



**Insolvency and Bankruptcy Board of India
Press Release**

**No. IBBI/PR/2022/14
31st March 2022**

Phase 4 of Valuation Examinations *w.e.f.* 1st July 2022

In pursuance of the rule 5 (3) of the Companies (Registered Valuers and Valuation) Rules, 2017, the IBBI, being the Authority, hereby publishes the syllabus and format of the ‘Valuation Examinations’ to be conducted from 1st July 2022 for the asset classes as under:

- a. **Land and Building:** Annexure I
- b. **Plant and Machinery:** Annexure II
- c. **Securities or Financial Assets:** Annexure III

2. The details of examinations are available on IBBI website <https://ibbi.gov.in/>.

Insolvency and Bankruptcy Board of India
Valuation Examinations Division

31st March 2022

Subject: Syllabus of Valuation Examination for Asset Class - Land and Building with effect from 1st July 2022.

In pursuance of the rule 5 (3) of the Companies (Registered Valuers and Valuation) Rules, 2017, the Insolvency and Bankruptcy Board of India, being the Authority, hereby publishes the syllabus, format, and frequency of the 'Valuation Examination' for the asset class: **Land and Building** to be commenced from 1st July 2022.

I. Syllabus

Sl. No.	Coverage	Weight (%)
1.	<p>Principles of Economics - Microeconomics</p> <ul style="list-style-type: none"> - Consumption: Indifference curve, consumer surplus, elasticity - Price mechanism: determinants of price mechanism; individual and market demand schedules; conditions, exceptions, and limitations of law of demand; individual and market supply schedules; conditions and limitations of law of supply; highest, lowest and equilibrium price; importance of time element - Pricing of products under different market conditions: perfect and imperfect competition, monopoly etc. - Factors of production and their pricing: land, labour, capital, entrepreneur, and other factors - Theory of rent - Capital and interest: types of capital, gross interest, net interest - Organisation and profit: functions of entrepreneur; meaning of profit and theories of profit 	3
	<p>Macroeconomics</p> <ul style="list-style-type: none"> - Functions and role of money - Inflation: types of inflation; causes and effects of inflation; Inflationary gap - Control of inflation: monetary, fiscal, and direct measures - Deflation: causes and effects of deflation; deflationary gap; measures to control deflation; deficit financing - Savings and investment: savings and types of savings; determinants of savings; investment and types of investment; determinants of investment; relationship between savings and investment - Components of economy: primary sector, secondary sector, tertiary sector; informal sector in urban economy; parasitic components in urban economy - Concepts of gross domestic product and gross national product; capital formation etc. - Definition of parallel economy; causes of parallel economy and effects on use of land and its valuation - Impact on real estate market and construction industry 	3
2.	<p>Book-keeping and Accountancy</p> <ul style="list-style-type: none"> - Meaning and objects of book-keeping; double entry book-keeping 	3

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Books of prime entry and subsidiary books: cash book, bank book, journal, ledger, purchase and sale books, debit and credit notes register; writing of books; posting and closing of accounts - Trading account; profit and loss account; income and expenditure account - Preliminary analysis of financial statements - Cost and costing; elements of cost - fixed expenses, variable expenses, break-even point 	
3.	<p>Laws - General</p> <ul style="list-style-type: none"> - Indian legal system: salient features of the Indian Constitution, fundamental rights, directive principles of state policy - Government: executive, legislature, and judiciary - Laws of contract: formation of a contract, parties, void, voidable and unenforceable contract, contingent contract, misrepresentation, fraud, and effect thereof, termination of contract, remedies for breach, performance of contract, indemnity and guarantee, law of agency - Tort: general principles of tort, tort affecting valuation - Law of arbitration and conciliation: salient features - Auction: authority of auctioneer, duties of vendor, purchaser and public, mis-description and misrepresentation, advertisements, particulars and catalogues, statements on the rostrum, conduct of sale, reservation of price, right to bid, bidding agreements, memorandum of the sale, deposit, rights of auctioneer against vendor and purchaser - Laws of evidence: burden of proof, presumptions, conclusive proof - Salient features of the Insolvency and Bankruptcy Code, 2016 concerning valuation - The Companies Act, 2013: Section 192(2), 230 (1), 230 (2), 230 (3), 231, 232, 247 and 281(1) - Salient features of the Companies (Registered Valuers and Valuation) Rules, 2017 - Salient features of the Securitisation and Reconstruction of the Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002) concerning valuation - Section 5(n) of the Banking Regulation Act, 1949 on “secured loan or advance” 	9
4.	<p>Introduction to Statistics</p> <ul style="list-style-type: none"> - Data classifications and processing, graphical representation of data, frequency distributions - Measures of central tendency, dispersion, and skewness - Elementary theory of probability and probability distributions, sampling, and sampling distributions - Simple test of significance, regression and correlation, multiple correlation coefficient - Time series - Index numbers 	2
5.	<p>Environmental Issues in Valuation</p> <ul style="list-style-type: none"> - Environment and valuation - differences between the market price and the negative value consequent on environmental impact - Environmental issues of air pollution, water pollution, environmental factors and their effects, measures to restore the damage, cost to cure 	3

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Outlines of environmental legislations: the Indian Forest Act, 1927, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 - Laws related to industrial health and safety 	
6.	<p>Professional/Business Ethics and Standards</p> <ul style="list-style-type: none"> - Model code of conduct under the Companies (Registered Valuers and Valuation) Rules, 2017: professional competence and due care, independence and disclosure of interest, confidentiality, information management, gifts, and hospitality - Integrity and fairness, remuneration and costs, occupation, employability and restrictions, business ethics - Ethical considerations under terms of engagements: engagement letter, management representation, guidance on use of work of experts, independence and conflict of interest, quality review process of valuers, rights, and responsibilities of valuers 	3
7.	<p>Laws related to Real Estate</p> <ul style="list-style-type: none"> - Land acquisition - the right to fair compensation and transparency in the land acquisition, the Rehabilitation and Resettlement Act, 2013 - General building rules and regulations - Rent control laws: sections pertaining to occupancy rights of tenants, freezing of rent, protection against eviction of tenant and its effect on value of property - Right of way and Section 52 - licenses under the Indian Easements Act, 1882 - Salient features of the Real Estate (Regulation and Development) Act, 2016 and regulating authorities established under the Act - The Transfer of Property Act, 1882: transfer of immovable property, sale, mortgage, gift, exchange, assignment, charge, lien, tenancies/sub-tenancies; lease of immovable property; lease granted by private and statutory bodies - impact of each on valuation; Sections: 3, 5, 6, 7, 25, 53 and 53A of the Transfer of Property Act, 1882 - Laws relating to inheritance/succession: Mohammedan: Muslim Personal Law; the Hindu Succession Act, 1956, the Hindu Succession (Amendment) Act, 2005; the Indian Succession Act, 1925: law of succession for person other than Hindu and Mohammedan; will & testament, succession certificate 	7
8.	<p>Valuation of Real Estate</p> <ul style="list-style-type: none"> - Cost, price, and value - Types of value - Basic elements of value - marketability, utility, scarcity, and transferability - Factors affecting value - physical, economic, legal, and social - Highest and best use, value in use, value in exchange - Real property: rights and interests in real estate; types of ownerships and types of occupancy in real estate - Annuities; capitalization and rate of capitalization; years purchase; sinking fund; redemption of capital; reversionary value - Construction and use of valuation tables - Urban infrastructure and its influence on value of real estate 	9

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Real estate market and its characteristics; investment in real estate; factors influencing demand and supply schedule in real estate - Concepts of green building 	
	<p>Income Approach to Value</p> <ul style="list-style-type: none"> - Relation between income and value - Valuation of property affected by the Rent Control Acts; licensed property under the Easement Act, 1882; leasehold properties under the Transfer of Property Act, 1882 - Derivation of yield rate from market derived data - Remunerative rate of interest and accumulative rate of interest - Types of rent: outgoings, income, yield, years purchase - Determination of market rent and standard rent - Lease - lessor and lessee: types of lease; lease provisions and covenants - Valuation of lessor's interest, lessee's interest including sub-lease in leased property; premature termination of lease or surrender of lease - Real estate as an investment; yield from real estate vis-à-vis other forms of investments; sound investment comparison - Investment decisions: discounted cash flow techniques, internal rate of return, net present value and capital assets pricing model - Profit method for valuation of special properties: hotels, cinema, mall, petrol pump, hill resorts 	7
	<p>Market Approach to Value</p> <ul style="list-style-type: none"> - Types of market - Market survey and data collection; sources of sale transactions - Comparison of sale instances: factors of comparison and weightages for adjustment in value - Hedonic model and adjustment grid model under sales comparison method - Land characteristics and its effect on land values - Hypothetical plotting scheme for value of large size land - Residue technique and other development methods - Valuation for joint venture development of property 	7
	<p>Cost Approach to Value</p> <ul style="list-style-type: none"> - Methods of cost estimates for buildings - Life of building: economic, physical, legal - Factors affecting life of the building - Total life, age, estimating future life - Various methods of computation of depreciation, functional, technological, and economic obsolescence - Reproduction cost/replacement cost, depreciated replacement cost (DRC) working, adopting DRC as value subject to demand and supply aspect - Land value by market approach and building value by cost estimation method for owner occupied bungalows, factories, public buildings 	7
	<p>Various purposes of Valuation</p> <ul style="list-style-type: none"> - Valuation of properties for purposes such as: bank finance, auction reserve, building insurance, sale, purchase, valuation disputes in court, probate, partition, rent fixation, stamp duty, capital gains tax, as per rule 11UA of the Income Tax Act, 1961, lease and mortgage of property, any other purposes not referred above - Valuation standards as per the provisions of the Companies Act, 2013 	3

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Indian accounting standards (Ind AS 16, Ind AS 36, Ind AS 40, Ind AS 113) as applicable to valuation - Valuer as an expert witness in court - Valuers' functions & responsibilities, error of judgement and professional negligence 	
9.	<p>Principles of Insurance and Loss Assessment</p> <ul style="list-style-type: none"> - Principles and legal concepts in relation to insurance of buildings; contract of insurance; insurable interests; liability to insure; duties of the insurer and the insured - Types of fire policies; reinstatement value, indemnity policies and policies for other perils; terms and conditions; perils, beneficial and restrictive clauses - Value at risk, sum insured and condition of average, over and under insurance; provisions regarding inflation, depreciation, obsolescence, and betterment; other provisions - Preparation of claim for damages due to insured perils - Obligations and rights of insurer and insured 	3
10.	<p>Report writing</p> <ul style="list-style-type: none"> - Reports: quality, structure, style - Report writing for various purposes of valuation: sale, purchase, purchase, mortgage, taxation, insurance, liquidation etc. - Contents of the report: instruction of clients; date as on which valuation is made and date of report; site inspection; location; ownership history; data collection and analysis; type of construction; valuation method; value estimation; assumptions and limiting conditions including caveats and conclusion 	3
11.	<p>Important Case Laws on principles of valuation of Real Estate:</p> <ul style="list-style-type: none"> - R.C. Cooper Vs. Union of India, (1970) AIR SC 564 - Sorab D. Talati Vs. Joseph Michem, Appeal No. 101 Of 1949 in R.A. Application No. 805 of 1948 - CWT Vs. P.N. Sikand (1977) 107 ITR 922 (SC) - Wenger & Co. Vs. DVO (1978) 115 ITR 648 Delhi HC - Jawajee Nagnathan Vs. Revenue Divisional Officer (1994) SCC (4) 595 (SC) - Chimanlal Hargovinddas Vs. SLAO, Pune AIR 1988 SC 1652 - CED Vs. Radhadevi Jalan (1968) 67 ITR 761 (Cal) - CIT Vs. Ashima Sinha (1979) 116 ITR 26 (Cal) - CIT Vs. Anupkumar Kapoor & others (1980) 125 ITR 684 (Cal) - CIT Vs. Smt. Vimlaben Bhagwandas Patel (1979) 118 ITR 134 (Guj) 	2
12.	<p>Case Studies:</p> <p>Three case studies on valuation of land and building:</p> <ul style="list-style-type: none"> - One case study with six 2-mark questions, for 12 marks - One case study with four 2-mark questions, for 8 marks - One case study with three 2-mark questions, for 6 marks <p>(This section will have case studies for application of valuation techniques. For each case there will be a comprehension narrating the transaction based on which questions will be asked from the case)</p>	26
Total		100

Note: Wherever any Law, Act of Parliament or any Rule/Regulation is referred in the syllabus, the same shall be taken as updated as on 31st March 2022.

II. Format and Frequency of Examination

- a. The examination is conducted online (computer-based in a proctored environment) with objective multiple-choice questions;
- b. The examination centres are available at various locations across the country;
- c. The examination is available on every working day;
- d. A candidate is expected to thoroughly read the relevant Frequently Asked Questions (FAQs) on Valuation Examinations placed on the IBBI website before registering/enrolling for the examination;
- e. A candidate may choose the time, the date, and the Examination Centre of his choice for taking the Examination. For this purpose, he needs to enrol and register at <https://certifications.nism.ac.in/nismaol/>;
- f. A fee of Rs. 1770 (Seventeen hundred and seventy rupees) is currently applicable on every enrolment;
- g. The duration of the examination is 2 hours;
- h. A candidate is required to answer all questions. No marks will be awarded if a question is not attempted;
- i. A wrong answer attracts a negative mark of 25% of the marks assigned for the question;
- j. A candidate needs to secure 60 % of marks for passing;
- k. A successful candidate is awarded a certificate by the Authority;
- l. A candidate is issued a temporary mark sheet on submission of answer paper;
- m. No workbook or study material is allowed or provided;
- n. No electronic devices including mobile phones and smart watches are allowed; and
- o. Use of only a non-memory-based calculator is permitted. Scientific Calculators (memory based or otherwise) are not allowed.

Further changes, if any, in the above details of the examination will be provided subsequently.

Insolvency and Bankruptcy Board of India
Valuation Examinations Division

31st March 2022

Subject: Syllabus of Valuation Examination for Asset Class- Plant and Machinery with effect from 1st July 2022.

In pursuance of the rule 5 (3) of the Companies (Registered Valuers and Valuation) Rules, 2017, the Insolvency and Bankruptcy Board of India, being the Authority, hereby publishes the syllabus, format and frequency of the 'Valuation Examination' for the asset class: **Plant and Machinery** to be commenced from 1st July 2022.

II. Syllabus

Sl. No.	Coverage	Weight (%)
1.	<p>Principles of Economics - Microeconomics</p> <ul style="list-style-type: none"> - Consumption: Indifference curve, consumer surplus, elasticity - Price mechanism: determinants of price mechanism; individual and market demand schedules; conditions, exceptions and limitations of law of demand; individual and market supply schedules; conditions and limitations of law of supply; highest, lowest and equilibrium price; importance of time element - Pricing of products under different market conditions: perfect and imperfect competition, monopoly etc. - Factors of production and their pricing: land, labour, capital, entrepreneur and other factors - Theory of rent - Capital and interest: types of capital, gross interest, net interest Organisation and profit: functions of entrepreneur; meaning of profit and theories of profit 	3
	<p>Macroeconomics</p> <ul style="list-style-type: none"> - Functions and role of money - Inflation: types of inflation; causes and effects of inflation; Inflationary gap - Control of inflation: monetary, fiscal and direct measures - Deflation: causes and effects of deflation; deflationary gap; measures to control deflation; deficit financing - Savings and investment: savings and types of savings; determinants of savings; investment and types of investment; determinants of investment; relationship between savings and investment - Components of economy: primary sector, secondary sector, tertiary sector; informal sector in urban economy; parasitic components in urban economy - Concepts of gross domestic product and gross national product; capital formation etc. - Definition of parallel economy; causes of parallel economy and effects on use of land and its valuation - Impact on real estate market and construction industry 	3

Sl. No.	Coverage	Weight (%)
2.	<p>Book-keeping and Accountancy</p> <ul style="list-style-type: none"> - Meaning and objects of book-keeping; double entry book-keeping - Books of prime entry and subsidiary books: cash book, bank book, journal, ledger, purchase and sale books, debit and credit notes register; writing of books; posting and closing of accounts - Trading account; profit and loss account; income and expenditure account - Preliminary analysis of financial statements - Cost and costing; elements of cost - fixed expenses, variable expenses, break-even point 	3
3.	<p>Law - General</p> <ul style="list-style-type: none"> - Indian legal system: salient features of the Indian Constitution, fundamental rights, directive principles of state policy - Government: executive, legislature and judiciary - Laws of contract: formation of a contract, parties, void, voidable and unenforceable contract, contingent contract, misrepresentation, fraud and effect thereof, termination of contract, remedies for breach, performance of contract, indemnity and guarantee, law of agency - Tort: general principles of tort, tort affecting valuation - Law of arbitration and conciliation: salient features - Auction: authority of auctioneer, duties of vendor, purchaser and public, mis-description and misrepresentation, advertisements, particulars and catalogues, statements on the rostrum, conduct of sale, reservation of price, right to bid, bidding agreements, memorandum of the sale, deposit, rights of auctioneer against vendor and purchaser - Laws of evidence: burden of proof, presumptions, conclusive proof - Salient features of the Insolvency and Bankruptcy Code, 2016 concerning valuation - The Companies Act, 2013: Section 192(2), 230 (1), 230 (2), 230 (3), 231, 232, 247 and 281(1) - Salient features of the Companies (Registered Valuers and Valuation) Rules, 2017 - Salient features of the Securitisation and Reconstruction of the Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002) concerning valuation - Section 5(n) of the Banking Regulation Act, 1949 on “secured loan or advance” 	9
4.	<p>Introduction to Statistics</p> <ul style="list-style-type: none"> - Data classifications and processing, graphical representation of data, frequency distributions - Measures of central tendency, dispersion and skewness - Elementary theory of probability and probability distributions, sampling and sampling distributions - Simple test of significance, regression and correlation, multiple correlation coefficient - Time series - Index numbers 	2
5.	<p>Environmental Issues in Valuation</p> <ul style="list-style-type: none"> - Environment and valuation - differences between the market price and the negative value consequent on environmental impact 	3

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Environmental issues of air pollution, water pollution, environmental factors and their effects, measures to restore the damage, cost to cure - Outlines of environmental legislations: the Indian Forest Act, 1927, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 - Laws related to industrial health and safety 	
6.	<p>Professional/Business Ethics and Standards</p> <ul style="list-style-type: none"> - Model code of conduct under the Companies (Registered Valuers and Valuation) Rules, 2017: professional competence and due care, independence and disclosure of interest, confidentiality, information management, gifts and hospitality - Integrity and fairness, remuneration and costs, occupation, employability and restrictions, business ethics - Ethical considerations under terms of engagements: engagement letter, management representation, guidance on use of work of experts, independence and conflict of interest, quality review process of valuers, rights and responsibilities of valuers 	3
7.	<p>Law - Plant and Machinery</p> <ul style="list-style-type: none"> - 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; transfer of title by non-owner; breach of contract and remedies; rights of unpaid seller against goods - Licensing of Industries and regulation of industrial activities under various industrial licensing laws etc. - Salient features of various acts such as the Factory Act, 1948, the Electricity Act, 2003, Labour laws with regards to regulatory measures for industrial undertakings 	2
8.	<p>Valuation of Plant and Machinery</p> <ul style="list-style-type: none"> - Role, functions and responsibilities of a plant and machinery valuer - Cost, price, value and valuation - Types of market - Annuities; capitalisation and rate of capitalisation; years purchase; sinking fund; redemption of capital; reversionary value - Construction and use of valuation tables - Definitions of the various terms: plant, machinery, furniture, fixtures, fittings - judicial interpretation of these terms; market value, highest and best use value - Basis of valuation: value in use, value in exchange, value to the buyer, value to the seller, value to the occupier, value in existing use in-situ/ex-situ, value in alternative use in in-situ/ex-situ, liquidation value in-situ/ex-situ, orderly liquidation value, forced sale value - Characteristics and approaches to value investment property, marketable non-investment property and non-marketable non-investment property - Factors having direct bearing on value (valuation maxims) like physical, legal, social, economic, utility, marketability, transferability, scarcity; present worth of future benefits; intangible rights 	5
	Identification and Physical Verification of Plant, Machinery and Equipment (PME)	2

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Inventory (listing of machinery) and data to be collected while taking inventory - Importance of technical specifications of PME in valuation exercise - Assessment of condition of PME based on visual inspection - Comparing inventory with plant and machinery records maintained by the company - Ascertaining discrepancy - Identification of productive, non-productive, surplus and off-balance sheet assets - Age, effective age, total economic life, economic balance life, physical life and their importance in valuation - Factors affecting life, both in terms of years or hours of use, depending on type of assets and maintenance - Definition and distinction of the terms - historical cost, acquisition cost, book cost, written down value and net book value - Items in the nature of buildings to be treated as plant and machinery- like chimneys to the boiler, brick, concrete or RCC foundation for plant and machinery, Water and Sewerage installations, Effluent treatment plant etc. 	
	<ul style="list-style-type: none"> - Depreciation under the Income Tax Act, 1961 as well as the Companies Act, 2013 - Useful lives to compute depreciation as per Schedule II of the Companies Act, 2013 - Factors to be considered for componentization of asset - Installed capacity of the plant and actual production; raw material availability and level of technology used such as current or obsolete, issues if any regards to these - Part, fraction and whole valuation - Relationship of earnings and assets - Difference between business specific economic viability and economic obsolescence - Efficiency of plant layout, imbalances in different production sections and their relevance in valuation 	3
	<p>Cost Approach</p> <ul style="list-style-type: none"> - Reproduction cost new; replacement cost new; depreciated reproduction cost/depreciated replacement cost (DRC); Difference and similarity in DRC and market value - Difference between reproduction cost new and replacement cost new - Methods of computation of reproduction cost new - Market inquiry of current cost of brand: new machine with identical specifications from same manufacturer i.e., replica indexation and its limitations; cost to capacity method and its limitation - Methods of computation of replacement cost new when identical machine/plant is not available and factors to be taken into consideration. - Direct and indirect costs for estimation of reproduction new /replacement cost new - Meaning of the term depreciation for wear and tear; Factors influencing depreciation, its measurements and application by valuers - Salvage value and scrap value along with the basis of the same 	5

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Methods of depreciation: observed deterioration; straight line; diminishing balance (written down value) - Difference between accounting and technical depreciation - Factors to be taken into consideration for selection of depreciation method - Obsolescence: technological, functional and economic - DRC subject to potential profitability - Limitations of cost approach 	
	<p>Market Approach- Sales comparison method</p> <ul style="list-style-type: none"> - Data collection - Elements of comparability and application of appropriate weights to identified comparable to estimate value of subject asset. - Instances when sales comparison method is not feasible and limitations of sales comparison method 	2
	<p>Income Approach</p> <ul style="list-style-type: none"> - Concept of income approach - Gross income-outgoings; net income and years purchase - Actual income Vs potential income - Terminal income - Remunerative and accumulative rates of interest and various methods of determining the same - Capitalization of earnings method - Discounted future earnings method (Discounted cash flow- DCF technique) - Pitfalls of DCF technique 	2
	<p>Process of Valuation</p> <ul style="list-style-type: none"> - Check list for valuation of plant and machinery; documents to be studied prior to plant visit/inspection; ABC analysis - Items to be treated as plant and machinery - Items to be treated as land and buildings - Physical verification (survey and inspection) - Data collection and valuation analysis for replacement cost new Method (cost approach) 	3
	<p>Broad categories of machines</p> <ul style="list-style-type: none"> - Valuation of a machine for which current cost of identical brand-new machine is available - Valuation of a machine for which current cost of identical brand-new machine is not available - Valuation of a machine which is no longer manufactured - Reasons for difference in price of machines with same technical specifications and features by different manufacturers - Factors to be considered while adopting cost approach - Data collection and valuation analysis under: cost, market and income approaches 	2
	<p>Leasing of plant and machinery</p> <ul style="list-style-type: none"> - Definition of lease - Leasing, Hiring and Renting - Obligations of supplier of asset, user of asset, hire purchase company/lessor in cases of loan; supplier's credit; hire purchase and leasing 	2

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Leasing as an instance of bailment; nature of the bailment agreement; features of bailment; contracts law on bailment. - Leasing rules - Types of leases and their characteristics - Structure of a lease agreement and steps in structuring a lease contract - Leasing from point of view of lessor/lessee - Limitations of leasing - Treatment of leased assets in company accounts – accounting practice for leased plant and machinery as per Indian Accounting Standards - Assessment of lease related risk - Risk and return trade-off - Valuation of leased plant and machinery 	
	<p>Valuation of plant and machinery for following purposes</p> <ul style="list-style-type: none"> - Mergers and Acquisitions (including purchase price allocation) - Financial statements - Impairment - Auction - Insurance - Leasing - Disposal - Capital raising - Corporatization and privatization - Stamp duty - Any other purpose - Valuation Standards as per the provisions of the Companies Act, 2013 - Indian Accounting Standards (Ind AS 16, Ind AS 36, Ind AS 105, Ind AS 113, Ind AS 116) as applicable to valuation - Valuer as an expert witness in Court - Valuers’ functions and responsibilities, error of judgement and professional negligence 	5
9.	<p>Machine Tools, Factory, Utility Equipment and Electrical Installations</p> <ul style="list-style-type: none"> - Machine Tools: milling, turning, cutting, drilling and threading, grinding, shaping, casting, plastic deforming, powder forming, sheet metal, welding, fabrication - Factory equipment: material handling and fire protection - Utility equipment for energy generation, energy consuming devices, for energy utilisation - Electrical installations 	2
10.	<p>Industrial Processes</p> <ul style="list-style-type: none"> - Factory planning and layout: types of plant layout; production techniques; automation; mass production, batch and one-off production - Principles of industrial processes: material flow, process sequences, automation and process control - Industrial processes: Normal processes, Methods of manufacture, Plant and machinery utilised, Flow diagrams and Inventory compilation for the following specific industries: Iron, Steel, Non-ferrous metal Production, Power, Cement, Petro-chemicals, Chemical and Pharmaceutical, Plastic and Rubber, Paper and paper Products, Printing, Binding and Publishing, Textiles, Dairy, Vegetable Oil, Food and Drink - Nature and function of trade specific machinery in the above industries 	6

Sl. No.	Coverage	Weight (%)
11.	<p>Principles of Insurance and Loss Assessment</p> <ul style="list-style-type: none"> - Principles and legal concepts in relation to insurance of Plant and Machinery; contract of insurance; insurable interests; liability to insure; duties of the insurer and the insured - Types of fire policies; reinstatement value, indemnity policies and policies for other perils; terms and conditions; perils, beneficial and restrictive clauses - Value at risk, sum insured and condition of average, over and under insurance; provisions regarding inflation, depreciation, obsolescence and betterment; other provisions - Preparation of claim for damages due to insured perils - Obligations and rights of insurer and insured 	3
12.	<p>Report writing</p> <ul style="list-style-type: none"> - Reports: Quality, Structure, Style - Report writing for various purposes of valuation: sale, purchase, purchase, mortgage, taxation, insurance, liquidation etc - Contents of the report: instructions (including basis of valuation) received from the clients showing scope of work; date as on which valuation is made and date of report; site inspection; purpose of valuation; location of assets; valuation definition considered; approach/method of valuation; procedure adopted; summary of valuation; assumptions and limiting conditions including caveats; schedule of plant and machinery with make, model, description, year, condition, values 	3
13.	<p>Important Case Laws on principles of valuation of plant and machinery:</p> <ul style="list-style-type: none"> - Holland Vs. Hodgson (1872) L.R.7 C.P.328 at 335 (Australia) - Duncan Industries Ltd. Vs. State of U.P. and Other AIR 2000 SC 355 - Westinghouse Elect. Corporation 93 NC App. 710, 379 S.E.2D 37(1989) (U.S.A) - Sirpur Paper Mills Pvt. Ltd. Vs. The Collector of the Central Excise, Hyderabad AIR (1998) 1 SCC 400: (1998 AIR SCW 366: AIR 1998 SC 1489) - Official Liquidator Vs. Sri Krishna Deo and Ors. (AIR 1959 All 247) - Symex Holdings Ltd. Vs. Commissioner of State Revenue, Supreme Court of Victoria, Australia- (2007) VSC 159 	1
14.	<p>Case Studies:</p> <p>Three case studies on valuation of plant and machinery:</p> <ul style="list-style-type: none"> - One case study with six 2-mark questions, for 12 marks - One case study with four 2-mark questions, for 8 marks - One case study with three 2-mark questions, for 6 marks <p>(This section will have case studies for application of valuation techniques. For each case there will be a comprehension narrating the transaction based on which questions will be asked from the case)</p>	26
	Total	100

Note: Wherever any Law, Act of Parliament or any Rule/Regulation is referred in the syllabus, the same shall be taken as updated as on 31st March 2022.

II. Format and Frequency of Examination

- a. The examination is conducted online (computer-based in a proctored environment) with objective multiple-choice questions;
- b. The examination centres are available at various locations across the country;
- c. The examination is available on every working day;
- d. A candidate is expected to thoroughly read the relevant Frequently Asked Questions (FAQs) on Valuation Examinations placed on the IBBI website before registering/enrolling for the examination;
- e. A candidate may choose the time, the date, and the Examination Centre of his choice for taking the Examination. For this purpose, he needs to enrol and register at <https://certifications.nism.ac.in/nismaol/>;
- f. A fee of Rs. 1770 (Seventeen hundred and seventy rupees) is currently applicable on every enrolment;
- g. The duration of the examination is 2 hours;
- h. A candidate is required to answer all questions. No marks will be awarded if a question is not attempted;
- i. A wrong answer attracts a negative mark of 25% of the marks assigned for the question;
- j. A candidate needs to secure 60 % of marks for passing;
- k. A successful candidate is awarded a certificate by the Authority;
- l. A candidate is issued a temporary mark sheet on submission of answer paper;
- m. No workbook or study material is allowed or provided;
- n. No electronic devices including mobile phones and smart watches are allowed; and
- o. Use of only a non-memory-based calculator is permitted. Scientific Calculators (memory based or otherwise) are not allowed.

Further changes, if any, in the above details of the examination will be provided subsequently.

Insolvency and Bankruptcy Board of India
Valuation Examinations Division

31st March 2022

Subject: Syllabus of Valuation Examination for Asset Class- Securities or Financial Assets with effect from 1st July 2022.

In pursuance of the rule 5 (3) of the Companies (Registered Valuers and Valuation) Rules, 2017, the Insolvency and Bankruptcy Board of India, being the Authority, hereby publishes the syllabus, format, and frequency of the 'Valuation Examination' for the asset class: **Securities or Financial Assets** to be commenced from 1st July 2022.

III. Syllabus

Sl. No.	Coverage	Weight (%)
1.	<p>Macroeconomics</p> <ul style="list-style-type: none"> - National income accounting: consumption, capital, intermediate and final goods, stock and flows concepts, gross investment, depreciation, and net investment; income method; expenditure method; value added method; GDP and NDP at factor cost and market price; national disposal income (gross and net); nominal and real income, GDP deflator - Basics of fiscal policy: meaning, objectives and components; revenue receipts, capital receipts, revenue expenditure, capital expenditure, government deficit, revenue deficit, effective revenue deficit, fiscal deficit, primary deficit - Basics of monetary policy: meaning, objectives and components; credit creation; money multiplier; tools of monetary policy- open market operation, cash reserve ratio, statutory liquidity ratio, bank rate, liquidity adjustment facility, marginal standing facility, reverse repo rate, quantitative easing; fiscal responsibility and budget management - Understanding business cycles: business cycle; phases of business cycle; yield curve as a predictor of future economic growth; real business cycle 	3
2.	<p>Finance and Financial Statement Analysis</p> <ul style="list-style-type: none"> - Finance: basic concepts of finance including time value of money - decisions in finance - investment decision; financing decision; dividend decision; net present value; internal rate of return; payback period - Financial statement analysis: financial statements; operating and non-operating assets; liabilities; incomes and expenses; profit and loss analysis; balance sheet analysis; ratio analysis; performance analysis; capital structure analysis; credit analysis; cash flow analysis 	6
3.	<p>Professional/Business Ethics and Standards</p> <ul style="list-style-type: none"> - Model Code of Conduct under the Companies (Registered Valuers and Valuation) Rules, 2017: professional competence and due care, independence and disclosure of interest, confidentiality, information management, gifts, and hospitality - Integrity and fairness, remuneration and costs, occupation, employability and restrictions, business ethics - Ethical considerations under terms of engagements: engagement letter, management representation, guidance on use of work of experts, independence and conflict of interest, quality review process of valuers, rights, and responsibilities of valuers 	3

Sl. No.	Coverage	Weight (%)
4.	<p>General laws</p> <ul style="list-style-type: none"> - The Companies Act, 2013: Chapter IV - Share Capital and Debentures; Chapter XV - Compromises, Arrangements and Amalgamations and the Companies (Compromises, Arrangements and Amalgamations) Rule, 2016; Chapter XVII - Registered Valuers; The Companies (Registered Valuers and Valuation) Rules, 2017; Chapter XX -Winding Up - The Transfer of Property Act, 1882: definition of immovable property; transfer and sale of property; rights and liabilities of buyer and seller; mortgage of property; rights and liabilities of mortgager and mortgagee; lease; gift of immovable property - The Indian Stamps Act, 1899: basics of the act; instruments on which duty is levied; valuation for duty - The Income Tax Act, 1961: taxes on individuals; taxes on companies; taxes on partnership firms; heads of income- income from salary; income from house property; income from profits; gains of business or profession; income from capital gains and income from other sources; clubbing and set off provisions; Double Taxation Avoidance Agreement; Valuation under Rule 11UA of Income Tax Act; taxation on transfer of business; transfer pricing issues; employee stock option plan or scheme - The Insolvency and Bankruptcy Code, 2016 (IBC) and Regulations: Part I of IBC: Preliminary; Part-II of IBC: Insolvency Resolution and Liquidation for Corporate Persons; The Insolvency and Bankruptcy Board of India (Insolvency Resolution Process for Corporate Persons) Regulations, 2016; The Insolvency and Bankruptcy Board of India (Liquidation Process) Regulations, 2016; The Insolvency and Bankruptcy Board of India (Voluntary Liquidation Process) Regulations, 2017; Valuation under IBC - The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002 (SARFAESI Act, 2002) - The Securities and Exchange Board of India (SEBI) Regulations: <ul style="list-style-type: none"> ▪ The SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011; ▪ The SEBI (Prohibition of Insider Trading) Regulations, 2015; ▪ The SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018; ▪ The SEBI (Delisting of Equity Shares) Regulations, 2021 ▪ The SEBI (Share Based Employee Benefits) Regulation, 2021: Employee stock option schemes, Employee stock purchase schemes and Stock appreciation rights schemes; - Reserve Bank of India and Regulations under Foreign Exchange Management Act, 1999: FEMA (Transfer or Issue of Security by a Person Resident Outside India), Regulations, 2017; Foreign Direct Investment (Pricing Guidelines); Direct Investment by Residents in Joint Venture/ Wholly Owned Subsidiary abroad; Prudential Norms for Classification, Valuation and Operation of Investment Portfolio by Banks; Guidelines on Sale of Stressed Assets by Banks 	17
5.	Financial reporting under Indian Accounting Standards (Ind AS) : Basics of fair value, fair value, and adjustments; Highest and best use, Fair value techniques, Disclosure in financial statement; Impairment of Assets (Ind	4

Sl. No.	Coverage	Weight (%)
	AS 36); Financial Instruments (Ind AS 109); Business Combinations (Ind AS 103); Fair Value Measurement (Ind AS 113)	
6.	<p>Overview of Valuation</p> <ul style="list-style-type: none"> - Meaning of value: Difference between price and value; definition of Value - Types of value: fair market value, fair value, intrinsic value, investment value, synergistic value, market value, special value - Premise of valuation: going concern and liquidation - Purpose of valuation: mergers and acquisitions, strategy evaluation, identification of under and overvalued assets, legal, financial reporting, scope of work - Valuation standards - Valuation process: understanding the business; planning and preparation; forecasting company performance; selecting the appropriate valuation model; converting forecast to valuation; applying analytical results in the form of recommendations; conclusions - Valuation report and documentation: scope of the work performed, approach adopted, method applied, key inputs used, assumptions made, conclusion(s) of value and principal reasons for any conclusions reached, and date of report, date of valuation - Importance of documentation, nature and purpose of documentation, timely preparation of documentation, documentation of valuation procedures performed, assembly of the final documentation, ownership of documentation 	4
7.	<p>Valuation Approaches</p> <ul style="list-style-type: none"> - Cost approach: net asset value and book value, adjusted value, sum of the parts, replacement cost - Market approach: quoted market price, price of recent investment and price of recent transaction, relative valuation, concept of multiples, selection of appropriate comparables; adjustments to multiple calculated in accordance with size, lines of operation and geographical areas of operation - Income approach: discounted cash flow approach; terminal value; present value; adjusted present value approach; internal rate of return; cash flow analysis- end of year and mid of year conventions; earning capitalization method /yield method; concept of perpetual growth; concept of cost of capital and capitalization rate 	3
8.	<p>Valuation Application</p> <ul style="list-style-type: none"> - Equity / Business Valuation: analysis of entity's business environment/ business model, industry analysis, regulatory framework (EIC) - Analysis of Business environment, Entity's Business Strategy Analysis: Michael Porter's five forces; SWOT; PEST; GE/McKinsey Matrix; ADL Matrix; core competencies - Business Combinations: amalgamation, merger, demerger, arrangement & restructuring; concept of due diligence, business risk assessment, historical financial analysis, sources of information; top to bottom and bottom to top approaches to analysis - Forecasting approaches and techniques; cash flow analysis - end of year and mid of year conventions 	33

Sl. No.	Coverage	Weight (%)
	<ul style="list-style-type: none"> - Appropriate Cost of Capital / rate of return; built-in Discount Rate; capital Asset Pricing Model (CAPM); modified CAPM; weighted Average Cost of Capital; weighted Average Rate of return on asset; internal rate of return; arbitrage pricing theory; risk adjustments - Valuation adjustments in relation to discount and premium <p>Fixed Income Securities</p> <ul style="list-style-type: none"> - Types of fixed income securities: categories of fixed income securities i.e., debt and preferred stocks along with different rights attached to both categories - Types of debt instruments: sovereign securities; state and local government bonds; semi-government/agency bonds; corporate debt securities; corporate bonds; money market securities in relation to investments (CP, CD, T-Bills); tax free securities; asset backed securities - Terms used in fixed income securities: fixed income securities; bond indenture; issuer and holder; covenants; maturity; par value, coupon rate, clean price, dirty price; repurchase agreement; yield to maturity, yield to put, yield to call; forward rate and spot rate - Bond duration- Macaulay duration, Modified duration, Effective duration, Key duration - Credit rating of bonds: risk assessment and factors considered in assigning credit rating - Embedded options for issuer and holder; call/put for repayment; cap and floor on coupon; conversion options; pre-payment options - Derivative products: types of derivative products; calculation of swap rates; valuation of swaps; accruals on swaps - Related Fixed Income Money Market and Derivatives Association of India circulars for Non-SLR bonds, Traded bonds, Non-traded bonds-rated, Non-traded bonds-not rated, Floating rate bonds, Staggered redemption bonds, Perpetual bonds, Deep discount bonds, Bonds with call/put options, Tax free bonds, Security receipts/Pass through certificates - Option valuation: General principles - Option valuation models: Black and Scholes; Black and Scholes Merton option pricing method; Binomial tree method; Monte Carlo simulation - Valuation of other financial assets and liabilities: concept of financial and non-financial assets and liabilities; valuation of other instruments like financial guarantees and warranties <p>Intangible Assets</p> <ul style="list-style-type: none"> - Nature and classification of intangibles - Identification of nature of intangible assets: life of asset; based on function; acquired or internally generated; generating cash flow independently or not generating cash flow independently; intangible assets under development and research assets - Purpose of intangibles valuation: financial reporting under Ind AS, legal and tax reporting, estate and gift tax, amortization allowance, transfer of standalone intangible assets, transfer of intangible asset as part of transaction, collateral lending, franchises and brand license agreement, insolvency/ bankruptcy - Valuation Approaches: excess earnings method; relief-from-royalty method; premium profit method; greenfield method; distributor method; 	

Sl. No.	Coverage	Weight (%)
	other valuation approaches as applicable; rate of return and discount rate for intangibles Situation Specific Valuation - Distressed asset valuation - Start-up entities valuation - Valuation of small and medium enterprises - Valuation of cyclical firms - Valuation of investment entities - Valuation for insurance coverage	
9.	Judicial Pronouncements on Valuation - Miheer H. Mafatlal Vs. Mafatlal Industries Ltd. (1997) 1 SCC 579 - Hindustan Lever Employees' Union Vs. Hindustan Lever Limited and Ors - Brooke Bond Lipton India Ltd. (1999) 98 Comp Cas 496 (Cal) - Dinesh Vrajlal Lakhani Vs. Parke Davis (India Ltd.) (2005) 124 Comp Case 728 (Bom HC) - Dr. Mrs. Renuka Datla Vs. Solvay Pharmaceutical B.V. and Ors. - G.L. Sultania and Another Vs. The Securities and Exchange Board of India	1
10.	Case Studies This section will have three case studies for application of valuation techniques. - One case study with six 2-mark questions, for 12 marks - One case study with four 2-mark questions, for 8 marks - One case study with three 2-mark questions, for 6 marks (This section will have case studies for application of valuation techniques. For each case there will be a comprehension narrating the transaction based on which questions will be asked from the case.)	26
Total		100

Note: Wherever any Law, Act of Parliament or any Rule/Regulation is referred in the syllabus, the same shall be taken as updated as on 31st March 2022.

II. Format and Frequency of Examination

- a. The examination is conducted online (computer-based in a proctored environment) with objective multiple-choice questions;
- b. The examination centres are available at various locations across the country;
- c. The examination is available on every working day;
- d. A candidate is expected to thoroughly read the relevant Frequently Asked Questions (FAQs) on Valuation Examinations placed on the IBBI website before registering/enrolling for the examination;
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