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Preface

Since its establishment in 1912, the Pakistan Engineering Congress has been instrumental in bringing out 553 highly valuable Papers on a number of subjects in almost all the engineering disciplines. Although these Papers are very rich in the technical knowledge yet, for want of a proper subject-index, reference to a particular paper was well nigh impossible. The necessity of such an Index was greatly felt for which no effort worth the name was ever made in the past. In the Executive Council meetings some of the honourable members volunteered to prepare the most needed index concerning their respective disciplines but none could accomplish this task due to their official preoccupations. The tabulation, therefore, lingered on. It was under these circumstances that the Congress Secretariat took upon themselves to compile this Index in 1985. This was the first Congress Publication of its kind although the bye-laws made its compilation mandatory. This onerous task which entailed technical insight, a lot of concentration and labour would not have been possible without the untiring efforts of Mr. Sher Mohammad, then Assistant PEC. I as Secretary was personnally indebted to his selfless service not falling within the purview of his normal schedule of duties.

Now, after elapse of more than 8 years, its revision with necessary additions was felt expedient. Mr. Sher Mohammad now Admin. Officer has again risen to the occasion and done the necessary job for which he deserves my sincere thanks.

In tabulating the Index the articles with which the titles of the Papers start viz 'a', 'an' and 'the' have been ignored and the first letter of the key word following the article has been taken for the grouping. Besides, the index has been prepared keeping in view the matter of the subject for better reference and not the department to which it relates.

To make this publication more useful a list of the various papers published in the Symposia & Seminars held under the auspices of Pakistan Engineering Congress from 1957 to 1994 has also been included at the end. These papers too run into 257 valuable numbers.

It is felt that the effort will be found greately helpful in making a ready reference to the desired Paper.

(ENGR. S. N. H. MASHHADI)
Convener, Publishing Committee
Pakistan Engineering Congress

Irrigation Channels and outlets, Lining of Canals, Hydrology and Hydraulic Structures, Dams and other Related Subjects

Irrigation Channels and outlets, Lining of Canals, Hydrology and Hydraulic Structures, Dams and other Related Subjects

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	The Absorption Losses of Punjab Irrigation Canals.	31	1917	F.W. Schonemann
2.	Adaption of Equiangular Spiral as an Open Channel Curve	389	1968	Khalid Mahmood, PSEI
3.	Agriculture Economics with Special Reference to Irrigation Problems.	198	1937	M. Roberts
4.	Alignments Charts.	44	1918	C. Paddy
5.	Alignment and Shape of a spur Head.	428	1975	S.M. Ayoob and Ch. Muhammad Ali
6.	Alluvial Channel Redesign Procedure.	522	1990	Naimatullah Cheema M. Hussain Khan, Tahir Ahmad
7.	Alternative Proposal for Remodelling Marala Headworks.	360	1963	Mr. H.J. Asar
8.	Analysis of Heavy Rainfall in Short Periods at Lahore.	295	1952	Dr. S.N. Naqvi
9.	Application of Modules in Irrigation.	M. 80	1923	E.S. Lindley
10.	Appraisal and Analysis or new Data from Alluvial Canal of West Pakistan in relation to Regime Concepts and Formulae.	356	1963	Dr. Mushtaq Ahmad and A. Rehman
11.	Artificial Cut-off at Islam Headworks.	M.352	1962	Khalid Mahmood and Abdul Basit Akhtar
12.	Auxiliary Reservoris for Irrigation in the Punjab.	3	1913	G.E. Blaker
13.	Behaviour of Drift Sand and Method of Dealing with it.	271	1945	M. A. Rahim

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
14.	The Board Crested Weir Meter.	111	1927	C.A. Colyer
15.	Canal Outlets.	36	1917	B.P. Varma
16.	Canal Falls and their Use as Meters.	97	1925	E. S. Lindley
17.	Chuharkana Acquifer Test.	326	1956	Sayyid Hamid and M.S. Minhas
18.	Concrete Lining of the Gang (Binker) Canal.	M.102	1926	C.E. Jefferis
19.	Conservation of Punjab Water Supplies.	216	1938	R. M. Gorrie
20.	Control of Flow on Curves in Open Channels	242	1941	A. N. Wilson
21.	Construction of the Emerson Barrage at Trimu.	244	1941	S. N. Kapur
22.	Corrosion Control Investigations at Attleboro, Massachusets (USA).	288	1951	Irshad Hussain
23.	Construction Aspects of Balloki, Sulemanki Link.	M.307	1954	S. Allah Bakhsh and Muzaffar Ahmad
24.	Cofferdams for the Warsak Dam	377	1959	Saeed Minhas
25.	Construction of Tarbela Dam Project	410	1972	S. A. Hussaini
26.	A Comparative Study of five Approximate Methods of Computing Uplift Pressures, Exit Gradient and Seepage rate under Hydraulic Structures on Permeable Foundations.	419	1974	Dr. Mushtaq Ahmad
27.	Construction and Working of Spurs for Protection of B.R.B.D. Link Canal.	444	1980	Ahmad Tariq, Khursheed Mahmud and Riaz Ahmad
28.	Construction of River Training Works on the left Bank of River Ravi from Babu Sabu to Chung near Lahore.	456	1982	S. Mansoob Ali Zaidi
29.	Dams and Storage Reservoirs	4	1913	F.W. Schonemann
30.	Damaged Falls on Khadir Branch of the Pakpattan Canal.	147	1931	E.L. Prothero

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
31.	The Design of Canal Head work	11	1914	F.W. Schonemann
32.	The Design of Head Regulators of Irrigation Distributaries.	29	1916	F.W. Schonemann
33.	The Design of Regulators for Distributaries	61	1920	W.P. Thompson
34.	Design of Canals.	101	1926	Mohammad Ibrahim
35.	Design of Channels in Alluvium	252	1942	N.K Bose and K.R. Erry
36.	Design of Alluvial Channels as influenced by Sediment Charge.	M.351	1962	Dr. Mushtaq Ahmad and Ch. Abdul Rehman
37.	Design of Silt-Stable Canals	355	1963	S.S. Kirmani
38.	Design of a Two Miles Long Irrigation Tunnel for Khanpur Dam Project	401	1971	S. Khalid Asmi and A. Aziz
39.	Design of Earthen Dikes.	439	1978	Tahir A. Malik
40.	Design and Construction of Simly Dam	452	1982	Dr. Izhar-ul-Haq
41.	The Design and Construction of Irrigation Structure - Some Important Factors.	304	1954	S.S. Kirmani
42.	The Design and Construction of Deg Super Passage on Marala - Ravi Link	317	1956	S.M. Riaz and Nafis Ahmad
43.	Design and Construction of Chashma Right Bank Canal Project	494	1987	Mian Mohammad Akram and Dr. Izhar-ul-Haq
44.	On the Design of an A.P. Module	176	1934	K. R. Sharma
45.	Design of Weirs on Sand Foundations	182	1935	F.F. Haigh
46.	Deg Diversion and the Combined Headfall and Aqueduct	204	1937	B.K. Kapur
47.	Densification of Canal Banks	257	1942	S.I. Mahbub
48.	Determination of Runoff from Rainfall on Punjab Torrents.	279	1945	R.B. Kanwar Sain

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
49.	The Development of Canal Fall for the Production of Artificial Fertilizers.	9	1914	Captain B.C. Battye
50.	Diagrams for the Design of an Adjustable Proportional Module	218	1939	N.D. Gulhati
51.	Discharge Observations	48	1919	W.B. Harvey
52.	Discharge Curves and a Slide rule	89	1924	E.S. Lindley
53.	Dissipation or Energy Below Canal Falls	163	1933	F.F. Haigh
54.	Distributary Head and other Canal Division Works.	28	1916	A.S. Gibb
55.	Distributary Offtakes in Relation to silt Conditions.	30	1916	F.V. Elsdon
56.	The Distribution of the Canal Water with special Reference to Outlets.	43	1918	J.O. Waterhouse
57.	Diverting River Indus Through Taunsa Barrage.	343	1960	Mirza Mohammad Said
58.	Diversion of Jammu Tawi and Protection of Upper Marginal Bund at Marala Headworks.	349	1961	B.A. Ghani
59.	Diversion of the River Jhelum at Mangla	372	1965	Mehtab Khan
60.	Diversion of River Indus through Ghazi Ghat Road Bridge.	468	1985	Brig. Ghazanfar Mohd Khan and Rana M. Aslam Chohan
61.	Duty of Distributaries in Sandy Soils	13	1914	F.Marshal Purves
62.	Earthwork on Irrigation Works in the Land of the Indus.	378	1965	Mazhar Ali
63.	Electrical Method for Determining Pressure Distribution under Hydraulic Works.	190	1936	V.I.Vaidhianathan and Gurdas Ram
64.	Energy Theory of Turbulent Flow in Liquid.	212	1938	T.Blench
65.	Engineering Economics of the Design and Construction of Dams.	276	1945	S.I.Mahbub and C.L. Handa

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
66.	Energy Dissipation and Expansion of Flow in Sharp-Divergence Below a Flumed Fall.	405	1972	S.M.Ayoob P.S.E.I and Ch.Mohammad Hussain
67.	Energy Losses over Long Crested Weirs	141	1930	J.D.H. Bedford and A.M.R. Montagu
68.	Energy of Flowing Water, Critical Flow and Standing waves.	126	1929	A.M.R. Montagu
69.	Erosion in the Punjab Himalayas and its Probable Effect on Water Supply	135	1930	L.B.Holland and H.M. Glover
70.	An Estimate of Water Loss by Evaporation in Pakistan.	453	1982	Dr.Nizar Ahmad
71.	An Estimate of Evaporation from free Water Surface in West Pakistan.	368	1965	Nazir Ahmed, Mohammad Sarfraz and Mohammad Akram
72.	Estimation of Maximum Discharge for the Design of Hydraulic Structures.	493	1987	Dr. Mushtaq Ahmed
73.	Exclusion of Heavy Silt from Channels by Vaned Pitching.	41	1918	H.W. King
74.	Experiences of Inspections of Dams in Pakistan	520	1989	Altaf-ur-Rehman
75.	Experiments on Broad-Crested Weirs.	M. 51	1919	F.H. Burkitt
76.	Extension of the Training Works in the Jamuna Bridge near Kalanour.	127	1929	D.C Varma
77.	Experiments with a Short Crested Weir Model.	170	1933	C.C. Inglis
78.	Experimental Errors in Measurement of Alluvial Channels	491	1986	Ahmed Masud Ch.
79.	The Extension of the River Training Works at Gidarpindi Bridge.	183	1935	G.A. Plank
80.	Failure and Reconstruction of Sukhbeas Syphon on Balloki-Sulemanki Link-I.	409	1972	R.K. Anver and S.M. Ismail
81.	Failure of Sukkur Barrage Gate No. 3 and replacement programme study.	532	1990	M.I. Memon

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
82.	A few Suggestions to Conserve Flood Run-Off and to Recover Fresh Water from the Saline Water Zones of the Indus Plains.	407	1972	Dr. Nazir Ahmad
83.	Finance and Economics of Irrigation Projects	M.228	1939	Kanwar Sain
84.	Fish Ladders or Fish Ways.	346	1961	Mushtaq Ahmad and Said Ahmad
85.	Flood Control Investigations in West Pakistan.	292	1951	M.A. Rahim, I.A. Zafar and S.M. Niaz
86.	Flow Lines through Embankment with Heterogeneous and Stratified Medium.	299	1952	Dr. Nazir Ahmad
87.	Flow in Expansions in Open Canals.	236	1940	A.R. Thomas
88.	The Formation of Land by Rivers and Torrents in the Punjab.	2	1913	A.J. Wadley
89.	Flushing operations of Warsak Reservoir Sediment.	454	1982	M.R. Chaudhry
90.	Foundation Treatment of the Baran Dam of Kurram Garhi Multipurposes Scheme, Bannu.	320	1956	D.M. Khanzada
91.	Foundation Problems at Karnafuli Project, Pakistan.	322	1956	Khawaja Azeem-ud-Din
92.	Headless Canal Maters.	M.125	1929	F.H. Burkitt, O.B.E
93.	Hydrologic Data, its Importance and Collection.	282	1945	N.D. Gulhati
94.	Hydraulic Design Features of Outlet Wroks for Tarbela Left Bank Irrigation Tunnel.	431	1978	M. Aslam Rasheed and Bashir Ahmad
95.	Hydrologic Design of Sukh Beas Surface Drainage Project.	433	1978	Mian Barkat Ali S.N.H. Mashhadi and Maqsood Ahmed Malik
96.	Hydraulic Gradients in Sub Soil Water in Relation to Stability of Structure Resting on Saturated Soil.	M. 138	1930	A.N. Khosla

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
97.	Hydraulics of Irrigation Channel.	249	1941	Ishar Das
98.	Hydraulic Observations on the Shyok Flood of 1919.	134	1930	J.P. Cunn
99.	Hydraulic Research Station Malikpur.	265	1944	H.L. Uppal
100.	Hydrological Studies on Zhob River and Streams of the Kachhi Plain.	354	1962	Sarfraz Khan Malik
101.	Improved Adjustable Proportionate Modules and Open Flume Outlets.	237	1940	K.R. Sharma
102.	Interlocked Adjustable Module in Precast and Reinforced Concrete Unit	108	1927	A.N. Khosla
103.	Inundation Canal Practice.	119	1928	P. Claxton
104.	Irrigation Outlets.	264	1944	S.I. Mahbub and N.D. Gulhati
105.	Irrigation System in Pakistan: Measures to Improve Irrigation Efficiency at the Farm Level.	445	1980	I.A. Khaliq
106.	Irrigation Requirements of Crops in the Punjab.	446	1980	Abdur Rahman, Nur-ud-Din Ahmad and Muhammad Akram
107.	The Kalabagh Barrage.	M.251	1942	S.I.Mahbub
108.	Khanpur Dam Project.	461	1983	Engr. Dr. Izhar-ul-Haq
109.	Kharif Channels.	60	1920	T.M. Bostock
110.	The Lacey Slope Formula.	184	1935	T. Blench
111.	Land and Water Management in West Pakistan.	394	1969	Ch. Mohammad Hussain
112.	Lessons from the Failure of Tando Masti Khan Fall.	331	1958	Abdul Latif Mirza, P.S.E.I.
113.	Lining Irrigation Channels.	M.32	1917	J.A. Curry
114.	Lining of the Haveli Main Canal.	221	1939	R.S. Duncan
115.	Lining of Channels.	240	1940	G.R. Sawhney
116.	Lining of Channels.	260	1943	S.I. Mahbub

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
117.	Lining of Irrigation Channels with Particular reference to CWMP.	524	1990	S.N.H. Mashhadi Ch. Muhammad Akbar
118.	Liquid Flow and Silt Transport.	293	1951	Mohammad Ibrahim
119.	The Long Term Bahaviour of Qadirabad-Balloki (B-Q) Link Canal.	525	1990	Tahir Altaf
120.	Maintenance of Marala Weir.	12	1914	Cecil A. Colyer
121.	Marala Headworks, Site Investigation.	364	1965	H.J. Asar
122.	Marala Barrage Investigations for High Up-lift Pressures under the Downstream Floor.	399	1971	Ramiz Ahmad Malik, T.Q.A., W.P.S.E.I.
123.	Methods of Discharge Observations.	272	1945	S.L. Malhotra
124.	A Model for Efficient Distribution of Irrigation supplies among Distributaries.	526	1990	Mohammad Shafique Dr. Muhammad Latif
125.	Model Tests for Assessing the Causes of Excess Uplift Pressure under Downstream Floor of Bays No.31-40 of Marala Barrage and Remedial Measures.	400	1971	S.M. Ayoob, P.S.E.I and Ch. Mohammad Ali.
126.	Monitoring of Mangla Dam Project.	490	1986	Ch. Altaf-ur-Rehman
127.	Movement of Moisture in Soil.	285	1947	A.G. Asghar
128.	The Namel Dam.	33	1917	Lahna Singh
129.	A New Approach for the Design of Alluvial Canal System in Pakistan.	542	1993	Bagh Ali & F.J. Watts
130.	A New Treatment of the Principles of Flow.	263	1943	P. Claxton
131.	Notes on Some Works on the Swat Canal.	14	1914	A J. Wadley
132.	Notes of Locating of a Burst Main.	81	1923	W. E. Bunchanan
133.	Notes on Aerial Photographs of Canal Works.	90	1924	E.S. Lindley
134.	Notes on Outlets and adjustable Proportional Modules.	109	1927	J.D. H. Bedford

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
135.	Note on Design and Construction of the Shujabad Branch and its Distributaries.	234	1940	S.L. Malhotra
136.	Observations of Lined (Haveli) Canals.	253	1942	S.N. Kapur
137.	Observation, Record and Analysis of Pressure Pipel Data of Weirs on Permeable of Foundations.	M.294	1952	Dr. Mushtaq Ahmad
138.	Open Channel Design in a Minute.	540	1993	Dr. Farooq Khan Niazi
139.	Operating Bambanwala Ravi Bedian, Depalpur Link Canal in 1961.	369	1965	Mohammad Ali Ch.
140.	An Optical Lever Siltometer	167	1933	V.I. Vaidhianathan
141.	An Overview of Irrigation and Drainage Projects of Pakistan.	473	1985	Dr. Nazir Ahmad and Sh. Sarfraz Ahmad
142.	Panjnad Headworks after 1973 Flood.	(M)413	1974	Mohammad Aslam Chohan
143.	The Phenomena of Losses and Gains in the Indus River Syphons.	(M)329	1958	S.S. Kirmani
144.	Percolation and Absorption of Water in Soil.	78	1923	B.H. Wilsdon
145.	Performance Evaluation of Existing lined Canals in Pakistan and suggestions for Improvement.	538	1993	Dr. Nazir Ahmad S.N.H. Mashhadi Amiruddin Qureshi
146.	Pressure Observation at Jaurian and Durgai Syphons.	158	1932	A. Turner
147.	Pressure Pipe Observation at Panjnad Weir.	162	1933	A.N. Khosla
148.	Pressure under a Model of Panjnad Weir and under the prototype.	185	1935	Harbans Lal Uppal
149.	Preliminary Investgation for Storage Scheme.	268	1944	S.D. Khangar and B.R. Palta
150.	Principle of Design for Proportionate Flumes at Head of Channels.	96	1925	Prabh Singh

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
151.	The Principles of Design of a Dissipator below a Fall.	112	1927	C.A. Colyer
152.	Principles of Wells Foundations, River Training and Protection Works.	278	1945	R.O.C. Thomson
153.	Problems related with sedimentation of Reservoirs.	544	1993	Qazi M. Anwar-ul-Haq
154.	Protection of Upstream Foreshore Regulator.	161	1933	F.F. Haigh
155.	Protection Against Scour Below River and Canal Works.	214	1938	H.L. Uppal
156.	Rainfall Runoff.	(M)245	1941	S.D. Khangar and N.D. Gulhati
157.	Rasul Barrage.	398	1971	Rana Mohammad Aslam Chohan, P.S.E.I.
158.	Reconstruction of the Khanki Weir.	(M)195	1936	Ajudhia Nath Khosla
159.	Reconditioning Marala Weir.	(M)215	1938	E.O. Cox and Ganpat Rai
160.	Regime Channels.	49	1919	E.S. Lindley
161.	The Regime Concept and the River Nile.	357	1963	Gerald Lacey
162.	A Regulation Gauged for Headless Canal Meters.	205	1937	A. N. Wilson
162-A	Reinforced Concrete Syphon on the Lower Swat Canal.	42	1918	E.H. Burkitt
163.	Reinforced Concrete Trough Construction	121	1928	A.N. Khosla and Kanwar Sain
164.	Remedial Measures to Rasul Barrage.	471	1985	M. R. Chaudhry
165.	Remodelling Approach for Kabul River Canal System in view of Changing Agro-Hydrological Conditions.	550	1993	J.A. Tariq
166.	Remodelling Upper Chanab Canal Head Regulator at Marala.	210	1939	C.L. Handa
167.	Remodelling of Mithalak Distributary.	154	1932	K.R. Sharma

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
168.	Remodelling of Channels on the Lower Bari Doab Canal, Illustrated by Dulwans (15 L) Distributary.	172	1934	S.L. Malhotra
169.	Remodelling Distributaries and Distribution of Water to Area Irrigated by Colony Canals.	(M)230	1940	A.W.M. Jesson
170.	Remodelling Inundation Canal in the Muzaffargarh District.	47		G.W. Duthy
171.	Rmodelling Balloki Headworks.	375	1965	Rana Mohammad Aslam Chohan
172.	Remodelling of Rohri Canal System.	465	1983	Barkat Ali Luna and S.N. H. Mashhadi
173.	Remodelling Bambanwala Cross Regulator.	541	1993	Usman Akram
174.	Remodelling Marala Barrage and Link Canal for Silt Control.	484	1986	Rana M. Aslam Chohan
175.	Repairs and Remodelling of Rasul Weir, 1929-31.	155	1932	T.A. Foy
176.	Report on Flume Experiment on Sirhind Canal.	(M)110	1927	A.G.C. Fane
177.	River Training Works and Diversion of Sutlej near Bahawalpur.	27	1916	J. Harford
178.	River Diversion at Trimmu.	229	1939	Som Nath Kapur
179.	River Training and Control by pitched Islands.	275	1945	A.M.R. Montagu and Dr. H.L. Uppal
180.	River Training Works of Empress Bridge Adamwahan.	309	1955	M.A. Wahidi
181.	Scientific Distribution of Canal Water and the use of Auto Adjusting Distribution.	128	1929	Radha Krisbana Khanna
182.	Scientific Irrigation Channel Design.	187	1936	T. Blench

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
183.	Scientific Land Water Use for Increased Production in West Pakistan.	384	1968	Ch. Mohammad Hussain
184.	Sedimentation of Reservoirs on Indus River System.	325	1956	Nazir Ahmad and Abdul Hamid
185.	Sediment Problems in the Indus Basin.	336	1959	S.S. Kirmani
186.	Sediment Transportation by Running Water and the Design of Stable Channels in Alluvial Soil.	347	1961	Prof. Ir. H. Vlugter
187.	Sediment Exclusion Methods and Devices at the Intake of Canals.	341	1960	Dr. Mushtaq Ahmad, Mohammad Ali and Abdul Khaliq
188.	Shock in Regime Channel.	233	1940	Cerald Lacey
189.	Sidhani Dam Bridge.	232	1940	C.L. Handa and Madan Lal
190.	Sillanwali Drain.	178	1935	S.D. Khangar and N.D. Gulhati
191.	A Silt Selective Distributary Head Regulator.	189	1936	K.R. Sharma
192.	Silt Movement and Design of Channels.	192	1936	Dr. N.K. Bose
193.	Silt Excluders.	(M)211	1938	F.F. Haigh
194.	Silting Tanks on the Western Jumna Canal.	277	1945	H.L. Vaders
195.	On silting Distribution and Factors Affecting Sediment Exclusion from Canals.	301	1954	Pir Mohammad Ibrahim and Dr. Mushtaq Ahmad
196.	Silt Carrying Capacity of a Channel and Criteria for Canal Closure Against Excessive Silt Entry.	350	1961	Mushtaq Ahmad and Abdur Rehman
197.	Silt Vanes.	62	1920	H.W. King
198.	Silt Conduction by Irrigation Outlets.	168	1933	K.R. Sharma
199.	Silt Exclusion from Distributaries.	(M)169	1933	H.W. King
200.	Silt Selection of Kala Bagh Dam.	469	1985	Dr. Izhar ul Haq

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201.	Slurry Trench Method of Cut-off.	363	1965	Ramiz Ahmad Malik
202.	Some Practical Mathematics of Canal Works.	23	1915	A.J. Wadley
203.	Some Examples of Control of Floods in Torrents in the Punjab.	150	1932	Rajbansi Lal
204.	Some Aspects of the Design of Weirs or Canal Falls in Relation to Scour.	289	1951	Dr. Mushtaq Ahmad
205.	Some Experiments on Seepage Losses in Irrigation Channels.	209	1938	Nand Gopal and K.R. Sharma
206.	Some Methods of Computing Retrogression in Channels Due to Change in Sediment Charge.	395	1969	Mushtaq Ahmad and A. Rehman
207.	Some Aspects of Hydraulics of Bridge Water Ways.	434	1978	S.M.Ayoob and Ch.Muhammad Ali
208.	Some Notes on the Result of River Training in the Punjab.	15	1914	H.J.Hurvey
209.	Some Recent Trends in Barrage Design on Alluvial Rivers in Pakistan.	362	1963	Mohi-ud-Din Khan
210.	Specific Discharge Gauges of Chenab River Sites.	319	1956	Abdul Latif
211.	Stability of Weirs and Canal Works, An Application of the new Theory of Hydraulic Gradients.	142	1930	A.N. Khosla
212.	Stability of Earth Dams.	302	1954	Mohammad Nazir and J.A. Parves
213.	A Stable and Impervious Lining for Canals of West Pakistan.	344	1960	Dr.Nazir Ahmad and Abdul Razzaq
214.	A study of the Flow of Water under works on Sand Foundation by Means of Models.	173	1934	Dr.Mckenzic and Harbans Lal Uppal
215.	A Study of the Internal Economy of Water as practised by Zamindars on an Outlet on the Upper Bari Doab Canal.	151	1932	J.D.H. Bedford

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
216.	A Study of the River Conditions on a Model of Khanki Head Works and Investigation of Methods for obtaining uniform Distribution of Flow and Minimum Silt Entry in the Canal.	227	1939	C.L. Hands and Thrkar Das Gulhati
217.	Studies in Some Hydraulic Features of the Design of Taunsa Barrage.	(M)315 A.	1956	Dr.Mushtaq Ahmad
	Studies in Hydraulic Features of the Design of Taunsa Barrage.	315 B.	1956	Dr.Mushtaq Ahmad, Abdul Latif and Ch.Mohammad ali
218.	Studies in Some Hydraulic Features of the Designs of Taunsa Barrage-Part III.	327	1957	Dr.Mushtaq Ahmad and Mohammad Ali
219.	Stress and Stability Analysis of Warsak Dam.	338	1959	Asrar A. Qureshy
220.	Structural Investigations of Sukkur Barrage Arches	(M)390	1968	Mazhar Ali P.S.E.I.
221.	Syphons under Rakh Branch for the Marh Chiniot Drain.	213	1938	S.L. Malhotra
222.	Synthetic Hydrograph study of unguard catchments in Pakistan.	479	1985	Dr.Mohammad Mehboob Alam
223.	Tests of bs-Theory	310	1955	Abdul Latif
224.	Theoretical Design of a New Type of Outlet for Irrigation Channels.	146	1931	K.R.Sharma
225.	Theory of Minimum Rate of energy dissipation and its application.	KM.470	1985	Dr.Chih Ted Yang
226.	Theory and Physics of Seepage Losses from Canals.	231	1940	K.R.Sharma
227.	The Training Works on the Sutlej at Rupar.	24	1915	H.W.Nichilson
228.	Transportation of Silt by Flowing Water	95	1925	P. Claxton
229.	Training Works, River Control Sand Method for Regulation at Rupar, Khanki, Marala and Rasul.	226	1939	B.K.Kapur

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
230.	Training of River Loops and Currents on Head Works.	334	1958	S.Allah Bakhsh Khan
231.	Turbulent Flow in Channels	201	1937	T. Blench
232.	Warsak Dam Project Problem and Remedies	534	1990	Dr. Izhar-ul-Haq
233.	Water conservation through water course improvement.	505	1987	Ch. Ata-ur-Rehman
234.	Water Management Strategies for optimizing Productivity	523	1990	Ch. Nuruddin Ahmad Dr. Nazir Ahmad
235.	Water Distribution and Assessment of Revenue at Volumetric Rates.	188	1936	Khushi Ram Erry
236.	Water proofing operations on the Jhang Branch of the Lower Chenab Canal during 1913-14.	22	1915	T.A. Curry
237.	Water Requirements of Crops.	259	1943	H.R. Stewart
238.	Weirs and Headworks on the Sutlej Valley Project and some connected Problems.	103	1926	E.R. Foy
239.	Wind Generated Waves and their effects on River Bunds	436	1978	S. Mansoob Ali Zaidi
240.	Working the Right Bays of Balloki Barrage.	330	1958	Ahmad Tariq and Sarfraz K. Malik

Water Logging, Salinity, Reclamation and Drainage

Water Logging, Salinity, Reclamation and Drainage

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Behaviour of Saline-Alkaline Punjab Soils Reclamation.	311	1955	Dr. A.G. Asghar and M.A. Hafeez Khan
2.	Cause and Control of Water Logging and Salinity.	527	1990	Brig. (Rtd) Khurshid Ghias
3.	Commercial and Industrial Uses of Kallar	321	1956	Dr. A.G. Asghar
4.	Comprehensive Sewerage and Drainage Scheme, Multan.	499	1987	Syed Ziaul Hassan
5.	Consolidation of Reclamation Operation	291	1951	Dr. A.G. Asghar and M.S. Sandhu
6.	Concept, Planning and Design of Khairwala Drainage Project	458	1983	S. Mansoob Ali Zaidi
7.	Construction of Khairwala Drainage Project	472	1985	S.M.A. Zaidi
8.	Drains on the Lower Chenab Canal	67	1921	W.P. Thompson
9.	Drainage of Irrigated Soil in Arid Regions.	312	1955	Dr. A.G. Ashgar and Dr. Nazir Ahmad
10.	Drainage well Desing Option for Saline Zones	495	1987	Ch. Ata-ur-Rehman
11.	Drainage of Irrigation lands of Pakistan - A Critical Review	543	1993	Dr. Nazir Ahmad
12.	Drainage Study of Coastal Area	485	1986	Bagh Ali Shahid, S.M. A. Zaidi
13.	Exponential Law of Sub-soil Flow	140	1930	Dr. N.K. Bose
14.	Effect of Capillarity on Drainage in Waterlogged Areas.	255	1942	V.I. Vaidhianathan and Chanan Singh.
15.	Evaluation of Well Performance and Water Management of Mona Reclamation Experimental Project (1965-1970)	406	1972	Ch. Ata-ur-Rehman. P.S.E.I.

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
16.	Non Reclaimable Lands made to Blossom.	528	1990	M. Altaf Hussain Dr. Zahid Hussain
17.	The Formation and the Reclamation of Thur Lands in the Punjab.	(M)235	1940	M.L. Mehta
18.	Groundwater Flow Around a Well installed in Rechna Doab	305	1964	Dr. Nazir Ahmad and Mohammad Nazir
19.	Gypsum as an amendment of Reclamation of Saline Sodic Lands.	473	1985	Ch. M. Altaf Hussain and Mohammad Ashgar
20.	Installation in Rechna Doab Hydrologic Evaluation of Marh-Chiniot Surface Drainage System Design.	462	1983	Engr. Saleem Bashir and Dr. N.M. Awan
21.	Interceptor Drains	488	1986	Dr. Izhar-ul-Haq
22.	Performance Analysis of Scarp-1.	449	1982	Dr. N.M. Awan and Mohammad Latif
23.	Rapid Reclamation of Unbroken Saline Sodic lands with ground water.	516	1989	M. Altaf Hussain M. Asghar
24.	Reclamation of Saline Sodic Land with Chemical Amendments.	489	1986	Ch. Altaf Hussain
25.	Reclamation of Saline Sodic soils with Brackish Water.	500	1987	M. Altaf Hussain
26.	Roller Compacted Concrete and its Applications	533	1990	S.M.A. Zaidi
27.	Saline Characteristics of Water in old Canal Colonies of West Pakistan.	342	1960	Dr. A.G. Ashgar and Abdul Hamid.
28.	Salvation of Baluchistan Kachi plain.	529	1990	A.N. Cheema M. Saleem Chaudhry
29.	Severity of Waterlogging and Salinity Problem in Pakistan.	440	1980	Dr.S.M.H. Bokhari
30.	The Sub-soil Water table under the Tract Irrigated by the Lower Chenab Canal.	38	1918	C.G. May

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
31.	Sub-soil Water in the Punjab Plains	72	1922	J.H.T. Middleton
32.	Subsurface Pipe Drainage Methodology	511	1989	Javed Salim Qamar
33.	The Sub-Soil Water Table and Methods for its Investigation.	98	1926	B.H. Wilson
34.	A Study of Problems of Water Supply and Drainage of Lahore Zone using the Numerical Modelling.	531	1990	Dr. Nazir Ahmad Dr. Mohammad Awan
35.	Surface Drainage Schemes in the Punjab.	35	1917	A.N. Nanda
36.	Studies in Lysimeters:			
	Part-I Influence of the Pelicular Zone on the Proportion of Surface Application Reaching in Sub-Soil.	(M)290	1951	Dr.A.G. Asghar
	Part-II Construction of Lysimeters and Building up of oil Profiles.	(M)290	1951	Dr.A.G.Asghar and H.S. Zaidi
	Part-III Influence of Surface Application on the Sub-Soil Watertable under Different Crops.	(M)290	1951	Dr.A.G.Asghar H.S. Zaidi and M.A. Qayyum
37.	Tarbela Dam Project Seepage Problems and Remedies.	512	1989	Dr. Izhar-ul-Haq
38.	The Treatment of Waterlogged or Threatened Areas. Changes in Distribution and Supply of Irrigation Water.	124	1928	B.H. Wilsdon
39.	Technical Appraisal of Salinity Control and Reclamation project-I with Reference to Decline of Water Level.	391	1969	Ch. Ata-ur-Rehman
40.	Use of Indigenous Sulphur for Lowering Soil Alkalinity.	323	1956	Dr. A.G. Ashgar, Abdul Hamid and M. Abdullah

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
41.	Use of Brackish Water for Reclamation and Crop Production.	518	1989	M. Ramzan Ch. Ch. Bashir Ahmad M. Abaidullah
42.	Utilizing Gypsum for the Agricultural Development of Pakistan.	457	1982	Dr. Amjad Parvez Sheikh
43.	Waterlogging.	52	1919	Iqbal Hussain
44.	Waterlogging from Irrigationn Canals in Alluvial Soil.	(M) 68	1921	F.V. Elsden
45.	Waterlogging on the Upper Chenab Canal, its Causes and Cure.	(M)197	1937	R.B. B.N. Singh
46.	Waterlogging in Western Punjab.	284	1947	S.D. Khangar
47.	Water-Allowance for Reclamation on High Watertable Areas.	313	1955	Dr. A.G. Ashar and Ch. Mohammad Ata-ur-Rehman

Buildings and Works and Materials

Buildings and Works and Materials

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Air Raid Protection for Buildings.	262	1943	N.B. Shroff
2.	Automated Structured Analysis	519	1989	M. Naimetullah Cheema
3.	Building of Two Reinforced Concrete Box Culverts on N.W.R.	202	1937	S.L. Kumar
4.	Concrete Work in Loco Shops, Lahore.	5	1913	J. A. Bell
5.	Construction Plans and Methods used on the Uhl River Hydro-Electric Project.	133	1930	Col. B.C. Battye, R E.
6.	Construction of the Pipe Tunnels and Pipe Line of Uhl River Hydro-Electric Scheme.	196	1936	N. Boddington
7.	Construction of Aerodromes in the Punjab	270	1944	A.R. Khanna
8.	Construction of Storage Bins in the Punjab.	283	1947	D.P. Nayar
9.	A Computer Programme for Raft Analysis with Specific Reference to WAPDA House Raft Foundation.	425	1975	Dr. Javed Yunas Uppal and Dr. M. Taib Chaudhry
10.	Controlling Marine Bifoulding.	432	1978	Dr. Amjad Parvez Sheikh and Ch. Muhammad Abdullah.
11.	Construction of Prilling Towers with Slipform at Pakarab Fertilizers Factory, Multan.	437	1978	Mian M. Hanif
12.	A Description of the Erection and Operation of Sliding Form in Grain Elevator Construction.	66	1921	Major J. K. Wyman R.E.

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
13.	Development of Foundation for Transmission Line Towers.	318	1956	R. A. Sheikh
14.	Dominant Problems in the Design of Harbour Strutures on Mekran Coast.	416	1974	Dr. Javed Yunas Uppal and Izzat Ullah
15.	Earthquake Reconstruction in North Bihar.	217	1938	A. S. G. Lyster
16.	Efflorescene in Building and a New Method of Cure.	222	1939	Nand Gopal and M. L. Mehta
17.	Foundation Investigation and Salient Features of the Design of Chichoki Power House Raft.	316	1956	S. Irshad Ahmad and Jamil Asghar
18.	Grain Elevators and their Application to the Punjab Wheat Transport Problems.	1	1913	Victor Bayley
19.	Influences of Surfaces for Conmcentrated Loads on Slabs.	159	1932	J. Halcro Johnston
20.	Introduction of Dry Hydrate Lime as a Building Material in Pakistan.	482	1986	M. Iqbal, Ali Muhammad K.L. Khawaja
21.	An Investigation and Research Institute for Public Works Department.	54	1919	F.A. Carne
22.	Influence of Parapet Walls on the Ventilation of Roof.	361	1963	Mr. Hanif
23.	Improvement of Bearing Capacity for Foundations of Kotri Gas Turbines Extension Project.	460	1983	M.R. Chaudhry
24.	Limit State Design of Reinforced Concrete Structures.	414	1974	Dr. Khalid Mahmood
25.	Methods of Calculation and Analysis of Structures Employed by the North Western Railway.	149	1931	P.L. Dhawan
26.	Notes on Efflorescence on Buildings and Structures together with the Means of Combating.	26	1916	C.S. Waite

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
27.	Notes on Cracks in Buildings in Dera Ghazi Khan.	79	1923	J.H. Johnston
28.	Post Yielding Deflection of R.C. Beams.	549	1993	Akram Tahir Bilal Ahmad Ahmad Sana
29.	The purchase of Cement for Government Works.	132	1929	A.K. Astbury
30.	Provision for Temperature and Shrinkage Movements in Cement Concrete Structure (Plain and Reinforced).	181	1935	Kanwar Sain
31.	The Planning and Design of Modern Stadiums.	333	1958	Mohammad Ashraf,
32.	Quetta Reconstruction Progress 1935	206	1937	Captain N Baddington
33.	Reinforced Concrete Platforms for Carriage Washing at Lahore Station.	19	1915	Captain E P. Anderson, R E.
34.	Research and Investigation Section for the Public Works Department.	20	1915	Cecil A. Colyer
35.	Reinforced Concreted Tank.	53	1919	R.A. Wallace
36.	Report on Tensile Tests of Various Mortars.	114	1927	C.E. Blaker
37.	Rational Concrete Mixes Compared to Arbitrary Mixes using Typical Punjab River Sand and Gravel.	250	1941	H. Holman
38.	Recording of Temperature Changes Inside the Concrete of Sukkur Barrage Arches.	396	1969	Dr. Nazir Ahmad
39.	Shelter for the Shelter less Design and evaluation.	548	1993	Ghulam Mustafa Qazi
40.	Some Notes on Granite and its uses on Certain Works on N.W.R.	203	1937	S.L. Kumar
41.	Soil Compaction as Applied to Airfield Construction and Stability of Runway Slabs in High Spring Level Areas.	269	1944	C.L.Handa

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
42.	Some Salient Features of the Construction of Nishtar Medical College and Hospital at Multan.	303	1954	G.D. Habib
43.	A Study of Thermal Properties of the Locally Available Building Materials to Improve the Summer Comfort in Residential Buildings.	335	1958	Khan Mohammad Azam Khan and Syed Irshad Hussain
44.	Some Aspects of Design of Flexible Pavements in West Pakistan.	340	1959	Mazhar-ul-Haq and Saeed Ahmad
45.	Structual Analysis and Design of multistoreyed Framed Buildings.	358	1963	G.D. Habib
46.	The Sunshade Table.	376	1965	Ashfaq Hasan
47.	Temporary quarters: No.1 Division Khyber Railway.	84	1924	Major E.P. Anderson, R.E.
48.	Tunnelling in Connection with Uhl River Hydro-Electric Project.	(M)153	1932	G.H. Junt, M.C., Capt. R.D. Keane, R.E. and N.V. Dorrofeeff.
49.	Theory of Earthquake Resisting Design, with a Note on Earth quake Resisting Construction in Baluchistan.	165	1933	S.L. Kumar
50.	Underpinning of Satgarha Rest House	148	1931	K.R. Sharma
51.	The Use of Mud in Building Construction.	74	1922	D. Macfarlane
52.	Use of Pre-concreted Reinforcement in Slabs.	328	1958	Khan Muhammad Azam Khan, I.S.E.
53.	Wind Effect Study on An Ogival Masjid Dome.	438	1978	Sheikh Wajeehuddin, Bakhtiar Ali and Mohammad Azim

Highways, Railways and Inland Navigation

Highways, Railways and Inland Navigation

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Bituminous Road Construction	123	1928	W.S. Dorman
2.	Cheap Feeder Railway of 5 feet 6 inches Gauge, Bahawalnagar Cholistan Railway.	115	1928	T.N. Kunzru
3.	The Chaki-Dalhousie Road.	171	1934	J. Halcro Johnston
4.	Concrete Trackway on Lahore-Multan Road (Arterial No.4) Mile 2 and 3, Lahore District	193	1936	Bhikam Singh
5.	Constructiou of a Concrete Track in Miles 306-310 G.T. Road (near Lahore)	224	1939	D.P. Nayyar
6.	Construction of a Motor road round Simla.	261	1943	W.A.R. Baker and Balwant Singh
7.	Chief Considerations Affecting the Design and Usage of Railway Sleepers in India.	(M)267	1944	S.L. Kumar
8.	Cheap Specification Adopted for the Construction of Multan-Bosan Road.	296	1952	G.D. Habib
9.	Crushed Brick in Road Construction.	388	1968	Mazhar-ul-Haq Saeed Ahmad, P.S.E I.
10.	Design of Rails	280	1945	R P. Lall
11.	Damages caused on Kangra valley Road by Floods in August 1944 and their Restoration.	281	1945	H.L. Sondhi and G.C. Khanna
12.	Economic Railway Construction.	(M)86	1924	Major E.P. Anderson, D.S.O., R.E.
13.	Energy Conservations by Improving Locomotive Utilization	535	1990	M. Aurangzeb Khan.
14.	Earth Road.	137	1930	S.G. Stubbs
15.	Experiments of Premix Work in Mile 33 G.T. Road.	207	1937	Murari Lal

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
16.	Electric Traction on Pakistan Western Railway.	373	1965	S.H. Nawab
17.	Experimenal Use of Hydrated Lime in Road Construction.	383	1968	Tajamal Hussain Qureshi, P S E.I and Hashmat Ali
18.	Feasible Inland Navigation route from Kala Bagh to Port Qasim.	515	1989	Mohyuddin Khan
19.	A Few Aspects of the Punjab Road Transport Problem.	(M)65	1920	K G. Mitchell.
20.	The Future of Communications in the Punjab.	122	1928	Major H. L. Wordhonse
21.	Grade and Curves on Hill Roads.	64	1920	A.R.B. Armstrong
22.	The Hindustan-Tibet Road.	8	1914	A.R. Astbury
23.	Highways in the Punjab, Past and Future.	45	1919	W.S. Dorman
24.	Highway Financing in Pakistan.	370	1965	Saleem Akhtar Bhalli and Muzaffar Iqbal Sheikh
25.	Inland Navigation in West Pakisan - A Few Proposals.	359	1963	Mohi-ud-din Khan
26.	Intensity of Traffic on Punjab Raods.	225	1939	Brij Mohan Lal
27.	Investigation of New Railway Scheme.	247	1941	K B. Nizam-ud-Din
28.	Immunisation of Signalling Equipment in Connection with Electrification of Lahore-Khanewal Section of Pakistan Western Railway.	387	1968	M H. Bhaur P.R.S.E
29.	Methodology of Hot Mix Asphalt Paving.	474	1985	Ch. Ghulam Hussain and Raja Karamat Ullah
30.	Modern Road Construction.	106	1927	G.T Pound
31.	Modern Features of Road Design.	273	1945	W.A R. Baker

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
32.	Modern Practice in Surface Dressing.	411	1972	Abdus Salam P.S E.I.
33.	Re-conditioning of Kankar Roads.	191	1936	Brij Mohan Lal
34.	Road to Kulu.	200	1937	J. Halcro Johnston
35.	Recent Road Construction and Proposed Future Development in the Punjab.	274	1945	Brij Mohan Lal and R.N. Dogra
36.	Road Problems in Slip Affected Areas.	386	1968	M.A. Waheed P.S.E.I. and Muzaffar Iqbal Sheikh
37.	Railway Electrification (Power Supply System).	392	1969	Dr. F.A. Hamdani
38.	A Review Report on Collapsible Soils for the Design and Construction of Road.	415	1974	Syed Fayyaz Ali Shah and Hashmat Ali
39.	Role of Management, Training and Research in Rail-Road Operations.	450	1982	Mian Ghias-ud-Din
40.	Supply of Road Metal in the Punjab.	71	1922	G.T. Pound
41.	Some Aspects of Track Maintenance and Permanent Way of the North Western Railway.	87	1924	N G. Watson
42.	The Survey and Coastruction of the Kangra Valley Railway.	136	1930	Captain R.D. Waghorn
43.	Super Elevation on Highway Curves.	180	1935	Murari Lal
44.	Some Modern Bituminous Resurfacing Methods.	246	1941	Murrari Lal
45.	Soil Stabilization as Applied to Roads in India.	256	1942	S.R. Mehra
46.	A Study of the Effect of Suspension Parameters of Ride Index of a Railway Vehicle and Results of Trial on the Pakistan Western Railway.	(M)377	1965	M. Zafarul Muzaffar
47.	Suerveying and Mapping for Road.	404	1971	Saleem Akhtar Bhalli

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
48.	A study on Dieselization of Sibi-Khost Section with GEU-14 Gorup-IV Locomotives.	459	1983	Mian Ghias-ud-Din
49.	Third IRBD Highway Project.	455	1982	E.I.Johri
50.	Trial of Sand Bitumen Mixture Pavement on Naukot-Mithi Road (Sindh)	498	1987	Sajjad Haider
51.	West Soils and their Behaviour under Loads.	63	1920	Iqbal Hussain

Bridges --- Highways and Railways

Bridges -- Highways and Railways

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Analysis of Partly Stiffened Suspension Bridge Type 2F.	(M)94	1925	J. Halcro Johnston
2.	The Construction of Double Track Girder Bridge across the Jumna river on the North Western Railway between Kalanour and Sarsawa.	18	1915	A.I. Sleigh
3.	The Construction of the Road Bridges. over the Chenab and Palkhu and Wazirabad.	93	1925	W.S. Dorman
4.	Construction of a Railway Bridge over the River Indus at Kalabagh.	(M)145	1931	W D. McD Cruikshank
5.	The Completion of Kalabagh Bridge.	157	1932	P.C. Judges
6.	The Construction of a Rainforced Concrete Bridge on the Grand Trunk Road over the Bhimber Nullah, Gujrat District on Vibro-Pile Foundation.	177	1934	P.L. Varma
7.	Construction of a Road Bridge over the Sohan at Dbokpattan.	241	1941	G.R. Nangea
8.	The Design and Construction of Light Suspension Bridge.	(M)69	1922	A St. G. Lyster
9.	Description of Several Unusual Structures Adopted in Bridge Construction.	160	1933	W.T. Everall
10.	Dewatering of Foundation.	(M)339	1959	Dr. Nazir Ahmad and Zia-ul-Haq
11.	Design of a New Road Bridge over Jhelum River near Jhelum.	367	1965	Abdus Salam
12.	Design and Construction of Chichawatni Bridge.	385	1968	Abdus Salam, P.S.E.I. and S.U. Qureshi

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
13.	Design and Construction of Sutlej Bridge.	397	1969	Abdus Salam and Abdul Waheed Chaudhry
14.	Ferro-concrete Well Curbs and Roadway Slabs used on the Chenab Bridge.	59	1920	A.R.B. Armstrong
15.	Geometric Design of Faizabad Interchange	544	1993	E.I. Johri
16.	Girder Erection in the deMontmorency Bridge accross the Jhelum River at Khushab.	156	1932	Col. J.R. Simpson. R.E.
17.	Influence Line for Continuous Concrete Bridges.	324	1956	A.A. Jamal-ud-Din
18.	Metallic Arc Welding as Applied to Bridge and Allied Sturctures with Special Reference to North Western Railway.	(M)174	1934	W.T. Everall and P.S.A. Berridge
19.	Notes on the New Road Bridge over the River Ravi at Lahore.	16	1924	D. Macfarlane
20.	Notes on the Design of Girder Bridge Abutments for Broad-gauge (5'6") Tracks.	85	1924	N.G. Watson
21.	Two Notes on Grouting Applied to Bridge Work.	175	1934	J.D. Waston
22.	Prestressed Concrete Road Bridge at Wazirabad.	353	1962	Mohammad Aslam
23.	Reinforced Concrete Pile Foundation in the West Beyne Bridge	6	1913	E.A.C. Lister
24.	Reinforced Concrete Bridges on the Sirhind Canal.	120	1928	A.G.C. Fane
25.	Reinforced Concrete Trough Construction.	121	1928	A.N. Khosla
26.	Recent Practice in Girder Erection on the North Western Railway.	144	1931	Major C.F. Carson, M.C., R.E.

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
27.	Replacement of Gallery No S. 26 on the Kalka-Simla Railway by a Steel Trestle Bridge	179	1935	W.A. Anderson
28.	Raising Jhelum Bridge,	199	1937	T. Mclntyre
29.	Re-flooring the Sukkur Channel Bridge.	223	1939	S L. Kumar
30.	Restoration of the Flood Damages to the Deg Nullah Bridge.	308	1954	S. Mukhtar Ahmad
31.	Regirderng Ravi Bridge at Abdul Hakim.	332	1958	Ghulam Sarwar
32.	Shortening the Alexandra Bridge over the Chenab River near Wazirabad.	58	1920	F.C. Pavry
33.	The Testing of Bridges.	25	1916	H.S. Sales
34.	Waterway Required under Bridges with Special Reference to the Rohi Beas Bridge on N.W.R.	254	1942	Karnail Singh and Gurdial Singh

Power Hydel -- Thermal, Oil, Coal and Gas

Power Hydel - Thermal, Oil, Coal and Gas

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	An Appraisal of Rural Electrification in Pakistan.	429	1975	Mian Fazal Ahmad
2.	Addition to Guddu Thermal Power Station	451	1982	M. Hussain Ali
3.	Case Study on Use of Natural Gas for Power Generation in Pakistan.	408	1972	A.U. Loan
4.	Combating High Sulphur in the Coal at Lakhra Power Plant.	492	1987	Ghulam Murtaza Ilias
5.	Comparison of Load following Capabilities of Various Types of Commercially Proven Nuclear Power Plants and their Impacts on the Grid System Reliabilities.	442	1980	Dr. S.M. Bhutta and Prof. IRFR Vanmassenhove
6.	Distribution System Protection and Safety	409	1971	Javaid Akhtar
7.	The Electrical Equipment of the North Western Railway Power Station and Workshops of Moghalpura.	73	1922	K. Preston
8.	Emergency Plan for Rapid Development of Water Resources and Overcoming Power Load Shedding.	551	1993	Mohyuddin Khan
9.	Electric Transmission Towers	258	1942	R.C. Talwar
10.	Foundation Protection of Tarbela Hydro Power Building Units 5 - 8	487	1986	M.R. Chaudhry
11.	Fundaments of Rate Fixing for Electrical Undertakings.	208	1938	H.P. Thomas
12.	Liquid Fuel Installation at Kotri North Western Railway.	55	1920	N. Pearce
13.	Low Fall Hydro-Electric Power Illustration.	88	1924	Major J. Ashford
14.	Project for Providing the Punjab with Cheap Supply of Electric Power	50	1919	F.W. Milne

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
15.	A Plan for self sufficiency in Power for Pakistan.	537	1990	Mohyuddin Khan
16.	Planning Hydro-Electric Development in Pakistan.	297	1952	S.S. Kirmani
17.	Problems of Medium Voltage Earthing Practice in a Developing Power System.	412	1972	Mian Fazal Ahmad
18.	Pumped Storage as Peaking Station in An Interconnected Grid System	464	1983	Daud Beg
19.	Some Problems of High Voltage Transmissin in the Lower Himalays.	77	1923	Lt. Col. B.C. Battye
20.	The Selection of Electric Motors and Control Gear for Industrial Use.	186	1935	M.F. Thompson
21.	Selection of Busbar Schemes for Grid Stations. A Mathematical and Graphic Approach.	463	1983	Mohammad Irfan Akhtar
22.	Transformer Losses Devaluation Factors for the Generator Transformer of Proposed Kalabagh Hydro Station.	477	1985	Mohammad Irfan Khan
23.	Utilization of Bubbling Fluidized Bed Combustion Technology for Lakhra Coal.	506	1989	M.H. Masud Butt
24.	Village Electrification Through Micro-Power Plants in Canal Falls.	366		Mohi-ud-Din Khan
25.	Variation of Loss with Specimen Size of Alcomax III at 50 Hz Excitation.	422	1975	Parvez Rashid
26.	WAPDA Northern Grid System Need for Peaking Generating Capacity 1970-71.	381	1968	A Rahimtoola
27.	West Pakistan 500 kV Super Grid.	402	1971	Mahmood Ahmad Cheema.

Water Supply, Sewerage and Water Treatment

Water Supply, Sewerage and Water Treatment

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Appropriate Technology options for waste water treatment in Tropical Developing Countries.	530	1990	Mian Muhammad Amin
2.	The Construction of the Rawalpindi City Water Supply Extension Scheme.	104	1926	J.A.R. Bromage
3.	Design Aspects of Municipal Water Supply Pilot Projects.	393	1969	Syed Arshad Ali
4.	Design Standard for Water Supply Schemes in Pakistan.	418	1974	Dr. Iqbal Ahmad Beg
5.	Financial Planning of Water Supply Schemes.	371	1965	Iqbal Ahmad Beg
6.	Locomotive and Drinking Water Supply on the North Western Railway.	131	1929	J. Vardon
7.	Mechanical Filter Installations at Jammu.	46	1919	P.G. Dani
8.	The Metering of Water Supplies.	105	1926	W.E. Buchanan
9.	Materials and Construction of Trunk and Distribution Pipe line for Water Supply, Using Metal Pipes.	143	1931	D.A. Howell
10.	Pipes and Fittings Used in Water Service Buildings.	164	1933	J.A.R. Bromage
11.	Railway Water Supplies.	56	1920	C.B. Barrie
12.	Rational Pattern of Sewerage and Waste Disposal in Pakistan Part-I.	348	1961	Sheikh Abdul Raoof, and Sheikh Rafi Ahmad
13.	Sialkot Water Supply.	34	1917	E.S. Heard
14.	Sub-Aqueous Construction Methods Adopted during the Execution of the Lahore Sewerage Scheme.	298	1952	S. Irshad Hussain

S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
15.	Supply of Drinking Water to Rural Population.	448	1980	A.N. Cheema
16.	Socio-economic and Financial Aspects of International Water Supply and Sanitation Decade for Pakistan.	466	1983	Masih Ullah Khan
17.	Up Grading an Rehabilitation of Sewerage System.	508	1989	Mian Mohammad Amin
18.	Waste Water Treatment and re-use in Irrigation.	501	1987	Mian Mohammad Amin
19.	Water Supply Improvement.	75	1922	E. Cathrow
20.	Water Supplies to Town in Canal Colonies.	118	1928	J.A. R. Bromage
21.	The Water Supply of the Sun Eclipse Fair at Thanesar.	220	1939	D.A. Howell

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S.No.	Title of Paper	No. of Paper	Year of Publication	Name of Author
1.	Cheapest Method of Steel Production	521	1989	J.K. Jafferi
2.	A Comparative Study of Sm-Co S ND-Fe-B Permanent Magnets.	547	1993	Dr. A. Ahmad G.A. Awan
3.	Draglines and Development of the Single Bucket Excavator.	91	1925	R. Hackney
4.	Economics of Mechanization with Reference to Earth-moving Operation in Pakistan.	424	1975	S. Nisarul Haq
5.	Experience with Diesel Dragline Excavator.	116	1928	J.D.H. Bedord
6.	External Pressurized Gas Journal Bearings and their Use in High Technology and Some Performance Characteristics.	552	1993	Dr. M. Uneeb Dr. I. A. Chaudhry Dr. R. Gohar
7.	General Design Principles and Preliminary Selections of Turbine Units for a Low Head Electric Development.	306	1954	Mohammad Nazir
8.	The Karol Tubewell Scheme.	248	1941	H.L. Vadhera and A.R. Talwar
9.	The Mechanical Equipment of Irrigation Works.	7	1913	John Ashford
10.	Microprvcessor controlled Robot Aram for light Engineering Tasks.	545	1993	Dr. Israr Chaudhry, Dr. Tariq Mehmood
11.	Notes on Tube-Wells.	40	1918	John Ashford
12.	Present Knowledge about the Factors Influencing the Design of a Tubewell.	287	1951	Nazir Ahmad
13.	Planning of Tubewell Projects.	314	1955	I.A. Zafar
14.	Pumping Installation for the Warsak Lift Irrigation.	374	1965	Khan Sarwar Jan Khan

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15.	Some Experiences with Dragline Excavator.	92	1925	R.P. Hadow
16.	Some Interesting Tube-wells on the North Western Railway.	139	1930	J. Vardon
17.	Selection of Hydraulic Machines for Scarp Tubewells.	423	1975	Sardar Allah Bakhsh and Ahmad Hussain
18.	Tube-well.	10	1914	T.A. Miller Brownlie
19.	Tube-well in Borstal Jail Gardens at Lahore.	57	1920	W.S. Dorman
20.	The Tube-well Practice of the Public Health Circle, P.W.D. Punjab.	129	1929	D.A. Howell
21.	Tube-wells on Zhob Valley Railway, Baluchistanh.	152	1932	J.A. Vardon
22.	Water Supply from Tube-wells.	39	1918	T.A. Miller Brwnlie
23.	Water Table Depletion Non-Steady Flow to Wells-Effects of Soil Evaporation.	443	1980	Muhammad Saleem

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3.	A Computerized One-step Cut Flow Method for Measurement of Soil Water Diffusivity	509	1989	Zia ul Haq
4.	Construction of Cement Factory in Patiala State	239	1940	H. Holman
5.	Construction Economy through Engineering Research and Design	345	1960	I.A. Zafar
6.	A Descriptive Note on the North Western Railway Creosoting Plant at Dhilwan.	99	1926	Wazir Singh Aggarwal
7.	Determination of Cohesion and Angle of Internal Friction of Partially Saturated Soil from Stress Strain Model.	517	1989	I.H. Handani
8.	Determination of Firm Generating Capacity	380	1965	A. Rehimtoola
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10.	Development of Lahore at West Bank of Ravi.	483	1986	Dr. Javed Yunus Uppal
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13.	The Engineering Side of Fire Fighting.	243	1941	Hukam Singh

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14.	Engineering Planning for Industrial Development in Pakistan.	300	1952	I.A. Zafar
15.	The Engineering Profession in Pakistan.	(M)365	1965	S.S. Kirmani
16.	Flooding Rohtak Civil Station in September 1933 and Measures taken for Relief and for Future Safety.	194	1936	Kanwar Sain
17.	Fading on Indus Valley Microwave Link.	447	1980	Muhammad Javed
18.	Future of Science & Technology in Pakistan.	507	1989	A.R. Memon
19.	Improvements to Delhi and Lahore Stations.	286	1947	Y.P. Kulkarni and Gurdial Singh
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37.	The Relativity of Navigation and Engineering Science.	100	1926	P. Claxton
38.	Rail and Road Competition.	219	1939	F.R. Hawkes
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40.	Rawalpindi Earthquake Feb. 14, 1977.	435	1978	N.Z. Adhmi and Mansur Ahmad
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46.	Technical Education to Developing Countries.	504	1987	Shafqat Hussain Qureshi
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53.	Un-exploited Available Potential for Higher Train speeds.	497	1987	M. Amir Chaudhry
54.	Use of Bibliography in Engineering	166	1933	A.M.R. Montagu
55.	Use of one Point Proctor Standard Compaction Method for Computing Modified -- Aasho Compaction Parameter.	502	1987	I.H. Handani
56.	Utilizing Gypsum for the Agricultural Development of Pakistan.	457	1982	Dr. Amjad Parvez

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