

**SARDAR PATEL UNIVERSITY  
VALLABH VIDYANAGAR**



**SYLLABUS EFFECTIVE FROM: 2018-19  
FACULTY OF SCIENCE  
MSC Plant and Machinery Valuation  
Semester- III**

**PS03CVPM21: ENVIRONMENTAL IMPACT ASSESSMENT**

**CREDITS : 2**

UNIT	DESCRIPTION	WEIGHTAGE (%)
1	Environment: definition; air, land, water, vegetation, aquatic life, climate and the systems, which interact with nature	25
2	Why environmental studies? - a holistic approach to environmental problems	25
3	Environment and valuation - Differences between the „open market price and the negative value consequent on environmental impact; environmental issues of air pollution, acid rain, ozone layer depletion/destruction, water pollution etc.; environmental statement as to effects, negative or positive; measures to restore the damage; cost of cure. Stigma due to environmental factors	25
4	Environmental impact assessment:- i) Baseline surveys and data collection on environmental levels and pollutants; ii) Preparation of environmental status report; iii) Legal and permissible levels of environmental pollutants; iv) Analysing existing situation against permissible levels to identify excesses; v) Alternative methods to reduce pollutants to permissible levels through technical process, other solutions; vi) Social - cost-benefit analysis of solutions proposed vii) Recommended measures for short term reduction and long term elimination of negative effects; viii) Environmental Management Plan (EMP) and implementation strategy ix) Financial allocations for EMP; Outlines of environmental legislations : Forest Act, Mining Act, Industrial Health & Safety Act, Municipal Acts, Water Pollution Act, Air Pollution Act, Environment Protection Act, Wild Life (Protection) Act, Archaeological Monuments (Protection) Act etc. Leading case laws on environmental issues	25

**Suggested Books**

- (i) Environmental Impact Assessment by Canter, Mc Graw Hill
- (ii) Environmental Impact Analysis by R.K. Jain et al
- (iii) Environmental Strategy and Concern by Diwan

- (iv) Water Pollution (Prevention) Control Act, 1974, Govt. of India
- (v) Air Pollution (Prevention) Act, 1981, Govt. of India
- (vi) Environment (Protection) Act, 1986, Govt. of India
- (vii) Guidelines for Environmental clearance of various projects, Dept. of Environment, Govt. of India.
- (viii) Forest Conservation Act, 1980, Govt. of India
- (ix) Environmental Laws and Policy in India, By Shyam Divan and Armin Rosencranz, Oxford University Press, New Delhi

**PS03CVPM22: FINANCE, BUSINESS AND MANAGEMENT STUDIES CREDITS : 2**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE</b>
<b>1</b>	Goals and functions of finance organization, setting financial controlling system – planning and budgeting; Structuring of balance sheet.	<b>25</b>
<b>2</b>	Financial analysis for management decisions – tools of financial analysis - ratio analysis – fund flow, cash flow analysis; Management of working capital - components of working capital importance of working capital.	<b>25</b>
<b>3</b>	Investment decision – decision rule, discounted and non-discounted methods – NPV & IRR.	<b>25</b>
<b>4</b>	Capital structuring; Mergers and acquisitions for corporate restructuring – valuation of corporate organizations; Managing business – large, medium & small companies.	<b>25</b>

**Suggested Books**

- (i) Financial Management - 8<sup>th</sup> edition I.M. Pandey, Vikas Publication, New Delhi

**PS03CVPM23: TOWN AND REGIONAL PLANNING CREDITS : 4**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE (%)</b>
<b>1</b>	Desirability of Planning - planning practices in India - planning process and hierarchy of planning (Macro level to Micro level); Physical, social and economic factors in relation to development; Land use planning and management, Concept of city and town as a human settlement	<b>25</b>
<b>2</b>	Preparation of development plan, Land use zoning principles and its effect on real estate; Development plan : agencies involved in plan preparation and implementation: Effect of Development Plan on Valuation, effects of 73 <sup>rd</sup> and 74 <sup>th</sup> constitutional amendments; Legal mechanism for enforcement of planning document - Updating of planning document- Effect of planning document in force.	<b>25</b>

<b>3</b>	<b>Regional Planning :</b> Its aim and objectives and basic concepts; Some theories on Regional Planning e.g. delineation of region, types of region; Hierarchy of Regions, Human Settlements. Industrial location theory (WEBER and ISART).	<b>25</b>
<b>4</b>	<b>Laws Affecting Planning:</b> Development plan, rules and regulations as prepared under the Gujarat Town Planning and Urban Development Act 1976 and the M.R.T.P.	<b>25</b>

Act, 1966;  
The Development Control Regulations;  
Bombay Land Revenue Code and its important documents to be studied for Real Estate;  
Agencies involved for the preparation of Development Plan and Regional Plan under various Acts;  
Introduction to Bombay Provincial Municipal Corporation Act, 1949 and the Gujarat Municipal Act, 1961;  
Preparation of Draft T.P. Scheme and Final T.P. Scheme

- (i) Town Design by Fredrick Gibbered, London Architecture Press London.
- (ii) Principles of Town & Country Planning by Lewis Keeble.
- (iii) The Image of City by Kevin Lynch, M.I.T. Press, Cambridge, U.K.
- (iv) Site Planning by Kevin Lynch, M.I.T. Press, Cambridge, U.K.
- (v) Shopping towns
- (vi) Urban Design as Public Policy by Jonathan Barnett  
Architectural Record McGraw Hill Publication
- (vii) Planning the Indian Cities by M.N. Buch
- (viii) Social Aspects of Urban Planning ) Dr.H.D.Kopardekar  
) All India Institute of
- (ix) Management Ideas of Urban Planning ) Local Self Govt.  
) Andheri (West)
- (x) Land Pooling and Readjustments ) Bombay - 400 058
- (xi) Town Scape by Gordon.
- (xii) Urban Pattern by Gallion.
- (xiii) Architecture of Towns and Cities by Sprragrin.
- (xiv) Model Town and Country Planning Act  
Published by Town & Country Planning Organisation, Govt.of India
- (xv) Principles of Town & Country Planning by Modok V.S.
- (xvi) Town Planning by Institute of Estate Management
- (xvii) Modern Town and Country Planning Act, Published by Town and Country Planning Organisation, Government of India

**PS03CVPM24: LEGAL STUDY – II****CREDITS : 4**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE (%)</b>
<b>1</b>	Sale of goods and agreements to sell, seller's obligations as to delivery time, title, description, fitness, quality and quantity; exclusion of obligations, sales by sample, passing of property in goods.	<b>25</b>
<b>2</b>	Transfer of title by non-owner, remedies for breach of contract; rights of unpaid seller against goods.	<b>25</b>
<b>3</b>	Licensing of industries and regulation of industrial activities under various laws; viz., revenue code, industrial licensing laws etc.	<b>25</b>
<b>4</b>	Salient features of various acts such as - Factory Act, - Electricity Act, - Labour Laws Outlines of environmental laws having direct bearing on valuation of industrial undertaking/plant and machinery	<b>25</b>

**Suggested Books**

- (i) Sale of Goods Act by Pollock/Mulla
- (ii) Sale of Goods Act by P.R. Aiyar
- (iii) Hand book of Electricity Laws by Justice Mallecl
- (iv) Environmental Law and Policy in India Cases, Materials & Statutes by Divan/Nobles/Rose ncranz
- (v) Law and Practice of Property Transaction by G.M.Divekar
- (vi) The Factories Act by L.L.A
- (vii) Commentaries on Factories Act, 1948 by K.D. Srivastava
- (viii) The Workmen's Compensation Act with Rules by L.L.A (ix) Workmen's Compensation Act, 1923 by R.Aiyar/K. Aiyar (x) Employer's Guide to Labour Laws by S.R.Samant
- (xi) Labour Laws one should know by Nabhi's

**PS03CVPM25: VALUATION OF PLANT AND MACHINERY – III (VALUATION OF P&M-III)****CREDITS : 4**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE (%)</b>
<b>1</b>	Meaning and computation of terms - functional, technological and economic obsolescence	<b>25</b>

2	<p><b>VALUATION OF PLANT &amp; MACHINERY IN LEASING AND HIRE PURCHASE</b>          Difference between leasing and hire purchasing          Interpretation and classification - finance lease and operating lease          Various types of finance leases.          Treatment of leased assets in company accounts - guidance notes and accounting practices for leased plant and machinery as prescribed by Institute of Chartered Accountants of India.          Hire purchase accounting          Role of a Valuer in lease and hire purchase transactions- salient features of a valuation report in sale &amp; lease-back transaction</p>	25
3	<p>Overview of industrial structure in India. Historical perspective on industrial policy and features of the policy currently in vogue. Impact of current industrial policy on industrial investment. Industrial policy announcement of various States with special reference to incentives and concessions available for industrial investment. Policy for small scale industries. Need to keep track of changes in policy in view of their impact on valuation practice</p>	25
4	<p>Institutional arrangement for provision of industrial credit. Credit flow to industries. Role and functions of specialized development financial institutions, such as, Industrial Development Bank of India, Industrial Credit and Investment Corporation of India Ltd, Small Industries Development Bank of India, Industrial Finance Corporation of India Ltd. Industrial Reconstruction Bank of India, National Small Industries Corporation of India, Unit Trust of India, Life Insurance Corporation, General Insurance Corporation etc.;</p> <p>Role and functions of State Financial Corporations, and State Industrial Investment Development Corporations;</p> <p>Bank finance to industries;</p> <p>Valuation requirements for financial institutions and banks;</p> <p>Future Industrial scenario;</p> <p>The effect of inflation, income tax, corporation tax, government grants and incentives on the value of plant and machinery;</p> <p>Industrial visits.</p>	25

### Suggested Books

- (i) Leasing by Shri Vinod Kothari
- (ii) Publications of Central Government and State Government Agencies involved in Industrial development.
- (iii) Lease Financing and Hire Purchase by Dr. J.C. Verma
- (iv) Appraising of Machinery and Equipment, Edited by John Alico  
Published by American Society of Appraisers  
ISBN - 07-001475-2, Mc Graw Hill, New Delhi
- (v) Valuation of Plant and Machinery by C.J.C. Derry  
Property Valuation Hand Book B5  
Published by Centre for Advanced Land Use studies  
College of Estate Management
- (vi) Guidance Note of the Institute of Chartered Accountants of India on leasing.
- (vii) International Accounting Standard No. 17 on Lease Accounting.

**PS03CVPM26: VALUATION OF PLANT AND MACHINERY – IV**  
**(VALUATION OF P&M-IV)**

**CREDITS : 4**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE (%)</b>
<b>1</b>	Valuation for financial statement - historic cost and current cost accounting conventions Overview of Financial Reporting Standards-IFRS, IFRS-1, IAS-16, IAS-36 AS-28 IFRS-3	<b>25</b>
<b>2</b>	Valuation of specialized machineries / properties like (a) Jigs & fixtures (b) Press Tools (c) Moulds (d) Patterns (e) Dies and Special tools (f) Custom built machineries manufactured by the company by consuming its own material and labour (g) Petrol filling stations (h) Hotels (i) Plant structures and specialized industrial buildings which have no alternative use; Elementary study of docks and harbours; Salient features of Land Acquisition Act, 1894 and The right to fair compensation and transparency in land acquisition, rehabilitation and resettlement Act, 2013; Assessment of compensation for compulsory purchase, disturbance or total extinguishments claims.	<b>25</b>
<b>3</b>	Study of the following literature:- International Valuation Standards published by International Valuation Standards Committee, Manual of Valuation/Guidance notes in relation to valuation of plant and machinery published by Royal Institution of Chartered Surveyors.	<b>25</b>
<b>4</b>	Study of guidance notes and accounting practice for revaluation of fixed assets in books of account published by Institute of Chartered Accountants of India from time to time; Case laws - affecting valuation of plant and machinery; Valuer's role, functions and responsibilities; Code of ethics for valuers; Industrial visits.	<b>25</b>

**Suggested Books**

- (i) Valuation of Plant and Machinery (Theory & Practice) by Kirit Budhbhatti
- (ii) Guidance notes published by Institution of Chartered Accountants of India on Valuation of Fixed Assets
- (iii) Valuation of Plant and Machinery by C.J.C. Derry Property Valuation Hand Book B5 Published by Centre for Advanced Land Use studies College of Estate Management
- (iv) Inflation Accounting by W.T. Baxter
- (v) Industrial Valuation by Karlake and Nichlos Published by Estate Gazettes U.K.
- (vi) Current Value Accounting - A practical guide for business Edited by Warren Chippendale, Philips L. Defliese Published by AMCON, ISBM - 0 - 8144-5433-X
- (vii) Land Acquisition Act 1894 by V.G. Ramchandra

- (viii) Manual of Valuation/Guidance Notes in relation to valuation of plant and machinery published by Royal Institution of Chartered Surveyors, New Zealand Institute of Plant and Machinery Valuers, The European Group of Valuers of Fixed assets, Appraisal Foundation U.S.A.

**PS03EVPM21: REPORT WRITING**

**CREDITS : 4**

The subject will cover the teaching of how to write reports for various purposes for which a valuer is normally called upon for advice in general practice.

**Suggested Books**

- (i) Writing a report – Real Estate Valuation by P. T. Hardikar
- (ii) Mastering Technical Writing by Joseph C. Mancuso
- (iii) The Technical Writer’s Handbook by Matt Young
- (iv) Guide to Real Property Demonstration Appraisal Report Writing
- (v) Communicating the Appraisal:
- (vi) The Individual Condominium or PUD
- (vii) Unit Appraisal Report by Arlen C. Mills, MAI
- (viii) Hand book for writers and editors by S Sreenivas Rao , Academic Book Centre, 10 Walkeshwar, Ambawadi, Ahmedabad 380 015

**PS03EVPM22: SUSTAINABLE DEVELOPMENT**

**CREDITS : 4**

<b>UNIT</b>	<b>DESCRIPTION</b>	<b>WEIGHTAGE (%)</b>
<b>1</b>	Introduction to sustainable development: Concept of sustainable development, Rio earth Summit (1992), Brundtli and commission report, scheme of sustainability: economic, social, environmental; indicators of sustainable development and its selection criteria, Agenda 21 World Summit on Sustainable Development, Local agenda 21 (Earth Summit 2002), planning (for Sustainable Development).	<b>25</b>
<b>2</b>	Global challenges of sustainable development: poverty, pollution, population, finance for sustainable development, health, nutrition, sanitation, energy crisis, disasters, desertification, biopiracy etc. Currencies for evaluations of sustainable development- Biophysical measurements; Environmental degradations and conservation issues; Global change and sustainability issues: Climate change, biological invasion, bio-diversity concerns	<b>25</b>
<b>3</b>	Millennium development goals and its recent status (global, Indian), approaches to sustainable development: natural resource management, capacity building, Ecosystem concept in space and time; Ecosystem level processes and landscape level processes; the concept of sustainable development temporal and spatial dimensions.	<b>25</b>



<b>4</b>	Human resource development, pollution management, green policy development, good governance and recycling, reuse and recovery. Ecosystem and social processes in: (a) Rehabilitation of degraded rural landscape, (b) Rehabilitation of unbalanced soils, (c) Rehabilitation of specialized habitats, e.g. water bodies, mangroves; (d) Mined area rehabilitation participatory research and education environmental	<b>25</b>
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1. AID Environment (1997) Strategic Environmental Analysis: A New Planning Framework for Sustainable Development, AIDEnvironment, Amsterdam
2. Banuri, T and Holmberg, J (1992) Governance for Sustainable Development: a Southern perspective, IIED, London
3. Carew-Reid, J (ed) (1997) Strategies for Sustainability: Asia, IUCN in association with Earthscan, London
4. Degnbol, T (1996) The Terroir Approach to Natural Resource Management: Panacea or Phantom? – the Malian Experience, working paper no 2/1996, International Development Studies, Roskilde University, Denmark
5. Earthscan. 2002. Sustainable Development Strategies: A Resource Book. Organisation for Economic Co-operation and Development, Paris and United Nations Development Programme, New York.
6. Grieg-Gran, M (2001) „Investment in Sustainable Development: The Public–Private Interface“, in The Future is Now, vol 2, IIED, London