2014 | Qualitative |
| 911 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Expanding materials | IS 9873 (Part 1), Clause 5.21: 2017 | Qualitative |
| 912 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Expanding materials | ISO 8124-1: 2014 | Qualitative |
| 913 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability test of Soft FilledtoysRate of Spread of flame | IS 9873-2 Clause 5.5: 2017 | 5.0 mm/s to 200 mm/s |
| 914 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability test of Soft FilledtoysRate of Spread of flame | ISO 8124-2: 2014 | 5.0 mm/sec to 200 mm/sec |
| 915 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability Test realiting relating tobeards, moustaches, wigs, etc. whichprotrude 50 mm or more from thesurface of the toy | ISO 8124-2: 2014 | Qualitative |



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|------|---------------------------------------|----------------------------|---|---|---------------------------------------|
| 916 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability Test relating to beards, moustaches, wigs, etc. which protrude 50 mm or more from the surface of the toy | IS 9873-2: Clause. 5.2: 2017 | Qualitative |
| 917 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability Test relating to beards, moustaches, wigs, etc. which protrude less than 50 mm from the surface of the toy, and full or partial moulded head masks | ISO 8124-2: 2014 | Qualitative |
| 918 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability Test relating to beards, moustaches, wigs, etc. which protrude less than 50 mm from the surface of the toy, and full or partial moulded head masks | IS 9873 (Part-2), Cl. 5.3: 2017 | Qualitative |
| 919 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability test relating to flowing elements of toys to be worn on the head Rate of Spread of flame | IS 9873 (Part-2), Cl. 5.4: 2017 | 5.0 mm/sec to 200 mm/sec |



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| 920 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flammability test relating to flow elements of toys to be worn on the head Rate of Spread of flame | ISO 8124-2: 2014 | 5.0 mm/sec to 200 mm/sec |
| 921 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flexure test | ISO 8124-1: 2014 | Qualitative |
| 922 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Flexure test | IS 9873 (Part 1), Clause 5.24.8: 2017 | Qualitative |
| 923 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | folding or sliding mechanisms | IS 9873 (Part 1), Clause 5.22: 2017 | Qualitative |
| 924 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | folding or sliding mechanisms | ISO 8124-1: 2014 | Qualitative |
| 925 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Fore and aft stability test | ISO 8124-1: 2014 | Qualitative |
| 926 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Fore and aft stability test | IS 9873 (Part 1), Clause 5.12.4: 2017 | Qualitative |
| 927 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Free Wheeling facility and brake performance test | IS 9873 (Part 1), Clause 5.16: 2017 | Qualitative |
| 928 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Free Wheeling facility and brake performance test | ISO 8124-1: 2014 | Qualitative |



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| 929 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | General | IS 9873 (P-1), Cl. 5.1: 2017 | Qualitative |
| 930 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | General | ISO 8124-1: 2014 | Qualitative |
| 931 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | General | IS 9873 (Part 1), Clause 5.12.1: 2017 | Qualitative |
| 932 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | General | IS 9873 (Part 1), Clause 5.24.1: 2017 | Qualitative |
| 933 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Impact test for magnets | ISO 8124-1: 2014 | Qualitative |
| 934 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Impact test for magnets | IS 9873 (Part 1), Clause 5.33: 2017 | Qualitative |
| 935 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Impact test for toy that cover the face | ISO 8124-1: 2014 | Qualitative |
| 936 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Impact test for toy that cover the face | IS 9873 (Part 1), Clause 5.14: 2017 | Qualitative |
| 937 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Kinetic Energy and wall impact test | ISO 8124-1: 2014 | Qualitative |
| 938 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Kinetic Energy and wall impact test | IS 9873 (Part 1), Clause 5.15: 2017 | Qualitative |



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|------|---------------------------------------|----------------------------|--------------------------------------|---|---------------------------------------|
| 939 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Leakage of liqued filled toy | IS 9873 (Part 1), Clause 5.19: 2017 | Qualitative |
| 940 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Leakage of liqued filled toy | ISO 8124-1: 2014 | Qualitative |
| 941 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Length of suction cup projectile | ISO 8124-1: 2014 | Qualitative |
| 942 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Length of suction cup projectile | IS 9873 (Part 1), Clause 5.37: 2017 | Qualitative |
| 943 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Lid support | ISO 8124-1: 2014 | Qualitative |
| 944 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Lid support | IS 9873 (Part 1), Clause 5.13.3: 2017 | Qualitative |
| 945 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Magnetic flux index | IS 9873 (Part 1), Clause 5.32: 2017 | Qualitative |
| 946 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Magnetic flux index | ISO 8124-1: 2014 | Qualitative |
| 947 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Overload test for ride "on toysseats | ISO 8124-1: 2014 | Qualitative |
| 948 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Overload test for ride on toysseats | IS 9873 (Part 1), Clause 5.12.5: 2017 | Qualitative |



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|------|---------------------------------------|----------------------------|--|---|---------------------------------------|
| 949 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Reasonable foreseeable abuse test | ISO 8124-1: 2014 | Qualitative |
| 950 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Reasonable foreseeable abuse test | IS 9873 (Part 1), Clause 5.24: 2017 | Qualitative |
| 951 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Resistance to separation of handlebar | ISO 8124-1: 2014 | Qualitative |
| 952 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Resistance to separation of handlebar | IS 9873 (Part 1), Clause 5.30: 2017 | Qualitative |
| 953 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Self-retracting pull cords | ISO 8124-1: 2014 | Qualitative |
| 954 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Self-retracting pull cords | IS 9873 (Part 1), Cl 5.11.2: 2017 | Qualitative |
| 955 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sharp point test | ISO 8124-1: 2014 | Qualitative |
| 956 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sharp pointtest | IS 9873 (P-1), Cl. 5.9: 2017 | Qualitative |
| 957 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sideway stability test , feed unavailablefor stabilization | ISO 8124-1: 2014 | Qualitative |
| 958 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sideway stability test , feed unavailablefor stabilization | IS 9873 (Part 1), Clause 5.12.3: 2017 | Qualitative |



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|------|---------------------------------------|----------------------------|--|---|---------------------------------------|
| 959 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sideway stability test , feet availablefor stabilization | IS 9873 (Part 1), Clause 5.12.2: 2017 | Qualitative |
| 960 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Sideway stability test , feet availablefor stabilization | ISO 8124-1: 2014 | Qualitative |
| 961 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Small ball test | IS 9873 (P-1), Cl. 5.4: 2017 | Qualitative |
| 962 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Small ball test | ISO 8124-1: 2014 | Qualitative |
| 963 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Small Parts test | ISO 8124-1: 2014 | Qualitative |
| 964 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Small Parts test | IS 9873 (P-1), Cl. 5.2: 2017 | Qualitative |
| 965 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Soaking test for magnets | ISO 8124-1: 2014 | Qualitative |
| 966 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Soaking test for magnets | IS 9873 (Part 1), Clause 5.34: 2017 | Qualitative |
| 967 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Stability and overload tests | IS 9873 (Part 1), Clause 5.12: 2017 | Qualitative |
| 968 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Stability and overload tests | ISO 8124-1: 2014 | Qualitative |



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|------|---------------------------------------|----------------------------|--|---|---------------------------------------|
| 969 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Stability test for stationary floor toys | ISO 8124-1: 2014 | Qualitative |
| 970 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Stability test for stationary floor toys | IS 9873 (Part 1), Clause 5.12.6: 2017 | Qualitative |
| 971 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Static strength for toy scooter | ISO 8124-1: 2014 | Qualitative |
| 972 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Static strength for toy scooter | IS 9873 (Part 1), Clause 5.26: 2017 | Qualitative |
| 973 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Strength of toy scooter steering tube | ISO 8124-1: 2014 | Qualitative |
| 974 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Strength of toy scooter steering tube | IS 9873 (Part 1), Clause 5.29: 2017 | Qualitative |
| 975 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tension test | IS 9873 (Part 1), Clause 5.24.6: 2017 | Qualitative |
| 976 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tension test | ISO 8124-1: 2014 | Qualitative |
| 977 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tension test for magnets | ISO 8124-1: 2014 | Qualitative |
| 978 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tension test for magnets | IS 9873 (Part 1), Clause 5.31: 2017 | Qualitative |



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|------|---------------------------------------|----------------------------|---------------------------------------|---|---------------------------------------|
| 979 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for closures and toys chest lids | ISO 8124-1: 2014 | Qualitative |
| 980 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for closures and toys chest lids | IS 9873 (Part 1), Clause 5.13: 2017 | Qualitative |
| 981 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for cords | IS 9873 (P-1), Cl. 5.11: 2017 | Qualitative |
| 982 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for cords | ISO 8124-1: 2014 | Qualitative |
| 983 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for Pompoms | IS 9873 (P-1), Cl. 5.5: 2017 | Qualitative |
| 984 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for Pompoms | ISO 8124-1: 2014 | Qualitative |
| 985 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for pre schoolplay figures | ISO 8124-1: 2014 | Qualitative |
| 986 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for pre schoolplay figures | IS 9873 (P-1), Cl. 5.6: 2017 | Qualitative |
| 987 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for Shape & size of certain toys | IS 9873 (P-1), Cl. 5.3: 2017 | Qualitative |
| 988 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Test for Shape & size of certain toys | ISO 8124-1: 2014 | Qualitative |



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| 989 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tip assesment of rigid projectile | IS 9873 (Part 1), Clause 5.36: 2017 | Qualitative |
| 990 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tip assesment of rigid projectile | ISO 8124-1: 2014 | Qualitative |
| 991 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tip-over test for large and bulky toys | IS 9873 (Part 1), Clause 5.24.3: 2017 | Qualitative |
| 992 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Tip-over test for large and bulky toys | ISO 8124-1: 2014 | Qualitative |
| 993 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Toy chest lids | IS 9873 (Part 1), Clause 5.13.2: 2017 | Qualitative |
| 994 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | Toy chest lids | ISO 8124-1: 2014 | Qualitative |
| 995 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | washable toy | IS 9873 (Part 1), Clause 5.23: 2017 | Qualitative |
| 996 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys | washable toy | ISO 8124-1: 2014 | Qualitative |
| 997 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | BarriersDynamic strength of barriersand handrails | IS 9873-4, Clause 4.2 & 6.3: 2017 | Qualitative |



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| 998 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Barriers Head and neck entrapment incompletely bound opening | IS 9873-4, Clause 6.5.1: 2017 | Qualitative |
| 999 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Barriers Rung ladder, Step ladder & stairways | IS 9873-4, Clause 4.3: 2017 | Qualitative |
| 1000 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Carousels and Rocking Toys | IS 9873-4, Clause 4.8: 2017 | Qualitative |
| 1001 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Carousels and Rocking Toys Stability of activity toys with a free height of fall of 600 mm or less | IS 9873-4: Clause 4.8, 4.9 & 6.1.1: 2017 | Qualitative |
| 1002 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Carousels and Rocking Toys Static strength of toys other than swings | IS 9873-4 Clause 6.2.1: 2017 | Qualitative |
| 1003 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Carousels and Rocking Toys Static strength of toys other than swings | IS 9873-4 Clause 6.1.1: 2017 | Qualitative |
| 1004 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Carousels and Rocking Toys Static strength of toys other than swings | IS 9873-4, Clause 6.2.1: 2017 | Qualitative |
| 1005 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Entrapment of clothing & hair | IS 9873-4, Clause 6.5.2: 2017 | Qualitative |
| 1006 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Entrapment of clothing & hair | IS 9873-4 Clause 6.5.2: 2017 | Qualitative |



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|------|---------------------------------------|---|---|---|---------------------------------------|
| 1007 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Head and neck entrapment in completely bound opening | IS 9873-4: Clause 4.4 & 6.5.1: 2017 | Qualitative |
| 1008 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Head and neck entrapment in completely bound opening | IS 9873-4, Clause 4.4 & 6.5.1: 2017 | Qualitative |
| 1009 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Toggle Test | IS 9873-4 Clause 6.6: 2017 | Qualitative |
| 1010 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Entrapment Toggle Test | IS 9873-4, Clause 6.6: 2017 | Qualitative |
| 1011 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Inflatable activity Toys Deflation of Inflatable activity toys | IS 9873-4: Clause 4.10 & 6.9: 2017 | Qualitative |
| 1012 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Inflatable activity Toys Deflation of Inflatable activity toys | IS 9873-4, Clause 4.10 & 6.9: 2017 | Qualitative |
| 1013 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Open Tubing | IS 9873-1, Clause 5.24.5 & 5.24.6: 2017 | Qualitative |
| 1014 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Open Tubing | IS 9873-4, Clause 4.1.6: 2017 | Qualitative |
| 1015 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Open Tubing | IS 9873- (P-4 & 1) : Clause 4.1.6, 5.24.5 & 5.24: 2017 | Qualitative |



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| 1016 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Padding pools Static load test for paddling pools with non-inflatable walls | IS 9873-4: Clause 4.11 & 6.10: 2017 | Qualitative |
| 1017 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Protruding Parts All Protrusions Protrusions in motion ride | IS 9873-4, Clause 4.1.4, 6.7.1 & 6.7.2: 2017 | Qualitative |
| 1018 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Protruding Parts Climbing and swinging ropes, Chains and Cables | IS 9873-4: Clause 4.1.5: 2017 | Qualitative |
| 1019 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Rung ladder, Step ladder & stairways | IS 9873-4: Clause 4.3: 2017 | Qualitative |
| 1020 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Seesaws | IS 9873-4 Clause 6.8: 2017 | Qualitative |
| 1021 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Slides Stability of slides | IS 9873-4, Clause 4.6 & 6.1.3: 2017 | Qualitative |
| 1022 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Stability of activity toys other than slides, swings and toys with crossbeams Stability of activity toys with a free height of fall of more than 600mm | IS 9873-4, Clause 6.1.2: 2017 | Qualitative |



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| S.No | Discipline / Group | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing/ Limits of Detection |
|------|---------------------------------------|---|---|---|---------------------------------------|
| 1023 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Stability of activity toys other than slides, swings and toys with crossbeams Stability of activity toys with free height of fall of 600 mm or less | IS 9873-4, Clause 4.5 & 6.1.1: 2017 | Qualitative |
| 1024 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Stability of activity toys with a free height of fall of 600 mm or less | IS 9873-4, Clause 4.9 & 6.1.1: 2017 | Qualitative |
| 1025 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Swings Stability of swings and other activity toys with crossbeams more than 1200 mm above the ground | IS 9873-4: Clause 4.7 & 6.1.4.1: 2017 | Qualitative |
| 1026 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Swings Stability of toddler swings | IS 9873-4 Clause 6.1.5: 2017 | Qualitative |
| 1027 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Swings Strength of swings and similar toys Durability test for suspension connectors and means of suspension | IS 9873-4, Clause 6.2.2: 2017 | Qualitative |
| 1028 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Swings Stability of swings and other activity toys with crossbeams 1200mm or less above the ground | IS 9873-4 Clause 6.1.4.2: 2017 | Qualitative |



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SCOPE OF ACCREDITATION

Laboratory Name SIGMA TEST & RESEARCH CENTRE, 99, BADLI INDUSTRIAL AREA PHASE-2, NEW DELHI, DELHI, INDIA

Accreditation Standard ISO/IEC 17025:2017

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|------|---------------------------------------|---|--|---|---|
| 1029 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Toys other than swings Corners and Edges | IS 9873-4, Clause 4.1.3: 2017 | Qualitative |
| 1030 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Toys other than swings Maximum height | IS 9873-4 Clause 4.1.2: 2017 | Qualitative |
| 1031 | MECHANICAL- TOYS AND SIMILAR PRODUCTS | Toys- Swing, Slide, Activity for Indoor & Outdoor | Toys other than Swings Static Strength | IS 9873-4: Clause 4.1.1 & 6.2.1: 2017 | Qualitative |
| 1032 | MECHANICAL- WOOD AND WOOD PRODUCTS | Plywood Wood | Knife test / Adhesion of ply | IS: 1734 (P-5): 1983 | Qualitative |
| 1033 | MECHANICAL- WOOD AND WOOD PRODUCTS | Plywood Wood | Knife test / Adhesion of ply | IS: 1659: 2004 | Qualitative |
| 1034 | MECHANICAL- WOOD AND WOOD PRODUCTS | Plywood Wood | Moisture Content and Density | IS 1734 (P-1): 1983 | 0.5 % to 25 % |
| 1035 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Density | IS: 1708 (P-2): 1986 | 100 100 kg/m ³ to 1600 100 kg/m ³ |
| 1036 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Moisture Content | IS: 1708 (P-1): 1983 | 0.1 % to 20 % |
| 1037 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Resistance to Cigarette burns | IS: 12823: 1990 | Qualitative |
| 1038 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Resistance to Crack | IS: 12823: 1990 | Qualitative |



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|------|--|----------------------------|--------------------------------|---|---------------------------------------|
| 1039 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Resistance to Steam | IS: 12823: 1990 | Qualitative |
| 1040 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Resistance to Water | IS 1659: 2004 | Qualitative |
| 1041 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Resistance to Water | IS 1734 (P-6): 1983 | Qualitative |
| 1042 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Screw holding test | IS: 1708 (P-15): 1986 | 1 kg to 10000 kg |
| 1043 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Specific Gravity | IS: 1708 (P-2): 1986 | 0.2 % to 4.5 % |
| 1044 | MECHANICAL- WOOD AND WOOD PRODUCTS | Wood | Water adsorption | IS: 2380 (P-16): 1977 | 1 % to 100 % |
| 1045 | NON-DESTRUCTIVE- BUILDING MATERIALS - REINFORCED CONCRETE STRUCTURES | Concrete | Rebound Number | IS 13311 (Part-2) : 1992 | 10 to 100 |
| 1046 | NON-DESTRUCTIVE- BUILDING MATERIALS - REINFORCED CONCRETE STRUCTURES | Concrete | Ultrasonic Pulse Velocity Test | S 13311 (Part-1) : 1992 | 0.1 km/s to 6 km/s |



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|---------------|---|----------------------------|--------------------------------|---|---------------------------------------|
| Site Facility | | | | | |
| 1 | NON-DESTRUCTIVE-BUILDING MATERIALS - REINFORCED CONCRETE STRUCTURES | Concrete | Rebound Number | IS 13311 (Part-2) : 1992 | 10 to 100 |
| 2 | NON-DESTRUCTIVE-BUILDING MATERIALS - REINFORCED CONCRETE STRUCTURES | Concrete | Ultrasonic Pulse Velocity Test | S 13311 (Part-1) : 1992 | 0.1 km/s to 6 km/s |

'NOTE- The Laboratory has demonstrated competence for the stated scope for WATER. This however does not fully cover the specification requirements of BIS for the Packaged Drinking Water as per IS 14543 and the Packaged Natural Mineral Water IS 13428.'