

WRD

कार्य योजना

(1 नवम्बर 2011 तक)

PROGRAMME OF WORK

(AS ON 1st November 2011)

जल संसाधन विभाग

(डब्ल्यूआरडी)

WATER RESOURCES DEPARTMENT

(WRD)



भारतीय मानक ब्यूरो

मानक भवन, 9 बहादुरशाह जफर मार्ग

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BUREAU OF INDIAN STANDARDS

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PREFACE

A programme of work is prepared every year for each Division of the Bureau of Indian Standards, to indicate the latest position of published Indian Standards and draft standards at different stages of processing. This programme of work for Water Resources Division Council (WRDC) has been prepared Sectional Committee-wise, as on **1st November 2011**, and arranged in sequential order of the Committees.

The scope of WRDC is as under:

'Standardization in the field of water resources development and management; to include activities covering utilization of water resources for all uses. In regard to drinking and industrial water supply, the work shall be confined to making the raw water available for treatment and distribution. However, Handbook for water resources management shall include all facets of technology and engineering covering entire hydrologic cycle. In regard to water for hydroelectric uses, the work shall include planning and design of hydroelectric development and powerhouse structures but may not include generation, transmission and distribution equipment.'

In the programme of work an asterisk mark (*) given before a printed standard indicates that the standard is under revision and the document is available at different stages of processing; whereas, a double asterisk mark (**) indicates a standard identified for revision the document being yet to be prepared. Below the designation of a published standard, wherever "/ISO....." standard number is given, it implies that the Indian Standard is the total adoption of ISO standards under dual numbering scheme. (*The designations such as IS/ISO 9001:2008 also indicate dual number standards.*) . Below the designation of a published standard, wherever "| ISO...." Standard number is given, it implies that the Indian Standard is technically equivalent to the ISO standard.

It is hoped that this publication will provide the community of standard users a convenient tool for obtaining the latest information about new and upcoming standards in the field of Water Resources Development and Management. For further information, please write to :

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STATISTICS AT A GLANCE

ASPECT WISE POSITION OF STANDARDS

ASPECT OF STANDARD	NUMBER OF STANDARDS
PRODUCT	11
METHODS OF TEST	-NIL-
CODES OF PRACTICE	364
TERMINOLOGY	37
DIMENSIONS	-NIL-
SYMBOLS	5
OTHERS	18
TOTAL	435

HARMONIZATION POSITION

TYPE OF HARMONIZATION	NUMBER OF STANDARDS
INDIAN STANDARDS UNDER DUAL NUMBER (IDENTICAL WITH ISO OR IEC STANDARDS)	23
INDIAN STANDARDS TECHNICALLY EQUIVALENT WITH ISO OR IEC STANDARDS	30
INDIAN STANDARDS HARMONIZED WITH EN STANDARDS/REGULATIONS/DIRECTIVES	-NIL-
INDIAN STANDARDS HARMONIZED WITH STANDARDS OF OTHER BODIES	-NIL-
TOTAL	53

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COMMITTEE WISE POSITION OF WORK OF WATER RESOURCES DIVISION COUNCIL (WRDC)

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WRD 1 HYDROMETRY

SCOPE - a) STANDARDIZATION OF METHODS, PROCEDURES, INSTRUMENTS AND EQUIPMENT RELATING TO TECHNIQUES FOR HYDROMETRIC DETERMINATION OF WATER LEVEL, VELOCITY, DISCHARGE AND SEDIMENT TRANSPORT IN OPEN CHANNELS AND FLUID FLOW IN CLOSED CONDUITS, HYDROLOGICAL AND METEOROLOGICAL INVESTIGATIONS

b) CO-ORDINATION OF WORK WITH

i) ISO/TC 113 HYDROMETRY AND ITS SUBCOMMITTEES SC 1 AND SC6 - SECRETARIAT

ii) ISO/TC 113 SC1, SC2, SC5, & SC 6 - P MEMBER

iii) ISO/TC 30 MEASUREMENT OF FLUID FLOW IN CLOSED CONDUITS AND ITS SUBCOMMITTEES SC2, SC5 AND SC7 - O MEMBER

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 1191:2003 ISO 772:1996	Hydrometric determination - Vocabulary and Symbols (Second Revision)	Mar 2009	
2	IS 1192:1981 ISO 748:1979	Velocity area Methods for measurement of flow of water in open channels (first revision)	Mar 2011	
3	IS 1194:1960	Forms for recording measurement of flow of water in open channels	Mar 2011	
4	IS 2912:1999 / ISO 1070:1992	Liquid flow measurement in open channels - Slope-area method (first revision)	Mar 2010	1
5	IS 2951(Part 1):1965	Recommendation for estimation of flow of liquids in closed conduits Part 1 Headloss in straight pipes due to friction resistance	Dec 2007	
6	IS 2951(Part 2):1965	Recommendation for estimation of flow of liquids in closed conduits Part 2 Headloss in valves and fittings	Dec 2007	1
7	IS 3910:1992 ISO 2537:1988	Requirements for rotating element current meters (cup type) for water flow measurement (first revision)	Dec 2007	
8	IS 3911:1994	Surface floats - Functional requirements (first revision)	Mar 2010	
9	IS 3912:1993 ISO 3454:1983	Sounding rods - Functional requirements (first revision)	Mar 2010	
10	IS 3913:2005 ISO 3716	Suspended sediment load samplers - Specification (first revision)		
11	IS 3917:2003 ISO 4364:1997	Specification for scoop type bed material samplers (first revision)	Mar 2009	
12	IS 3918:1966	Code of practice for use of current meter (cup type) for water flow measurement	Mar 2011	1
13	IS 4073:1967	Specification for fish weights	Mar 2011	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

14	IS 4080:1994	Vertical staff gauges – Functional requirements (First Revision)	Mar 2010	
15	IS 4477(Part 2):1975	Methods of measurement of fluid flow by means of venturi meters: Part 2 Compressible fluids	Mar 2011	
16	IS 4858:1968	Specification for velocity rods	Mar 2011	
17	IS 4890:1968 ISO 4363	Methods for measurement of suspended sediment in open channels	Mar 2011	1
18	IS 4986:2002	Code of practice for installation of rain-gauge (non- recording type) and measurement of rain (second revision)	Dec 2007	
19	IS 4987:1994	Recommendations for establishing net work of raingauge stations (first revision)	Mar 2010	
20	IS 5542:2003	Guide for storm analysis (first revision)	Mar 2010	
21	IS 6062:1971	Method of measurement of flow of water in open channels using standing wave flume-fall	Mar 2010	
22	IS 6063:1971	Method of measurement of flow of water in open channels using standing wave flume	Mar 2010	
23	* IS 6064:1971	Specification for sounding and suspension equipment	Mar 2011	
24	IS 6330:1971 ISO 3847	Recommendation for liquid flow measurement in open channels by weirs and flumes- end depth method for estimation of flow in rectangular channels with a free overfall (approximate method)	Dec 2007	
25	IS 6339:1971 ISO 4365	Methods of analysis of concentration, particle size distribution and specific gravity of sediment in streams and canals	Mar 2011	
26	IS 8389:2003	Code of practice for installation and use of raingauges, recording (second revision)	Mar 2009	
27	IS 9108:1979 ISO1438-1	Liquid flow measurement in open channels using thin plate weirs	Dec 2007	
28	IS 9115:2002	Method for estimation of incompressible fluid flow in closed conduits by bend meters (first revision)	Dec 2007	
29	IS 9116:2002	Specification for water stage recorder (float type) (first revision)	Dec 2007	
30	IS 9118:1979	Method for measurement of pressure by means of manometer	Mar 2011	
31	IS 9119:1979	Method for flow estimation by jet characteristics (approximate method)	Mar 2011	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

32	* IS 9163(Part 1):1979 ISO9555-1:1973	Dilution methods of measurement of steady flow Part 1 constant rate injection method	Mar 2011
33	IS 9922:2010 ISO/TR 8363:1997	Measurement of liquid flow in open channel - General guidelines for selection of method (first revision)	
34	IS 12752:1989 ISO 8368:1985	Guidelines for the selection of flow gauging structures	Mar 2011
35	IS 13083:1991 / ISO 4377:1990	Liquid flow measurement in open channels- flat-V weirs	Dec 2007
36	IS 13084:1991 / ISO 4374:1990	Liquid flow measurement in open channels - round nose horizontal crest weirs	Dec 2007
37	IS 13371:1992 ISO 3455:1976	Code of Practice for calibration (rating) of rotating element current meters in straight open tank	Mar 2010
38	IS 14359:1996 ISO 4366:1979	Echo sounders for water depth measurements	Dec 2007
39	IS 14371:1996 ISO 9826:1982	Measurement of liquid flow in open channels - Parshall and SANIIRI flumes	Dec 2007
40	IS 14573:1998 / ISO 1088:1985	Liquid flow measurement in open channels - Velocity area methods - collection and processing of data for determination of errors in measurement	Mar 2010
41	IS 14574:1998 / ISO 4371:1984	Measurement of liquid flow in open channels by weirs and flumes- end depth method for estimation of flow in non rectangular channels with a free overfall (approximate method))	Mar 2010
42	IS 14615(Part 1):1999 / ISO 5167-1:1991	Measurement of fluid flow by means of pressure differential devices Part 1: Orifice plates, nozzles and venturi tubes inserted in circular cross-section conduits running full.	Mar 2010
43	IS 14673:1999 ISO 4360:1984	Liquid flow measurement in open channels by weirs and flumes - Triangular profile weirs	Mar 2010
44	IS 14869:2000 / ISO 4359:1983	Liquid flow measurement in open channels - Rectangular, trapezoidal and U-shape flumes	Mar 2010
45	IS 14973:2001 / ISO 3966:1997	Measurement of fluid flow in closed conduits - Velocity area method using Pilot Static Tubes	Jan 2007
46	* IS 14974:2001 / ISO 3846:1989	Liquid flow measurement in open channels by weirs and flumes - Rectangular broad-crested weirs	Jan 2007
47	IS 14975:2001 / ISO 9827:1994	Measurement of fluid flow in open channels - Stream and triangular profile weirs	Jan 2007
48	IS 15117:2002 / ISO 4375:2000	Hydrometric determination- Cable way system for stream gauging	Dec 2007
49	IS 15118:2002 / ISO 4373:1995	Measurement of liquid flow in open channel - Water level measuring devices	Dec 2007

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

50	IS 15119(Part 1):2002 / ISO 1100-1:1996	Measurement of liquid flow in open channels - Part 1 Establishment and operatin of a gauging station	Dec 2007
51	IS 15119(Part 2):2002 / ISO 1100-2:1998	Measurement of liquid flow in open channels - Part 2 Determinatnof the stage-discharge relation	Dec 2007
52	IS 15122:2002 / ISO 2425:1999	Measurement of liquid flow in open channels under tidal condition	Dec 2007
53	IS 15123:2002 / ISO 4362:1999	Hydrometric determination - Flow measurement in open chaqnnels using structures-Trapezoidal broad-crested weirs	Dec 2007
54	IS 15124:2002 / ISO 9195:1992	Liquid flow measurement in open channels - Sampling and analysis of gravel-bed-material	Dec 2007
55	IS 15352:2003 / ISO 6420:1984	Liquid flow measurement in open channels - Position fixing equipment for hydrometric boats	Mar 2009
56	IS 15353:2003 / ISO 8333:1985	Liquid flow measurement in open channels by weirs and flumes - V- shaped broad-crested weirs	Mar 2009
57	IS 15358:2003 / ISO 9196:1992	Liquid flow measurement in open channels - Flow measurement under ice conditions	Mar 2009
58	IS 15359:2003 / ISO 11329:2001	Liquid flow measurement in open channels -Measurement of suspended sediment transport in tidal channels	Mar 2009
59	IS 15360:2003 ISO 4364:1997	Measurement of liquid flow in open channels -Bed material sampling	Mar 2009
60	IS 15362:2003 / 14139:2000	Liquid flow measurement in open channels - Flow measurements in open channels using structures- compound gauging structure	Mar 2009
61	IS 15454:2004 ISO/TR 9823:1990	Liquid flow measurement in open channels- Velocity-area method using a restricted number of verticals	Mar 2010
62	IS 15527:2004 ISO/TR 9210:1992	Measurement ofliquid flow in open channels - Measurement in meandering rivers and in streams with unstable boundaries	Mar 2010
63	IS 15646(Part 1):2006 ISO /TR 9824-1:1990	Measurement of free surface flow in closed conduits Part 1 : Methods	Mar 2011
64	IS 15646(Part 2):2006 ISO/TR 9824-2:1990	Measurement of free surface flow in closed conduits Part 2: Equipment	Mar 2011
65	* IS 15772:2008 ISO/TR 9825:1994	Measurement of liquid flow in open channels - Field measurement of discharge in large rivers and floods	
66	IS 15822:2008 ISO/TR 11328:1994	Measurement of liquid flow in open channels - Equipment for the measurement of discharge under ice conditions	
67	IS 15823:2009 ISO/TR 11627:1998	Hydrometry - Computing stream flow using an unsteady flow model(based on ISO/TR 11627:1998)	

* INDICATES STANDARDS UNDER REVISION
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** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

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| 68 | IS 15847:2009
 ISO 9123:2001 | Measurement of total discharge in open channels - Stage-fall-discharge relationship
(adoption of ISO 9123:2001) |
| 69 | IS 15873:2010
 ISO/TR 11332:1998 | Hydrometric determination - Unstable channels and ephemeral streams |
| 70 | IS 15898(Part 3):2011
/ ISO 9555-3:1992 | Measurement Of Liquid Flow In Open Channels - Tracer Dilution Methods For The Measurement Of Steady Flow Part 3 Chemical Tracers |

FINALISED DRAFTS UNDER PRINT

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|----|----------------|--|
| 1 | DOC.WRD 1(381) | Revision of IS 6330:1971 [adoption of ISO 3847:1977] |
| 2 | DOC.WRD 1(382) | Revision of IS 6339:1971 (adoption of ISO 4365:2005) |
| 3 | DOC.WRD 1(384) | Revision of IS 9163:1979 [adoption of ISO 9555(Pt1):1994] |
| 4 | DOC.WRD 1(385) | Revision of IS 9163:1979 [adoption of ISO 9555(Pt2):1992] |
| 5 | DOC.WRD 1(387) | Revision of IS 9163:1979 [adoption of ISO 9555(Pt 4):1994] |
| 6 | DOC.WRD 1(499) | Hydrometry – Measurement of Liquid Flow in Open Channels using Current Meters or Floats
(Revision of IS 1192 and Adoption of ISO 748:2007) |
| 7 | DOC.WRD 1(528) | Hydrometric determinations-Flow measurement in open channels using structures-Guidelines for selection of structure (Revision of IS 12752 and based on ISO 8368) |
| 8 | DOC.WRD 1(529) | Hydrometry- Rotating element current meters
(Revision of IS 3910 and based on ISO 2537) |
| 9 | DOC.WRD 1(532) | Liquid flow measurement in open channels using thin plate weirs (revision of IS 9108 and based on ISO 1438:2008) |
| 10 | DOC.WRD 1(533) | Hydrometry- Direct depth sounding and suspension equipment (Revision of IS 3912 and based on ISO 3454) |

DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

- | | | |
|---|----------------|--|
| 1 | DOC.WRD 1(500) | Measurement of liquid flow in open channels - Method of measurement of bed load discharge
(Based on ISO/TR 9212:1992) |
| 2 | DOC.WRD 1(531) | Measurement Of Liquid Flow In Open Channels-Methods For Measurement Of Characteristics Of Suspended Sediment (Revision of IS 4890 and based on ISO 4363) |

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

DRAFTS COMPLETED WIDE CIRCULATION

- | | | |
|---|----------------|--|
| 1 | DOC.WRD 1(389) | Measurement of liquid flow in open channels -- Method of specifying performance of hydrometric equipment (Adoption of ISO 11655:1995) |
| 2 | DOC.WRD 1(530) | Revision of IS 3913 (adoption of ISO/TS 3716 2006) |
| 3 | DOC.WRD 1(572) | Measurement of liquid velocity in open channels -- Design, selection and use of electromagnetic current meters (Adoption of ISO/TS 15768:2000) |

DRAFT STANDARDS ISSUED IN WIDE CIRCULATION

- | | | |
|---|----------------|--|
| 1 | DOC.WRD 1(597) | Hydrometry - Calibration of current - Meters in straight open tanks (Based on ISO 3455:2007 & first revision of IS 13371) |
| 2 | DOC.WRD 1(598) | Hydrometry - Open channel flow measurement using rectangular broad - Crested weirs (Based on ISO 3846:2008 & first revision of IS 14974) |
| 3 | DOC.WRD 1(599) | Hydrometry - Echo sounders for water depth measurements (Based on ISO 4366:2007& first revision of IS 14359) |
| 4 | DOC.WRD 1(600) | Hydrometry - Field measurement of discharge in large rivers and rivers in flood (Based on ISO 9825:2005 & first revision of IS 15772) |
| 5 | DOC.WRD 1(601) | Hydrometry Uncertainty Guidance (HUG) (Based on ISO/TS 25377:2007) |

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS*

WRD 3 GROUND WATER AND RELATED INVESTIGATIONS

SCOPE - STANDARDIZATION OF ALL ASPECTS OF GROUND WATER RESOURCES, RELATED INVESTIGATIONS, WATER HARVESTING AND RECHARGE FOR GROUND WATER

COORDINATION WITH THE WORK OF ISO/TC 113/SC 8

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 11/Sec 1):1972	Glossary of terms relating to river valley projects Part 11 Hydrology Section 1 General terms	Mar 2011	
2	IS 4410(Part 11/Sec 2):1972	Glossary of terms relating to river valley projects: Part 11 Hydrology section 2 Precipitation and run-off	Mar 2011	
3	IS 4410(Part 11/Sec 3):1973	Glossary of terms relating to river valley projects: Part 11 Hydrology: Section 3: Infiltration and water losses	Mar 2011	
4	IS 4410(Part 11/Sec 4):1973	Glossary of terms relating to river valley projects: Part 11 Hydrology Section 4 Hydrographs	Mar 2011	
5	* IS 4410(Part 11/Sec 6):1994	Glossary of terms relating to river valley projects: Part 11 Hydrology Section 6 Ground water	Aug 2009	
6	IS 4410(Part 11/Sec 7):1984	Glossary of terms relating to river valley projects: Part 11 Hydrology Section 7 Quality of water	Mar 2011	
7	IS 13969:1994 ISO 5667-11:1993	Guidelines for sampling of groundwater	Aug 2009	
8	IS 14476(Part 1):1998	Test pumping of water wells - Code of practice Part 1 General	Jul 2008	
9	IS 14476(Part 2):1998	Test pumping of water wells - Code of practice Part 2 Hydrogeological considerations	Jul 2008	
10	IS 14476(Part 3/Sec 1):1998	Test pumping of water wells - Code of practice Part 3 Pre-test planning Sec 1 General aspects	Jul 2008	
11	IS 14476(Part 3/Sec 2):1998	Test pumping of water wells - Code of practice Part 3 Test planning Sec 2 Test design	Jul 2008	
12	IS 14476(Part 3/Sec 3):1998	Test pumping of water wells - Code of practice Part 3 Pre test planning Sec 3 Observation wells	Jul 2008	
13	IS 14476(Part 3/Sec 4):1998	Test pumping of water wells - Code of practice Part 3 Pre test planning Sec 4 Test wells	Jul 2008	
14	IS 14476(Part 4):1998	Test pumping of water wells - Code of practice Part 4 Pre-test observations	Jul 2008	
15	IS 14476(Part 5):1998	Test pumping of water wells - Code of practice Part 5 Pumping test	Jul 2008	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

16	IS 14476(Part 6):1998	Test pumping of water wells - Code of practice Part 6 Special tests	Jul 2008
17	IS 14476(Part 7):1998	Test pumping of water wells - Code of practice Part 7 Post test observations and presentation of data.	Jul 2008
18	IS 14476(Part 8):1998	Test pumping of water wells - Code of practice Part 8 Water level and discharge measuring devices	Jul 2008
19	IS 14476(Part 9):1998	Test pumping of water wells - Code of practice Part 9 Well development	Jul 2008
20	IS 15755:2007 ISO/TR 14685(E):2001	Hydrometry - Geophysical logging of boreholes for hydrogeological purposes-considerations and guidelines for making measurement	
21	IS 15792:2008	Guidelines for artificial recharge to ground water	
22	IS 15797:2008	Guidelines for roof top rain water harvesting	
23	IS 15896:2011 ISO 21413:2005	Manual method for measurement of a ground water level in a well	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 3(457)	Surface geophysical surveys for hydrogeological studies	
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DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

1	DOC.WRD 3(505)	Hydrometry - Measuring the water level in a well using automated pressure transducer methods - Guidelines (based on ISO/TR 23211:2009)	
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DRAFT STANDARDS FORMULATED

1	DOC.WRD 3(602)	Glossary of terms relating to river valley projects: Part 11 Hydrology Section 6 Ground water [(Second Revision of IS 4410 (Part 11/Sec 6)]	
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* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 5 GEOLOGICAL INVESTIGATION AND SUB-SURFACE EXPLORATION

SCOPE - STANDARDIZATION OF CRITERIA FOR CHOICE OF METHODS, INVESTIGATIONS AND TESTING OF SUB-SURFACE STRATA AND RECOMMENDATIONS FOR COLLECTION AND PRESENTATION OF DATA

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4078:1980	Code of practice for indexing and storage of drill cores (first revision)	Sep 2009	
2	IS 4410(Part 7):1982	Glossary of terms relating to river valley projects: Part 7 Engineering geology(first revision)	Oct 2010	
3	IS 4453:2009	Code of practice for exploration by pits, trenches, drifts and shafts (second revision)	Feb 2008	
4	IS 4464:1985	Code of practice for presentation of drilling information and core description in foundation investigation (first revision)	Sep 2009	
5	IS 5313:1980	Guide for core drilling observations (first revision)	Sep 2009	1
6	IS 5497:2008	Guide for topographical surveys for river valley projects (second revision)		
7	* IS 5529(Part 1):1985	Code of practice for in-situ permeability test: Part 1 Test in overburden (first revision)	Sep 2009	
8	IS 5529(Part 2):2006	Code of practice for in-situ permeability test: Part 2 Test in bedrock (second revision)	Jul 2011	
9	IS 6926:1996	Diamond core drilling for site investigation for river valley projects - Code of practice (first revision)	Jul 2011	
10	IS 6935:1973	Method for determination of water level in a bore hole	Feb 2008	
11	IS 6955:2008	Code of practice for subsurface exploration for earth and rockfill dams (first revision)		
12	IS 7422(Part 1):1974	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs: Part 1 Abbreviations	Sep 2009	
13	IS 7422(Part 2):1974	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs: Part 2 Igneous rocks	Sep 2009	
14	IS 7422(Part 3):1974	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs: Part 3 Sedimentary rocks	Sep 2009	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

15	IS 7422(Part 4):1985	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs: Part 4 Metamorphic rocks	Sep 2009	
16	IS 7422(Part 5):1992	Symbols and abbreviations for use in geological maps, sections and subsurface exploratory logs: Part 5 Line symbols for formation contacts and structural features	Feb 2008	
17	* IS 10060:1981	Code of practice for subsurface investigation for power house sites	Sep 2009	1
18	IS 10290:1982	Code of practice for photogeological interpretation and mapping of river valley project site	Sep 2009	
19	IS 11385:2008	Code of practice for subsurface exploration for canals and cross drainage works (first revision)		
20	IS 13216:1991	Code of practice for geological exploration for reservoir sites	Sep 2009	2
21	IS 13578:2008	Subsurface exploration for barrages and weirs - Code of practice (first revision)		
22	IS 14330:1996	Groundwater investigations for hydraulic structures - Guidelines	Jul 2011	
23	IS 15662:2006	Code of practice for geological exploration for gravity dams and overflow structures	Jul 2011	1
24	IS 15681:2006	Geological exploration by geophysical method (seismic refraction) - Code of practice	Jul 2011	
25	IS 15686:2006	Recommendations for preparation of geological and geotechnical maps for river valley projects	Jul 2011	1
26	IS 15736:2007	Geological exploration by geophysical method (electrical resistivity)- Code of practice	2001	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 5(450)	In-situ permeability test: Part 1 Test in overburden [(second revision of IS 5529(Part 1))]		
2	DOC.WRD 5(452)	Subsurface investigation for power house sites- Code of practice (First revision of IS 10060)		

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 6 WATER RESOURCES PLANNING, MANAGEMENT AND EVALUATION

SCOPE - STANDARDIZATION FOR WATER RESOURCES PLANNING, DEVELOPMENT AND MANAGEMENT

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4008:1985	Guide for presentation of project report for river valley projects (first revision)	Jan 2011	
2	IS 4186:1985	Guide for preparation of project report for river valley projects (first revision)	Jan 2011	
3	IS 4410(Part 1):1991	Glossary of terms relating to river valley projects:Part 1 Irrigation practice (first revision)	Aug 2007	
4	IS 4410(Part 2):1967	Glossary of terms relating to river valley projects: Part 2 Project planning	Jan 2011	
5	IS 4410(Part 4):1982	Glossary of terms relating to river valley projects: Part 4 Drawings (first revision)	Jan 2011	
6	IS 4410(Part 11/Sec 5):1977	Glossary of terms relating to river valley projects: Part 11 Hydrology Section 5 Floods	Jan 2011	
7	IS 4410(Part 14/Sec 1):1977	Glossary of terms relating to river valley projects: Part 14 Soil conservation and reclamation Section 1 Soil conservation	Nov 2007	
8	IS 4410(Part 14/Sec 2):1977	Glossary of terms relating to river valley projects: Part 14 Soil conservation and reclamation Section 2 Reclamation	Aug 2007	
9	IS 4410(Part 17):1977	Glossary of terms relating to river valley projects: Part 17 Water requirements of crops	Sep 2008	
10	IS 4410(Part 21):1987	Glossary of terms relating to river valley projects: Part 21 Flood control	Feb 2010	
11	IS 5510:1969	Guide for soil surveys for river valley projects	Jan 2011	
12	IS 6748(Part 1):1973	Recommendations for watershed management relating to soil conservation Part 1 Agronomic aspects	Jan 2011	
13	IS 7560:1974	Guidelines for allocation of cost among different purposes of river valley projects	Dec 2006	
14	IS 10336:1982	Guidelines for preparation of completion reports of multi-purpose river valley projects	Jan 2011	
15	* IS 13028:1991	Guidelines for overall planning of river basin	Dec 2006	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

16	* IS 13142:1991	Proforma for reporting progress of benefits created by river valley projects	Dec 2006	1
17	IS 13218(Part 1):1992	Proforma for reporting progress during construction for river valley projects: Part I Irrigation works	Jan 2008	
18	IS 13218(Part 2):1991	Proforma for reporting progress during construction for river valley projects:Part 2 Hydel works	Jan 2008	
19	IS 13218(Part 3):1992	Proforma for reporting progress during construction for river valley projects: Part 3 Flood control	Jan 2008	
20	IS 13668:1993	Guidelines for fixing intensity of irrigation	Dec 2006	
21	IS 13739:1993	Guidelines for estimation of flood damages	Dec 2006	
22	IS 14519:1998	Guidelines for fixing rates for irrigation water	Jan 2008	
23	IS 15087:2001	Guidelines for planning and design of drainage in irrigation projects	Mar 2008	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 6(497)	Proformae for reporting progress of benefits due to irrigation created by river valley projects (Draft amendment No. 2 to IS 13142)
2	DOC.WRD 6(584)	Draft Amendment 1. to IS 4410(Pt 21):1987

DRAFTS COMPLETED WIDE CIRCULATION

1	DOC.WRD 6(494)	Guidelines for integrated planning, development & management of river basins Part 1: Overall planning (Revision of IS 13028:1991)
2	DOC.WRD 6(476)	Guidelines for performance evaluation of completed irrigation projects (Major or Medium)

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 8 FOUNDATIONS AND FOUNDATION TREATMENT

SCOPE - STANDARDIZATION OF CRITERIA FOR DESIGN AND CONSTRUCTION OF FOUNDATIONS ON ROCKS, IMPERMEABLE AND PERMEABLE STRATA FOR WATER RESOURCE PROJECTS, INCLUDING METHODS OF FOUNDATION TREATMENT

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 19):1996	Glossary of terms relating to river valley projects: Part 19 Grouting	Jun 2011	
2	IS 4999:1991	Recommendations for grouting of pervious soils (first revision)	Jun 2009	1
3	IS 5050:1992	Code of practice for design, construction and maintenance of relief wells (first revision)	Jun 2011	1
4	IS 6066:1994	Pressure grouting of rock foundations in river valley projects - Recommendations(second revision)	Jun 2009	1
5	* IS 8414:1977	Guidelines for design of under-seepage control measures for earth and rockfill dams	Jun 2009	1
6	IS 11293(Part 1):1985	Guidelines for the design of grout curtains: Part 1 Earth and rockfill dams	Jun 2009	2
7	IS 11293(Part 2):1993	Guidelines for the design of grout curtains: Part 2 Masonry and Concrete dams	Jun 2011	1
8	IS 11973:1986	Code of practice for treatment of rock foundations, core and abutment contacts with rock, for embankment dams	Jun 2011	1
9	IS 12584:1989	Bentonite for grouting in civil engineering works - Specification	Jun 2009	1
10	IS 14343:1996	Choice of grouting materials for alluvial grouting - Guidelines	Jun 2011	1
11	IS 14344:1996	Design and construction of diaphragms for under seepage control - Code of practice	Jun 2011	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 8(540)	Draft Amendment No.2 to IS 4999:1991
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DRAFT STANDARDS ISSUED IN WIDE CIRCULATION

1	DOC.WRD 8(551)	Draft Indian Standard on Guidelines for design of under-seepage control measures for earth and rockfill dams (first revision of IS 8414)
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DRAFT STANDARDS APPROVED FOR WIDE CIRCULATION

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

1 DOC.WRD 8(549)

Draft Indian Standard on Guidelines for investigations for foundation of existing earth and rock fill dams

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS*

WRD 9 DAMS AND SPILLWAYS

SCOPE - STANDARDIZATION OF CRITERIA FOR PLANNING, DESIGN, CONSTRUCTION, MAINTENANCE AND RELATED ASPECTS OF VARIOUS TYPES OF DAMS AND SPILLWAYS

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	SP 55 : 1993	Design aid for anchorages for spillway piers, training walls and divide walls.	Mar 2010	
2	IS 4410(Part 8):1992	Glossary of terms relating to river valley projects: Part 8 Dam and dam section (first revision)	Aug 2007	
3	IS 4410(Part 9):1982	Glossary of terms relating to river valley projects: Part 9 Spillway and syphons (first revision)	Mar 2011	
4	IS 4410(Part 18):1983	Glossary of terms relating to river valley projects: Part 18 Energy dissipator devices - Stilling basins	Mar 2011	
5	IS 4997:1968	Criteria for design of hydraulic jump type stilling basins with horizontal and sloping apron	Mar 2010	1
6	IS 5186:1994	Design of chute and side channel spillways - Criteria (first revision)	Mar 2010	1
7	* IS 6512:1984	Criteria for design of solid gravity dams (first revision)	Mar 2009	
8	* IS 6934:1998	Recommendations for hydraulic design of high ogee over-flow spillways(first revision)	Nov 2007	
9	IS 7365:2010	Criteria for hydraulic design of bucket type energy dissipators (second revision)		
10	IS 7894:1975	Code of practice for stability analysis of earth dams	Feb 2008	1
11	IS 8605:1977	Code of practice for construction of masonry in dams	Mar 2009	1
12	IS 8826:1978	Guidelines for design of large earth and rockfill dams	Mar 2009	1
13	IS 9296:2001	Guidelines for inspection and maintenance of dam and appurtenant structures(first revision)	Feb 2008	
14	* IS 9297:1979	Recommendations for lighting, ventilation and other facilities inside the dam	Mar 2011	
15	IS 9429:1999	Code of practice for drainage system for earth and rockfill dams(first revision)	Mar 2009	
16	IS 10135:1985	Code of practice for drainage system for gravity dams, their foundations and abutments (first revision)	Feb 2008	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

17	* IS 10137:1982	Guidelines for selection of spillways and energy dissipators	Mar 2010	1
18	* IS 10635:1993	Freeboard requirements in embankment dams - Guidelines (first revision)	Mar 2009	
19	IS 11155:1994	Construction of spillways and similar overflow structures - Code of practice (First Revision)	Mar 2010	1
20	IS 11216:1985	Code of practice for permeability test for masonry (during and after construction)	Mar 2009	
21	IS 11223:1985	Guidelines for fixing spillway capacity	Mar 2010	2
22	* IS 11485:1985	Criteria for hydraulic design of sluices in concrete and masonry dams	Mar 2010	
23	* IS 11527:1985	Criteria for structural design of energy dissipators for spillways	Mar 2010	1
24	IS 11772:2009	Guidelines for design of drainage arrangements of energy dissipators and training walls of spillways (first revision)		
25	IS 12169:1987	Criteria for design of small embankment dams	Feb 2008	1
26	IS 12200:2001	Provision of water stops at transverse contraction joints in masonry and concrete dams - CP (first revision)	Feb 2008	
27	IS 12720:2004	Criteria for structural design of spillway training walls and divide walls (second revision)	Mar 2010	
28	IS 12731:1989	Hydraulic design of impact type energy dissipators - Recommendations	Mar 2010	
29	* IS 12804:1989	Criteria for estimation of aeration demand for spillways and outlet structures	Mar 2010	
30	IS 12966(Part 1):1992	Code of practice for galleries and other openings in dams: Part 1 General requirements	Feb 2008	
31	IS 12966(Part 2):1990	Code of practice for galleries and other openings in dams: Part 2 Structural design	Feb 2008	
32	IS 13048:1991	Recommendations for hydraulic design of duck bill spillways	Mar 2010	
33	IS 13144:1991	Recommendations for provision of facilities outside dams	Feb 2008	
34	IS 13195:1991	Preliminary design, operation and maintenance of protection works downstream of spillways - Guidelines.	Mar 2010	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

35	IS 13551:1992	Criteria for structural design of spillway pier and crest	Feb 2008	
36	IS 13645:1993	Guidelines for guniting the upstream face of masonry dams	Feb 2008	1
37	IS 14591:1999	Temperature control of mass concrete for dams - Guidelines	Mar 2010	
38	IS 14690:1999	Quality control during construction of earth and rockfill dams - Recommendations	Mar 2010	
39	IS 14954:2001	Distress and remedial measures in earth and rockfill dams- Guidelines	Oct 2006	
40	IS 15058:2002	Specification for PVC waterstops at transverse contraction joints in masonry and concrete dams	Feb 2008	

DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

1	DOC.WRD 9(489)	Criteria for structural Design of Energy Dissipators for Spillways (Firs Revision of IS 11527)		
2	DOC.WRD 9(468)	Freeboard requirements in dams- Guidelines (second revision of IS 10635)		

DRAFTS COMPLETED WIDE CIRCULATION

1	DOC.WRD 9(553)	Criteria for Hydraulic Design of Sluices in Concrete and Masonry Dams (first revision of IS 11485)		
2	DOC.WRD 9(512)	Criteria for design of solid gravity dams (second revision of IS 6512)		
3	DOC.WRD 9(520)	Guidelines for preliminary Design of Spillway Aerators (first revision of IS 12804)		
4	DOC.WRD 9(538)	Draft amendment to IS 9297:1979		
5	DOC.WRD 9(554)	Junction between spillways and earth dams		
6	DOC.WRD 9(555)	Colgrout Masonry in Dams – Code of Practice		
7	DOC.WRD 9(570)	Recommendations for hydraulic design of high ogee overflow spillways (second revision of IS 6934)		

DRAFT STANDARDS FORMULATED

1	DOC.WRD 9(585)	Guidelines for selection of spillways & energy dissipators (First Revision of IS 10137:1982)		
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* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 10 RESERVOIRS AND LAKES

SCOPE - STANDARDIZATION OF CRITERIA FOR PLANNING, DESIGN, OPERATION, MAINTENANCE AND OTHER RELATED ASPECTS OF RESERVOIRS/LAKES

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 6):1983	Glossary of terms relating to river valley projects: Part 6 Reservoirs (first revision)	Mar 2011	
2	IS 5477(Part 1):1999	Methods for fixing the capacities of reservoirs: Part 1 General requirements	Feb 2010	
3	IS 5477(Part 2):1994	Methods for fixing the capacities of reservoirs: Part 2 Dead storage (first revision)	Feb 2010	
4	IS 5477(Part 3):2003	Methods for fixing the capacities of reservoirs: Part 3 Live storage (first revision)	Mar 2008	
5	* IS 5477(Part 4):1971	Methods for fixing the capacities of reservoirs: Part 4 Flood storage	May 2008	
6	** IS 6518:1992	Code of practice for control of sediment in reservoirs (first revision)	Oct 2007	
7	IS 6939:1992	Methods for determination of evaporation from reservoirs (first revision)	Oct 2007	
8	IS 7323:1994	Operation of reservoirs - Guidelines (first revision)	May 2008	
9	IS 8237:1985	Code of practice for protection of slope for reservoir embankments (first revision)	Oct 2007	
10	IS 12182:1987	Guidelines for determination of effects of sedimentation in planning and performance of reservoirs	Oct 2007	
11	* IS 13665:1993	Sedimentation in reservoirs - Method of measurement	May 2008	
12	IS 14654:1999	Minimising evaporation losses from reservoirs - Guidelines	Feb 2010	
13	IS 15472:2004	Guidelines for planning and design of low level outlets for evacuating storage reservoirs	Mar 2010	
14	IS 15840:2009 ISO/TR 11330:1997	Determination of volume of water & water level in lakes & reservoirs		

DRAFTS COMPLETED WIDE CIRCULATION

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

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|---|-----------------|---|
| 1 | DOC.WRD 10(491) | Sedimentation in Reservoirs- Method of Measurement
(First Revision of IS 13665:1993) |
| 2 | DOC.WRD 10(552) | Draft Amendment No. 1 to IS 5477(Pt 2):1994 |

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS*

WRD 12 HYDRAULIC GATES AND VALVES

SCOPE - STANDARDIZATION OF CRITERIA FOR SELECTION, DESIGN, CONSTRUCTION, MAINTENANCE, OPERATION AND TESTING OF GATES AND VALVES

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 16/Sec 1):1999	Glossary of terms relating to river valley projects: Part 16 Gates and valves Section 1 Gates and terms related with gates (first revision)	May 2009	
2	IS 4410(Part 16/Sec 2):1981	Glossary of terms relating to river valley projects: Part 16 Gates and valves Section 2 Valves	May 2010	
3	IS 4410(Part 23):1999	Glossary of terms relating to river valley projects Part 23 Hoists, Cranes and other related terms.	May 2009	
4	IS 4622:2003	Recommendations for structural design of fixed wheel gates(third revision)	Mar 2009	
5	IS 4623:2000	Recommendations for structural design of radial gates (third revision)	May 2009	
6	* IS 5620:1985	Recommendations for structural design criteria for low head slide gates (second revision)	May 2010	
7	IS 6938:2005	Design of rope drum and chain hoists for hydraulic gates - Code of practice (second revision)	May 2010	
8	IS 7326(Part 1):1992	Penstock and turbine inlet butterfly valves for hydropower stations and systems: Part 1 Criteria for structural and hydraulic design (first revision)	Mar 2008	
9	IS 7326(Part 2):1992	Penstock and turbine inlet butterfly valves for hydropower stations and systems: Part 2 Guidelines for design and selection of control equipment (first revision)	Mar 2008	
10	IS 7326(Part 3):1976	Penstock and turbine inlet butterfly valves for hydropower stations and systems: Part 3 Recommendations for operations and maintenance	Mar 2008	
11	IS 7332(Part 1):1991	Spherical valves for hydropower stations and systems: Part 1 Criteria for structural and hydraulic design (first revision)	Mar 2009	1
12	IS 7332(Part 2):1993	Spherical valves for hydropower stations and systems: Part 2 Selection of control equipment (first revision)	Mar 2008	
13	IS 7332(Part 3):1994	Spherical valves for hydropower stations and systems: Part 3 Recommendations for operation and maintenance of spherical valves (first revision)	Mar 2008	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

14	* IS 7718:1991	Recommendations for inspection, testing and maintenance of fixed wheel and slide gates (first revision)	May 2010	
15	IS 9349:2006	Recommendations for structural design of medium and high head slide gates (second revision)	May 2010	
16	IS 10021:2000	Guidelines for de-icing systems for hydraulic installations (first revision)	May 2009	
17	* IS 10096(Part 1/Sec 1):1983	Recommendations for inspection, testing and maintenance of radial gates and rope drum hoists: Part 1 Inspection, testing and assembly at the manufacturing stage Section 1 Gates	May 2010	1
18	* IS 10096(Part 1/Sec 2):1986	Recommendations for inspection, testing and maintenance of radial gates and roof drum hoists: Part 1 Inspection, testing and assembly at the manufacturing stage Section 2 Rope Drum Hoists	May 2010	1
19	IS 10096(Part 2):1983	Recommendations for inspection, testing and maintenance or radial gates and rope drum hoists: Part 2 Inspection, testing and assembly at the time of erection	May 2010	2
20	IS 10096(Part 3):2002	*Recommendations for inspection, testing and maintenance of radial gates and rope drum hoists: Part 3 After erection (second revision)	Mar 2008	
21	IS 10210:1993	Criteria for design of hydraulic hoists for gates	May 2009	
22	IS 11228:1985	Recommendations for design of screw hoists for hydraulic gates	May 2010	
23	IS 11793:1986	Guidelines for design of float-driven hoisting mechanism for automatic gated control	May 2010	
24	* IS 11855:2004	Guidelines for design and use of different types of rubber seals for hydraulic gates (first revision)	May 2009	
25	* IS 13041:1991	Recommendations for inspection, testing and maintenance of hydraulic hoist (After Erection)	May 2010	
26	IS 13591:1992	Criteria for design of lifting beams	May 2009	
27	IS 13623:1993	Criteria for choice of gates and hoists	Mar 2009	1
28	IS 14177:1994	Guidelines for painting system for hydraulic gates and hoists	May 2009	
29	* IS 15466:2004	Rubber seals for hydraulic gates - Specification	May 2009	

FINALISED DRAFTS UNDER PRINT

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

- 1 DOC.WRD 12(379) Draft Indian Standard on recommendations for structural design criteria for low head slide gates (third revision of IS 5620)

DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

- 1 DOC.WRD 12(509) Draft amendment no. 1 to IS 4622:2003

- 2 DOC.WRD 12(510) Draft Amendment No. 1 to IS 6938:2005

- 3 DOC.WRD 12(511) Draft Indian Standard on recommendations for inspection, testing and maintenance of hydraulic hoist (After Erection) (first revision of IS 13041)

DRAFT STANDARDS APPROVED FOR WIDE CIRCULATION

- 1 DOC.WRD 12(571) Draft Indian Standard on guidelines for design and use of rubber seals for hydraulic gates (second revision of IS 11855)

- 2 DOC.WRD 12(575) Recommendations for inspection, testing & maintenance of radial gates and rope drum hoists:Part 1 Inspection, testing and assembly at the manufacturing stage, Section 1 Gates [first revision of IS 10096(Part 1/Sec 1)]

- 3 DOC.WRD 12(576) Recommendations for inspection, testing & maintenance of radial gates and rope drum hoists:Pt 1 Inspection, testing and assembly at the manufacturing stage, Sec 2 Rope drum hoists [1st revision of IS 10096(Part 1/Sec 2)]

DRAFT STANDARDS FORMULATED

- 1 DOC.WRD 12(590) Draft Indian Standard on recommendations for inspection, testing and maintenance of fixed wheel and slide gate (first revision of IS 7718)

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

WRD 13 CANALS AND CROSS DRAINAGE WORKS

SCOPE - STANDARDIZATION OF CRITERIA FOR PLANNING, LOCATION, DESIGN, CONSTRUCTION, INSPECTION, MAINTENANCE AND OTHER RELATED ASPECTS FOR CANALS AND CROSS DRAINAGE WORKS

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 3872:2002	Lining of canals with burnt clay tiles - Code of practice (first revision)	Mar 2008	1
2	IS 3873:1993	Laying cement concrete/stone slab lining on canals - Code of practice (second revision)	Jul 2009	1
3	IS 4410(Part 5):1982	Glossary of terms relating to river valley projects: Part 5 Canals (first revision)	Jul 2010	
4	IS 4410(Part 15/Sec 1):1973	Glossary of terms relating to river valley projects: Part 15 Canal structures Section 1 General terms	Jul 2010	
5	IS 4410(Part 15/Sec 2):1973	Glossary of terms relating to river valley projects: Part 15 Canal structures Section 2 Transitions	Jul 2010	
6	IS 4410(Part 15/Sec 3):1977	Glossary of terms relating to river valley projects: Part 15 Canal structures Section 3 Flumes	Jul 2010	
7	IS 4410(Part 15/Sec 4):1977	Glossary of terms relating to river valley projects: Part 15 Canal structures Section 4 Regulating works	Jul 2010	
8	IS 4410(Part 15/Sec 5):1992	Glossary of terms relating to river valley projects: Part 15 Canal structures Section 5 Cross drainage works (first revision)	Aug 2007	
9	IS 4515:2002	Stone pitched lining for canals - Code of practice (second revision)	Mar 2008	
10	IS 4558:1995	Under-drainage of lined canals - Code of practice (second revision)	Jul 2011	1
11	IS 4701:1982	Code of practice for earthwork on canals	Jul 2009	
12	IS 4839(Part 1):1992	Maintenance of canals - Code of practice : Part 1 Unlined canals (second revision)	Mar 2008	1
13	IS 4839(Part 2):1992	Maintenance of canals - Code of practice : Part 2 Lined canals (second revision)	Jul 2011	1
14	IS 4839(Part 3):1992	Code of practice for maintenance of canals: Part 3 Canal structures, drains, jungle clearance, plantation and regulation (second revision)	Mar 2008	1
15	IS 5256:1992	Sealing expansion joints in concrete lining on canals - Code of practice (first revision)	Mar 2008	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

16	IS 5690:1982	Guide for laying combination lining for existing unlined canals (first revision)	Jul 2009	1
17	IS 5968:1987	Guide for planning and layout of canal system for irrigation (first revision)	Mar 2008	
18	IS 6004:1980	Criteria for hydraulic design of sediment ejector for irrigation and power canals (first revision)	Jul 2009	
19	IS 6522:1972	Criteria for design of silt vanes for sediment control in offtaking canals	Jul 2009	
20	* IS 6531:1994	Canal head regulators - Criteria for design (first revision)	Mar 2010	
21	IS 6936:1992	Guide for location, selection and hydraulic design of canal escapes (first revision)	Mar 2008	
22	IS 7112:2002	Criteria for design of cross section for unlined canals in alluvial soil (first revision)	Mar 2008	
23	IS 7113:2003	Soil-cement lining for canals - Code of practice (first revision)	Mar 2008	1
24	IS 7114:1973	Criteria for hydraulic design of cross regulators for canals	Jul 2009	
25	IS 7331:1981	Code of practice for inspection and maintenance of cross-drainage works (first revision)	Mar 2008	
26	IS 7495:1974	Criteria for hydraulic design of silt selective head regulator for sediment control in offtaking canals	Jul 2009	
27	* IS 7784(Part 1):1993	Design of cross drainage works - Code of practice: Part 1 General features (first revision)	Mar 2008	
28	IS 7784(Part 2/Sec 1):1995	Design of cross drainage works - Code of practice: Part 2 Specific requirement Section 1 Aqueducts	Jul 2010	
29	IS 7784(Part 2/Sec 2):2000	Code of practice for design of cross drainage works: Part 2 Specific requirement Section 2 Superpassages (first revision)	Jul 2009	1
30	IS 7784(Part 2/Sec 3):1996	Code of practice for design of cross drainage works - : Part 2 Specific requirement Section 3 Canal syphons (first revision)	Jul 2011	
31	IS 7784(Part 2/Sec 4):1999	Design of cross drainage works - Code of practice : Part 2 Specific requirement Section 4 Level crossings (first revision)	Jul 2009	
32	IS 7784(Part 2/Sec 5):2000	Code of practice for design of cross drainage works: Part 2 Specific requirement Section 5 Syphon aqueducts (first revision)	Jul 2009	1
33	IS 7871:1975	Criteria for hydraulic design of groyne walls (curved wing) for sediment distribution at offtake points in a canal	Jul 2009	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

34	IS 7873:1975	Code of practice for lime concrete lining for canals	Jul 2009	1
35	IS 7880:1975	Criteria for hydraulic design of skimming platform for sediment control in offtaking canal	Jul 2009	
36	IS 7986:1976	Code of practice for canal outlets	Jul 2009	1
37	IS 8835:1978	Guidelines for planning and design of surface drains	Jul 2009	
38	IS 9097:1979	Guide for laying lining of canals with hot bitumen or bituminous felts	Jul 2009	
39	IS 9447:1980	Guidelines for assessment of seepage losses from canals by analytical method	Jul 2011	
40	IS 9451:1994	Guidelines for lining of canals in expansive soils (second revision)	Jul 2009	1
41	IS 9452(Part 1):1993	Measurement of seepage losses from canals - Code of practice : Part 1 Ponding method (first Revision)	Jul 2009	
42	IS 9452(Part 2):1980	Code of practice for measurement of seepage losses from canals : Part 2 Inflow Outflow method	Jul 2009	
43	IS 9452(Part 3):1988	Code of practice for measurement of seepage losses from canals: Part 3 By seepage meter method	Jul 2009	
44	IS 9698:1995	Lining of canals with polyethylene film - Code of practice (first revision)	Jul 2010	
45	IS 9913:2000	Code of practice for construction of cross drainage works (first revision)	Jul 2009	1
46	IS 10430:2000	Criteria for design of lined canals and guidelines for selection of type of lining (first revision)	Jul 2009	1
47	IS 10646:1991	Canal linings - Cement concrete tiles - Specification (first revision)	Jul 2009	3
48	IS 11809:1994	Lining for canals by stone masonry - Code of practice (first revision)	Jul 2009	1
49	IS 12331:1988	General requirements for canal outlets	Mar 2008	1
50	IS 12379:1988	Code of practice for lining water courses and field channels	Mar 2008	1
51	IS 13143:1991	Joints in concrete lining of canals - sealing compound - specification	Jul 2009	

FINALISED DRAFTS UNDER PRINT

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

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|---|-----------------|---|
| 1 | DOC.WRD 13(447) | Draft Indian Standard on Code of practice for design of cross drainage works: Part 1 General features [first revision of IS 7784(Pt 1)] |
| 2 | DOC.WRD 13(527) | Draft Amendment No.2 to IS 10096(Part 2):1983 |

DRAFTS COMPLETED WIDE CIRCULATION

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|---|-----------------|---|
| 1 | DOC.WRD 13(543) | Draft Indian Standard on Guidelines for estimation of transmission losses in canals |
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DRAFT STANDARDS APPROVED FOR WIDE CIRCULATION

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| 1 | DOC.WRD 13(542) | Draft Indian Standard on Guidelines for planning of parallel canals |
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DRAFT STANDARDS FORMULATED

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| 1 | DOC.WRD 13(593) | Canal head regulators - Criteria for design (Second Revision of IS 6531) |
| 2 | DOC.WRD 13(594) | Draft Indian Standard on Guidelines for design and construction of Water - Courses |

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 14 WATER CONDUCTOR SYSTEMS

SCOPE - STANDARDIZATION OF CRITERIA FOR PLANNING, DESIGN, CONSTRUCTION, MAINTENANCE AND RELATED ASPECTS OF ALL COMPONENTS OF WATER CONDUCTOR SYSTEMS

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 20):1983	Glossary of terms relating to river valley projects: Part 20 Tunnels	Jul 2010	
2	IS 4880(Part 1):1987	Code of practice for design of tunnels conveying water: Part 1 General design (first revision)	Nov 2008	1
3	IS 4880(Part 2):1976	Code of practice for design of tunnels conveying water: Part 2 Geometric design(first revision)	Jul 2010	
4	IS 4880(Part 3):1976	Code of practice for design of tunnels conveying water: Part 3 Hydraulic design(first revision)	Jul 2010	
5	* IS 4880(Part 4):1971	Code of practice for design of tunnels conveying water: Part 4 Structural design of concrete lining in rock	Jul 2010	2
6	IS 4880(Part 5):1972	Code of practice for design of tunnels conveying water: Part 5 Structural design of concrete lining in soft strata and soils	Jul 2010	2
7	IS 4880(Part 6):1971	Code of practice for design of tunnels conveying water: Part 6 Tunnel supports	Jul 2010	
8	* IS 4880(Part 7):1975	Code of practice for design of tunnels conveying water: Part 7 Structural design of steel lining	Jul 2010	
9	IS 5330:1984	Criteria for design of anchor blocks for penstocks with expansion joints (firstrevision)	Jul 2010	
10	IS 5878(Part 1):1971	Code of practice for construction of tunnels conveying water: Part 1 Precision survey and setting out	Nov 2008	2
11	IS 5878(Part 2/Sec 1):1970	Code of practice for construction of tunnel conveying water: Part 2 Underground excavation in rock, Section 1 Drilling and blasting	Jul 2010	1
12	IS 5878(Part 2/Sec 2):1971	Code of practice for construction of tunnels conveying water: Part 2 Underground excavation in rock, Section 2 Ventilating, lighting, Mucking and Dewatering	Jul 2010	1
13	IS 5878(Part 2/Sec 3):1971	Code of practice for construction of tunnels conveying water: Part 2 Underground excavation in rock, Section 3 Tunnelling method for Steeply Inclined Tunnels, Shafts and Underground Power Houses	Jul 2010	2
14	IS 5878(Part 3):1972	Code of practice for construction of tunnels conveying water: Part 3 Underground excavation in soft strata	Jul 2010	1

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

15	IS 5878(Part 4):1971	Code of practice for construction of tunnels conveying water: Part 4 Tunnel supports	Jul 2010	2
16	IS 5878(Part 5):1976	Code of practice for construction of tunnels conveying water: Part 5 Concrete lining (first revision)	Jul 2010	1
17	IS 5878(Part 6):1975	Code of practice for construction of tunnel conveying water: Part 6 Steel lining	Jul 2010	1
18	IS 5878(Part 7):1972	Code of practice for construction of tunnels conveying water: Part 7 Grouting	Jul 2010	2
19	IS 7357:1974	Code of practice for structural design of surge tanks	Jul 2010	
20	IS 7396(Part 1):1985	Criteria for hydraulic design of surge tanks: Part 1 Simple, restricted orifice and differential surge tanks (first revision)	Jul 2010	
21	IS 7396(Part 2):1985	Criteria for hydraulic design of surge tanks: Part 2 Tail race surge tanks (first revision)	Jul 2010	
22	IS 7396(Part 3):1990	Criteria for hydraulic design of surge tanks: Part 3 Special surge tanks	Jul 2010	
23	IS 7396(Part 4):1983	Criteria for hydraulic design of surge tanks: Part 4 Multiple surge tanks	Jul 2010	
24	IS 7563:1985	Code of practice for structural design of cut and cover concrete conduits (first revision)	Jul 2010	
25	* IS 7916:1992	Open power channels - Code of practice (first revision)	Nov 2008	
26	IS 9761:1995	Hydropower intakes - criteria for hydraulic design (first revision)	Jul 2010	
27	IS 11105:2004	Design and construction of tunnel plugs - Code of practice (first revision)	Mar 2010	
28	* IS 11388:1995	Recommendations for design for trash racks for intake (first revision)	Jul 2010	
29	IS 11570:1985	Criteria for hydraulic design of irrigation intake structures	Nov 2008	
30	IS 11625:1986	Criteria for hydraulic design of penstocks	Jul 2010	
31	IS 11639(Part 1):1986	Criteria for structural design of penstocks: Part 1 Surface penstocks	Jul 2010	1
32	IS 11639(Part 2):1995	Structural design of penstocks - Criteria: Part 2 Buried/embedded penstocks	Jul 2010	
33	IS 11639(Part 3):1996	Criteria for structural design of penstocks: Part 3 Specials for penstocks	Nov 2008	3

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

34	IS 12633:1989	First filling and emptying of pressure tunnels - Guidelines	Nov 2008	2
35	IS 12967(Part 1):1990	Analysis of hydraulic transients in hydro-electric and pumping plants - Code of practice: Part 1 Criteria for analysis	Jul 2010	
36	IS 13495:1992	Design of sediment excluders - Guidelines	Dec 2007	
37	IS 15310:2003	Hydraulic design of pump sumps and intakes - Guidelines	Dec 2007	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 14(374)	Draft Indian Standard on Recommendations for design of trash racks for intakes (second revision of IS 11388)		
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DRAFTS COMPLETED WIDE CIRCULATION

1	DOC.WRD 14(544)	Draft Amendment No.1 to IS 11570:1985		
2	DOC.WRD 14(496)	Draft Indian Standard on Guidelines for Design of Branching in Penstocks for Hydro Electric Projects		

DRAFT STANDARDS FORMULATED

1	DOC.WRD 14(545)	Draft Indian Standard on code of Practice for design of tunnels conveying water:Part 4 Structural design of concrete lining in rock[first revision of IS 4880(Part 4)]		
2	DOC.WRD 14(546)	Draft Indian Standard on Code of practice for design of tunnels conveying water: Part 7 Structural design of steel lining [first revision of IS 4880(Part 7)]		
3	DOC.WRD 14(547)	Draft Indian Standard on Open power channels - Code of practice (second revision of IS 7916)		
4	DOC.WRD 14(548)	Draft Indian Standard on critiera for hydraulic design of sediment ejectors from hydro power projects		

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 15 HYDROELECTRIC POWER HOUSE STRUCTURES

SCOPE - STANDARDIZATION OF CRITERIA FOR LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF POWER HOUSE STRUCTURES, INCLUDING PUMPED STORAGE

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4247(Part 1):1993	Code of practice for structural design of surface hydroelectric power stations:Part 1 Data for design (third revision)	Jan 2008	1
2	IS 4247(Part 2):1992	Code of practice for structural design of surface hydroelectric power stations: Part 2 Superstructure (second revision)	Jan 2008	1
3	IS 4247(Part 3):1998	Code of practice for structural design of surface hydel power stations: Part 3 Substructure (second revision)	Jan 2008	
4	IS 4410(Part 10):1988	Glossary of terms relating to river valley projects : Part 10 Hydro-electric Power station including water conductor system (first revision)	Jan 2008	
5	IS 4461:1998	Code of practice for joints in surface hydro-electric power stations (second revision)	Jan 2008	
6	** IS 4720:1982	Code of practice for ventilation of surface hydro power station (first revision)	Jan 2008	
7	** IS 4721:2000	Code of practice for drainage and dewatering of surface hydroelectric power stations	Mar 2011	
8	IS 5496:1993	Guide for preliminary dimensioning and layout of elbow type draft tubes for surface hydroelectric power stations (first revision)	Jan 2008	1
9	IS 7207:1992	Criteria for design of generator foundation for hydroelectric power stations (first revision)	Jan 2008	
10	IS 7418:1991	Criteria for design of spiral casing (concrete and steel) (first revision)	Jan 2008	
11	** IS 9120:1979	Guidelines for planning, layout and design of cavities in underground hydro-electric power stations	Jan 2008	
12	IS 10824:1984	Code of practice for amenities in power houses	Mar 2011	
13	IS 12800(Part 1):1993	Guidelines for selection of turbines, preliminary dimensioning and layout of surface hydro-electric power houses Part 1 Medium and large power houses	Jan 2008	
14	IS 12800(Part 2/Sec 1):1989	Guidelines for selection of turbines, preliminary dimensioning and layout of surface hydro-electric power house Part 2 Pumped storage power houses Section 1 Vertical francis runner	Mar 2011	2

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

15	IS 12800(Part 3):1991	Guidelines for selection of turbines, preliminary dimensioning and layout of surface hydro-electric power house Part 3 Small mini and micro power houses	Jan 2008
16	IS 12837:1989	Hydraulic turbines for medium and large hydro-electric power houses - Guidelines for selection	Mar 2011

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS*

WRD 16 HYDRAULIC STRUCTURES INSTRUMENTATION

SCOPE - STANDARDIZATION OF CRITERIA FOR SELECTION, INSTALLATION, USAGE AND MAINTENANCE OF INSTRUMENTS USED FOR THE MEASUREMENT OF DISPLACEMENT, STRAIN, STRESS, TEMPERATURE ETC. IN HYDRAULIC STRUCTURES.

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 6524:1972	Code of practice for installation and observation of instruments for temperature measurements inside dams; resistance type thermometers	Mar 2009	
2	IS 6532:1972	Code of practice for design, installation, observation and maintenance of uplift pressure pipes for hydraulic structures on permeable foundations	May 2010	
3	IS 7356(Part 1):2002	Code of practice for installation, maintenance and observation of instruments for pore pressure measurements in earth dams and rockfill dams: Part 1 Porous tube piezometers (second revision)	Jun 2011	1
4	IS 7356(Part 2):2003	Installation, observation and maintenance of instruments for pore pressure measurements in earth and rockfill dams - Code of practice Part 2 - Twin tube hydraulic piezometers (second revision)	Mar 2009	
5	IS 7436(Part 1):1993	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instruments: Part 1 For earth and rockfill dams (second revision)	Mar 2009	
6	IS 7436(Part 2):1997	Guide for types of measurements for structures in river valley projects and criteria for choice and location of measuring instruments: Part 2 Concrete and masonry dams (first revision)	Mar 2009	
7	IS 7500:2000	Code of practice for installation and observation of cross arms for measurement of internal vertical movement in earth dams	May 2010	
8	* IS 8226:1976	Code of practice for installation and observation of base plates for measurement of foundation settlement in embankments	May 2010	
9	IS 8282(Part 1):1976	Code of practice for installation, maintenance and observation of pore pressure measuring devices in concrete and masonry dams: Part 1 Electrical resistance type cell	Mar 2009	
10	IS 8282(Part 2):1996	Installation maintenance and observations of pore pressure measuring devices in concrete and masonry dams - Code of practice: Part 2 Vibrating wire type cell	May 2010	
11	IS 10334:1982	Code of practice for selection, splicing, installation and providing protection to the open ends of cables used for connecting resistance type measuring devices in concrete and masonry dams	May 2010	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

12	IS 10434(Part 1):2003	Installation, maintenance and observation of deformation measuring devices in concrete and masonry dams - Guidelines, Part 1 Resistance type jointmeters (First Revision)	Mar 2009
13	IS 10434(Part 2):1996	Guidelines for installation, maintenance and observation of deformation measuring devices in concrete and masonry dams: Part 2 Vibrating wire type joint meter	May 2010
14	* IS 12949:1990	Code of practice for installation, maintenance and observation of instruments for pore pressure measurments in earth dams and rockfill dams: Electrical pore pressure cells - vibratory wire type	Mar 2009
15	IS 13073(Part 1):2002	Installation, maintenance and observation of displacement measuring devices in concrete and masonry dams - Code of practice: Part 1 Deflection measurement using plumb lines (First Revision)	Mar 2008
16	IS 13073(Part 2):2000	Code of practice for installation, maintenance and observation of displacement measuring devices for concrete and masonry dams Part 2: Geodetic observation - Crest collimation	May 2010
17	IS 13232:1992	Installation, maintenance and observation of electrical strain measuring devices in concrete dams -Code of practice	Mar 2009
18	IS 14248:1995	Guidelines for instrumentation of barrages & weirs	May 2010
19	IS 14278:1995	Stress measuring devices in concrete and masonry dams - Installation, commissioning and observations - Code of practice	May 2010 1
20	* IS 14750:2000	Code of practice for installation, maintenance and observation of seepage measuring devices for concrete/masonry and earth/rockfill dams	May 2010
21	* IS 14793:2000	Code of practice for installation, maintenance and observation of instruments for vibration studies (other than earth quake)	May 2010

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 16(503)	Draft Indian Standard code of practice for installation, maintenance and observation of the the instruments for vibration studies other than earthquakes (first revision of IS 14793)
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DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

1	DOC.WRD 16(504)	Code of practice for installation, maintenance and observation of instruments for pore pressure measurments in earth dams and rockfill dams: Electrical pore pressure cells - vibratory wire type (First revision of
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DRAFT STANDARDS ISSUED IN WIDE CIRCULATION

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/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

1 DOC.WRD 16(574) Draft Indian Standard on code of practice for installation, maintenance and observation of seepage measuring devices for concrete/masonry and earth/rockfill dams (first revision of IS 14750)

DRAFT STANDARDS FORMULATED

1 DOC.WRD 16(588) Code of practice for installation and observation of base plates apparatus for measurement of foundation settlements in embankments (first revision of IS 8226)

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS*

WRD 21 SAFETY IN CONSTRUCTION, OPERATION & MAINTENANCE OF RIVER VALLEY PROJECTS

SCOPE - STANDARDIZATION OF SAFETY ASPECTS DURING VARIOUS STAGES OF CONSTRUCTION, OPERATION AND MAINTENANCE OF COMPONENTS AND APPURTENANCES OF WATER RESOURCE PROJECTS

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 13):1985	Glossary of terms relating to river valley projects: Part 13 Operation, maintenance and repair of river valley projects	May 2010	
2	* IS 10386(Part 1):1983	Safety code for construction, operation and maintenance of river valley projects: Part 1 General aspects	May 2010	
3	* IS 10386(Part 2):1982	Safety in construction, operation and maintenance of river valley projects: Part 2 Amenities, protective clothing and equipment	May 2010	
4	* IS 10386(Part 3):1992	Safety code for construction, operation and maintenance of river valley projects: Part 3 Plant and machinery	Oct 2007	
5	* IS 10386(Part 4):1992	Construction, operation and maintenance of river valley projects - Safety code: Part 4 Handling, storage and transportation of explosives	Oct 2007	
6	* IS 10386(Part 5):1992	Safety code for construction, operation and maintenance of river valley projects: Part 5 Electrical aspects	Oct 2007	
7	IS 10386(Part 6):1983	Safety code for construction, operation and maintenance of river valley projects: Part 6 Construction	May 2010	1
8	IS 10386(Part 7):1993	Construction, operation and maintenance of river valley projects - Safety code: Part 7 Fire safety aspects	Oct 2007	
9	IS 10386(Part 8):1995	Safety code for construction, operation and maintenance of river valley projects: Part 8 Open Excavation	May 2010	1
10	IS 10386(Part 9):1998	Safety code for operation and maintenance of river valley projects Part 9 Canals and cross drainage works	Oct 2007	1
11	IS 10386(Part 10):1983	Safety code for construction, operation and maintenance of river valley projects: Part 10 Storage, handling, detection and safety measures for gases, chemicals and flammable liquids	May 2010	

FINALISED DRAFTS UNDER PRINT

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

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| 1 | DOC.WRD 21(463) | Draft Indian Standard safety code for construction, operation and maintenance of river valley projects Part 11 Underground Excavation |
| 2 | DOC.WRD 21(492) | Draft Indian Standard safety code for construction, operation and maintenance of river valley projects: Part 2 Amenities, protective clothing and equipment [first revision to IS 10386(Part 2)] |
| 3 | DOC.WRD 21(493) | Draft Indian Standard safety code for construction, operation and maintenance of river valley projects Part 4 Handling, transportation and storage of explosives [first revision to IS 10386(Part 4):1992] |

DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

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|---|-----------------|---|
| 1 | DOC.WRD 21(507) | Draft Indian Standard on safety code for construction, operation and maintenance of river valley projects: Part 1 General aspects [first revision of IS 10386(Part 1)] |
| 2 | DOC.WRD 21(508) | Draft Indian Standard on safety code for construction, operation and maintenance of river valley projects: Part 5 Electrical aspects [first revision of IS 10386(Part 5)] |

DRAFT STANDARDS ISSUED IN WIDE CIRCULATION

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| 1 | DOC.WRD 21(589) | Draft Indian Standard on Safety code for construction, operation and maintenance of river valley projects: Part 3 Plant and machinery (first revision of IS 10386(Part 3)) |
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* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 22 RIVER TRAINING AND DIVERSION WORKS

SCOPE - STANDARDIZATION OF CRITERIA FOR PLANNING, DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE AND OTHER RELATED ASPECTS OF RIVER TRAINING WORKS, BARRAGES, WEIRS AND DIVERSION WORKS

SI. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	IS 4410(Part 3):1988	Glossary of terms relating to river valley projects: Part 3 River and river training (first revision)	Mar 2008	
2	IS 4410(Part 12):1993	Glossary of terms relating to river valley projects: Part 12 Diversion works (first revision)	Sep 2009	
3	IS 4410(Part 22):1994	Glossary of terms relating to river valley projects: Part 22 Barrages & weirs	Sep 2009	
4	IS 6966(Part 1):1989	Hydraulic design of barrages and weirs - Guidelines: Part 1 Alluvial Reaches (first revision)	Mar 2011	1
5	* IS 7349:1989	Barrages and weirs operation and maintenance - Guidelines(first revision)	Mar 2011	
6	IS 7720:1991	Criteria for investigation, planning and layout of barrages and weirs (first revision)	Mar 2011	
7	* IS 8408:1994	Planning and design of groynes in alluvial river - Guidelines (first revision)	Mar 2011	
8	IS 9461:1980	Guidelines for data required for design of temporary river diversion works	Mar 2008	1
9	IS 9795(Part 1):1981	Guidelines for the choice of type of diversion works : Part 1 Cofferdams	Mar 2008	
10	IS 10084(Part 1):1982	Criteria for design of diversion works : Part 1 Cofferdams	Mar 2008	
11	* IS 10084(Part 2):1994	Design of diversion works - Criteria :Part 2 Diversion channel and open cut or conduit in the body of dam.	Mar 2009	
12	* IS 10751:1994	Planning and design of guide banks for alluvial river - Guidelines (first revision)	Mar 2011	
13	IS 10788(Part 1):1984	Code of practice for construction of diversion works: Part 1 Cellular coffer dams	Mar 2011	
14	IS 11130:1984	Criteria for structural design of barrages and weirs	Mar 2011	1
15	IS 11150:1993	Construction of concrete barrages - Code of practice (first revision)	Mar 2011	1

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

16	IS 11532:1995	Construction and maintenance of river embankments (levees)- Guidelines (first revision)	Mar 2011	1
17	* IS 12094:2000	Guidelines for planning and design of river embankment (levees) (first revision)	Mar 2011	
18	IS 12892:1989	Safety of barrage and weir structures - Guidelines	Mar 2011	1
19	IS 12926:1995	Construction and maintenance of guide banks in alluvial rivers - Guidelines (first revision)	Mar 2011	
20	IS 13877:1993	Planning and design of fish pass- Guidelines	Mar 2011	
21	IS 13912:1993	Closure of diversion channel and open cut or conduit in the body of dam- Code of practice.	Mar 2009	
22	* IS 14262:1995	Planning and design of revetments - Guidelines	Mar 2011	
23	IS 14592(Part 1):1998	Planning and design of river powerhouses : Part 1 Investigation, planning and layout - Guidelines	Mar 2009	
24	IS 14815:2000	Design flood for river studies of barrages and weirs - Guidelines	Mar 2011	
25	IS 14955:2001	Hydraulic model studies of barrages and weirs - Guidelines	Mar 2011	

FINALISED DRAFTS UNDER PRINT

1	DOC.WRD 22(341)	Draft Indian Standard on barrages and weirs operation and maintenance - Guidelines (second revision of IS 7349)		
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DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

1	DOC.WRD 22(534)	Draft Amendment No.1 to IS 9795(Part 1):1981		
2	DOC.WRD 22(535)	Draft Amendment No.1 to IS 13912:1993		

DRAFT STANDARDS APPROVED FOR WIDE CIRCULATION

1	DOC.WRD 22(577)	Draft Indian Standard on planning and design of river power houses integrated with barrages _ Guidelines, Part 2 Design criteria (as part of IS 14592)		
2	DOC.WRD 22(578)	Draft Indian Standard on design of diversion works – Criteria : Part 2 Diversion channel and open cut or conduit in the body of dam [First Revision of IS 10084(Part 2)]		
3	DOC.WRD 22(579)	Draft Indian Standard on planning and design of groyne/spur in alluvial river – Guidelines (Second Revision of IS 8408)		

* INDICATES STANDARDS UNDER REVISION
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| 4 | DOC.WRD 22(580) | Draft Indian Standard on planning and design of guide banks for alluvial rivers - Guidelines (Second Revision of IS 10751) |
| 5 | DOC.WRD 22(581) | Draft Indian Standard on guidelines for planning and design of rivers embankments (Levees) (second revision of IS 12094) |
| 6 | DOC.WRD 22(582) | Draft Indian Standard on planning and design of revetment - Guidelines (Second Revision of IS 14262) |

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
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WRD 23 MEASUREMENT AND COST ANALYSIS OF WORKS FOR RIVER VALLEY PROJECTS

SCOPE - STANDARDIZATION IN THE FIELD OF MEASUREMENT AND COST ANALYSIS OF CIVIL ENGINEERING WORKS FOR WATER RESOURCE PROJECTS

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	* IS 4851:1987	Proforma for analysis of unit rate of concrete used in mechanised construction of river valley projects (second revision)	Apr 2008	
2	* IS 4852:1987	Proforma for analysis of unit rate of masonry used in construction of river valley projects (second revision)	Apr 2008	
3	** IS 4877:1968	Guide for preparation of estimate for river valley projects.	Jan 2011	
4	IS 9401(Part 1):1999	Method of measurement of works in river valley projects (dams & appurtenant structures) :Part 1 Excavation for foundation [first revision]	Mar 2011	
5	IS 9401(Part 2):2003	Method of measurement of works in river valley projects (dams & appurtenant structures): Part 2 Dewatering (first revision)	Mar 2008	
6	IS 9401(Part 3):2003	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 3 Grouting (second revision)	Mar 2008	
7	* IS 9401(Part 4):1980	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 4 Concrete works	Jun 2007	
8	* IS 9401(Part 5):1980	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 5 Masonry	Jun 2007	
9	* IS 9401(Part 6):1984	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 6 Ventilation pipes and other embedded materials	Mar 2011	1
10	* IS 9401(Part 7):1984	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 7 Joints	Mar 2011	2
11	IS 9401(Part 8):1985	Method of measurement of works in river valley projects (dams and appurtenant structures):Part 8 Instrumentation	Mar 2011	1
12	IS 9401(Part 9):1987	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 9 Lining	Jun 2007	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

13	IS 9401(Part 10):1990	Method of measurement of works in river valley projects (dams and appurtenant structures):Part 10 Form work	Jun 2007	
14	IS 9401(Part 11):1998	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 11 Diaphragm walls (first revision)	Jun 2007	
15	IS 9401(Part 12):1992	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 12 Topographical surveys	Jun 2007	1
16	IS 9401(Part 13):1992	Method of measurement of works in river valley projects (Dams and appurtenant structures): Part 13 Earth and fill dams	Jun 2007	
17	IS 9401(Part 14):1992	Method of measurement of works in river valley projects (Dams and appurtenant structures): Part 14 Canal works	Jun 2007	
18	IS 9401(Part 15):2010	Method of measurement of works of river valley projects (Dams and appurtenant structures Part 15 Investigation Works Drilling of Boreholes and Exploratory Drifting and Logging		
19	IS 9401(Part 16):1999	Method of measurement of works in river valley projects (dams and appurtenant structures): Part 16 Tunneling	Mar 2011	
20	IS 9401(Part 17):1999	Method of measurement of works in river valley projects (Dams and appurtenant structures): Part 17 Hydromechanical and related metal works	Mar 2011	
21	IS 9401(Part 18):2000	Method of measurement of works in river valley projects (Dams and appurtenant structures): Part 18 Sheet piling	Mar 2011	
22	* IS 9401(Part 19):2009	Method of measurement of works of river valley projects (Dams & appurtenant structures) Part 19 Electromechanical works		
23	* IS 10061:1991	Proforma for analysis of unit rate of excavation of tunnels by cyclic drilling and blasting (first revision)	Mar 2011	
24	* IS 10062:1991	Proforma for analysis of unit rate of quarrying rock by mechanical means (firstrevision)	Mar 2011	
25	* IS 10160:1982	Proforma for analysis of unit rate of earthwork used in construction of river valley projects	Mar 2011	
26	* IS 10421:1983	Proforma for analysis of unit rate of shuttering/formwork for concrete items	Mar 2011	
27	* IS 10777:1994	Proforma for analysis of unit rate of rock excavation by mechanical means including blasting for open excavation (first revision)	Mar 2011	

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

28	IS 11399(Part 1):1985	Guidelines for estimating output norms of items of work in construction of river valley projects: Part 1 Earthwork excavation	Mar 2011	2
29	* IS 11590:1995	Guidelines for working out unit rate cost of the construction equipment used for river valley projects (first revision)	Mar 2011	
30	* IS 11638:2000	Proforma for analysis of unit rate of construction of embankment by mechanical means (first revision)	Apr 2011	
31	* IS 13418:1992	Proforma for analysis of unit rate of grouting	Apr 2008	
32	* IS 13419:1992	Proforma for analysis of unit rate of shotcreting/guniting used in river valley projects	Apr 2008	
33	* IS 14590:1998	Proforma for analysis of unit rate of dewatering	Apr 2008	
34	* IS 14749:2000	Proforma for analysis of unit rate of underground excavation by cyclic drilling and blasting	Mar 2011	
35	* IS 14835:2000	Guidelines for estimating unit rate of items works in construction of rubble masonry for river valley projects	Mar 2011	

DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT

1	DOC.WRD 23(482)	Method of measurement of water in River Valley Projects (Dams and Appurtenant Structures) Part 6 Ventilation pipes and other embedded materials (First Revision of IS 9401(Part 6):1984)
2	DOC.WRD 23(367)	Method of Measurement of Works in River Valley Projects - (Dams And Appurtenant Structures) Part 20 Protective Treatment (As Part 20 of IS 9401)
3	DOC.WRD 23(483)	Method of measurement of water in River Valley Projects (Dams and Appurtenant Structures) Part 7 Joints (First Revision of IS 9401(Part 7):1984)

DRAFTS COMPLETED WIDE CIRCULATION

1	DOC.WRD 23(480)	Method of measurement of water in River Valley Projects (Dams and Appurtenant Structures) Part 4 Concrete Works (First Revision of IS 9401(Part 4):1980)
2	DOC.WRD 23(481)	Method of measurement of water in River Valley Projects (Dams and Appurtenant Structures) Part 5 Masonry (First Revision of IS 9401(Part 5):1980)

DRAFT STANDARDS FORMULATED

1	DOC.WRD 23(556)	Proforma for Estimating Unit Rate of Concrete Used in Mechanized Construction of River Valley Projects (Third Revision of IS 4851)
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* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

2	DOC.WRD 23(557)	Proforma for analysis of unit rate of masonry used in construction of river valley projects (third revision of IS 4852)
3	DOC.WRD 23(558)	Proforma for analysis of unit rate of excavation of tunnels by cyclic drilling and blasting (second revision of IS 10061)
4	DOC.WRD 23(559)	Proforma for analysis of unit rate of quarrying rock by mechanical means (second revision of IS 10062)
5	DOC.WRD 23(560)	Proforma for analysis of unit rate of earthwork used in construction of river valley projects (First Revision of IS 10160)
6	DOC.WRD 23(561)	Proforma for analysis of unit rate of rock excavation by mechanical means including blasting for open excavation (Second Revision of IS 10777)
7	DOC.WRD 23(562)	Guidelines for working out unit rate cost of the construction equipment used for river valley projects (Second Revision of IS 11590)
8	DOC.WRD 23(563)	Proforma for analysis of unit rate of construction of embankment by mechanical means (Second revision of IS 11638)
9	DOC.WRD 23(564)	Proforma for analysis of unit rate of grouting (first revision of IS 13418)
10	DOC.WRD 23(565)	Proforma for analysis of unit rate of shotcreting/ guniting used in river valley projects (first revision of IS 13419)
11	DOC.WRD 23(566)	Proforma for analysis of unit rate of dewatering (first revision of IS 14590)
12	DOC.WRD 23(567)	Proforma for analysis of unit rate of underground excavation by cyclic drilling and blasting (first revision of IS 14749)
13	DOC.WRD 23(568)	Guidelines for estimating unit rate of items of works in construction of rubble masonry for river valley projects (First Revision of IS 14835)
14	DOC.WRD 23(569)	Proforma for analysis of unit rate of shuttering/ formwork for concrete items (first revision of IS 10421)
15	DOC.WRD 23(592)	Method of measurement of works of river valley projects (Dams & appurtenant structures) Part 19 Electromechanical works (First revision of IS 9401(Pt 19)

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS

WRD 24 ENVIRONMENTAL ASSESSMENT AND MANAGEMENT OF WATER RESOURCES PROJECTS

SCOPE - STANDARDIZATION IN THE FIELD OF ENVIRONMENTAL ASSESSMENT, EVALUATION AND MANAGEMENT RELEVANT TO WATER RESOURCES PROJECTS

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
STANDARDS PUBLISHED				
1	* IS 15442:2004	Parameters for environmental impact assessment of water resources projects	Feb 2010	
2	IS 15832:2008	Glossary of technical terms related to environmental impact		
3	IS 15845:2009	Environmental Management plan for Hydropower/ Irrigation/Flood Control/Multipurpose River Valley Projects.		
DRAFT STANDARDS FINALIZED BUT NOT YET UNDER PRINT				
1	DOC.WRD 24(490)	Guidelines for Assessment of the Environmental Health Impacts of River Valley Projects		
DRAFT STANDARDS ISSUED IN WIDE CIRCULATION				
1	DOC.WRD 24(573)	Parameters for environmental impact assessment of water resources projects (First revision of IS 15442:2004)		
DRAFT STANDARDS FORMULATED				
1	DOC.WRD 24(596)	Guidelines for Environmental Impact Assessment of river Valley Project		

* INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS

** INDICATES STANDARDS TO BE REVISED
| INDICATES EQUIVALENT STANDARDS

WRD 27 HANDBOOKS FOR WATER RESOURCES MANAGEMENT

SCOPE - WORK REALTED TO HANDBOOK FOR WATER RESORCES MANGEMENT

Sl. No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.
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STANDARDS PUBLISHED

** INDICATES STANDARDS UNDER REVISION
/ INDICATES DUAL NUMBER STANDARDS*

*** INDICATES STANDARDS TO BE REVISED
/ INDICATES EQUIVALENT STANDARDS*

ANNEX A

STANDARDS WITHDRAWN / SUPERSEDED

S.N.	COMM NO.	IS NO.	TITLE
1	WRD 1	IS 1193:1959	Methods for measurement of flow of water in open channels using notches, weirs and flumes (Superseded by IS 6059, IS 6062, IS 6058, IS 9108)
2	WRD 1	IS 2913: 1964	Recommendation for determination of flow in tidal channels (Superseded by IS 15122:2002)
3	WRD 1	IS 2914: 1964	Recommendations for estimation of discharge by establishing stage-discharge relation in open channels (Superseded by IS 15119 (Part 1):2002) and IS 15119 (Part 2):2002)
4	WRD 1	IS 2915:1964	Instructions for collection of data for the determination of error in measurement of flow by velocity area methods (Superseded by IS 14573:1998)
5	WRD 1	IS 2952 (Pt 1): 1964	Recommendation for methods of measurement of liquid flow by means of orifice plates and nozzles: Part 1 Incompressible fluids.
6	WRD 1	IS 2952 (Pt 2):1975	Recommendation for methods of measurement of liquid flow by means of orifice plates and nozzles: Part 2 Compressible fluids.
7	WRD 1	IS 4477 (Pt 1):1967	Methods of measurement of fluid flow by means of venture meters: Part 1 Liquids (Superseded by IS 14615-1:1998)
8	WRD 1	IS 9117:1979	Recommendation for liquid flow measurement in open channels by weirs and flumes end depth method for estimation of flow in non rectangular channels with a free overfall (approximate method) (Superseded by IS 14574:1998)
9	WRD 1	IS 6059:1971	Recommendations for liquid flow measurement in open channels by weirs and flumes - weirs of finite crest width for free discharge (Superseded by IS 14974 :2001)
10	WRD 5	IS 6065 (Pt 1): 1985	Recommendations for the Preparation of Geological and Geotechnical Maps for River Valley Project: Part 1 Scales (first revision)
11	WRD 13	IS 3860:1966	Specification for precast cement concrete slabs for canal lining (Superseded by IS 10646:1991)
12	WRD 13	IS 4745:1968	Code of practice for design of cross section of lined canals (Superseded by IS 10430:1982)
13	WRD 13	IS 4969:1968	Method of test for determining flexural strength of precast Cement Concrete slabs for canal lining (Superseded by IS 10646:1991)
14	WRD 13	IS 5331:1969	Guide for selection of type of lining for canals (Superseded by IS 10430:1982)
15	WRD 22	IS 12028:1987	Guidelines for maintenance of river embankments (levees) (Superseded by IS 11532:1995)
16	WRD 23	IS 9401 (Part 15/Sec 1):1993	Method of Measurement of Works in River Valley Projects (Dams and appurtenant structures) Part 15 Investigation Works-Section 1 Drilling of Bore Holes
17	WRD 23	IS 9401 (Part 15/Sec 2):1992	Method of Measurement of Works in River Valley Projects (Dams and appurtenant structures) Part 15 Investigation Works-Section 2 Exploratory Drifting

