

THE CHARUTAR VIDYA MANDAL UNIVERSITY
M.Sc.(Plant and Machinery Valuation) – SEMESTER 2
SUMMER (REGULAR) 2022 EXAMINATION

Course Title: Legal Study I

Course Code: 101380203

Total Printed Pages :03

Date: 05/05/2022

Time: 10:30 to 12:30

Maximum Marks: 60

Instructions:

- Attempt all questions.
- Numbers to the right indicate full marks for each question.
- Make suitable assumptions wherever necessary.

- Q. 1** Answer the following multiple choice questions. **(12)**
- (1) In which of the following circumstance the members of a company can be made liable for the liability of the company..
- a. In case of diversion of funds
 - b. In case of tax evasion
 - c. In case of penalties imposed by a court
 - d. In case of penalties imposed by the government
- (2) The capital of a company is divided into parts, called _____.
- a. Shares
 - b. Borrowings
 - c. Secured Loans
 - d. Bonds
- (3) What is the maximum number of members of a private limited company?
- a. 2
 - b. 200
 - c. 7
 - d. 700
- (4) Which of the following is an adjudicating authority under IBC?
- a. Debt Recovery Appellate Tribunal
 - b. The Supreme Court of India
 - c. National Company Law Tribunal
 - d. National Company Law Commission
- (5) During the moratorium period, which of the following act shall be prohibited?
- a. Transfer of assets by corporate debtor
 - b. The supply of essential goods and services to the corporate debtor
 - c. loss-making activity of the corporate debtor
 - d. a decision of committee of creditor to declare liquidation of the corporate debtor

- (6) The committee of creditor is constituted by-
 - a. Resolution Professionals
 - b. Adjudicating Authority
 - c. Insolvency and Bankruptcy Board of India
 - d. Interim Resolution Professional

- (7) The proceeds from the sale of the liquidation of assets shall be distributed lastly to –
 - a. Equity Shareholders
 - b. Preference Shareholders
 - c. Operational Creditor
 - d. the Central Government

- (8) How long is the insolvency resolution process period?
 - a. 180 days from the insolvency commencement date
 - b. 180 days from the liquidation commencement date
 - c. 180 days from date of approval of resolution plan by adjudicating authority
 - d. 180 days from date of appointment of resolution professionals

- (9) Every appeal shall be filed within how many days before the National Company Law Appellate Tribunal.
 - a. 30 days
 - b. 45 days
 - c. 45 days in case of corporate person and 30 days in case of partnership firm
 - d. maximum of 45 days if not filed within 30 days

- (10) Where the auction sale is without reserve price, the goods will be sold to –
 - a. the highest bidder.
 - b. the highest bidder only if bid is equal to the real value of the goods.
 - c. the highest bidder only there are minimum three bids.
 - d. The highest bidder only if seller accept the bid

- (11) Whether goods are destroyed or damaged before the completion of auction sale, the loss will fall on –
 - a. the highest bidder.
 - b. the seller.
 - c. the auctioneer.
 - d. the seller only if seller had participated in auction himself.

- (12) Any bidder may retract his bid at auction sale –
 - a. if he is the only bidder
 - b. if the seller has not signed the contract
 - c. until acceptance
 - d. if the auctioneer have not signed the contract.

- Q.2** Attempt **any eight** of the following. **(16)**
- (1) What do you mean by 'debt' and 'default' under IBC, 2016?
 - (2) Who cannot be financial creditors under IBC. 2016?
 - (3) What do you mean by Financial Service Provider?
 - (4) Who is operational creditor under IBC, 2016?

- (5) What do you mean by reserved price under auction sale?
- (6) Briefly state features of Auction Sale.
- (7) Can a company be a witness in the court of law?
- (8) Does the company ceased to exist because all the members are dead due to war? Why?
- (9) How does a company is distinguished from a LLP with respect to maximum number of members and liability?
- (10) Explain very briefly - composition of arbitral tribunal

Q. 3 What are the objectives of enactment of Insolvency and Bankruptcy Code, 2016? **(08)**

OR

Q.3 What shall comprise liquidation estate and what shall not be included in liquidation estate? **(08)**

Q. 4 What are the rights and duties of Auctioneer? **(08)**

OR

Q. 4 Write short notes on the following: **(08)**

- (a) Pretended bidding in Auction sale
- (b) Right to bid
- (c) Implied Warranties in Auction sale
- (d) Knock Out

Q. 5 Write Short note on the following : **(08)**

- a) One person Company
- b) 'Nidhi'
- c) Foreign Company
- d) Dormant Company

OR

Q. 5 Discuss the characteristics of a company. **(08)**

Q. 6 What are the advantages of arbitration over traditional litigation? What is 'arbitral award on agreed terms'? **(08)**

OR

Q. 6 Mention grounds on which appointment of arbitrator can be challenged. Narrate the matters that cannot be referred for arbitration. **(08)**

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THE CHARUTAR VIDYA MANDAL UNIVERSITY
M.Sc. (PLANT & MACHINERY VALUATION)– SEMESTER 2
SUMMER (REGULAR) 2022 EXAMINATION

Course Title: Principles of Machine Tools and Factory Equipment

Course Code: 101380202

Total Printed Pages : 02

Date: 04/05/2022

Time: 10.30 am to 12.30 pm

Maximum Marks: 60

Instructions:

- Attempt all questions.
- Numbers to the right indicate full marks for each question.
- Make suitable assumptions wherever necessary.

- Q. 1** Answer the following multiple choice questions. **(12)**
- (1) Which of the following is/are general purpose machine(s)?
 - a) Lathe
 - b) Drilling machine
 - c) Shaper
 - d) All of the above
 - (2) Which of the following is not a cutting parameter?
 - a) Cutting speed
 - b) Feed
 - c) Depth of cut
 - d) Height of the table
 - (3) What type of surface does a shaper machine generate?
 - a) Radial
 - b) Uneven
 - c) Flat
 - d) None of the above
 - (4) In a lathe machine work piece is supported between _____.
 - a) Headstock and Tailstock
 - b) Ram and lever
 - c) Bed and Tool
 - d) Drive mechanism and Feed mechanism
 - (5) A vertical milling machine is _____ suitable for using arbor mounting milling cutters.
 - a) Not
 - b) Highly
 - c) Somewhat
 - d) perfect
 - (6) Which of the following is not an example of a direct measuring instrument?
 - a) Scale
 - b) Micrometers
 - c) Vernier calipers
 - d) Caliper
 - (7) Which of the following material handling equipment is used to move materials over a fixed path between specific points?
 - a) Conveyor
 - b) Crane
 - c) Forklift truck
 - d) Hoist
 - (8) As per IS-2987, clockwise rotation of the wheel should produce _____.
 - a) Upward movement of controlled component
 - b) Downward movement of controlled component
 - c) Movement away from the centre (clamping of chuck)
 - d) A rectilinear movement right to the observer
 - (9) Which of the following pump is not positive displacement pump?
 - a) Piston Pump
 - b) Gear Pump
 - c) Propeller Pump
 - d) Bucket Pump

Seat No. _____

Enrollment No. _____

THE CHARUTAR VIDYA MANDAL UNIVERSITY
M. Sc. (Plant and Machinery Valuation) – Semester II
Summer (Regular) 2022 Examination

Course Title: Valuation of P&M – I

Course Code: 101380204

Total Printed Page: 3

Date: 06/05/2022

Time: 10:30 to 12:30

Total Marks: 60

Instructions:

Attempt all questions

Numbers to the right indicates full marks for each question.

Make suitable assumptions whenever necessary

Q.1 Select the most appropriate answer:

12

- 1 _____ is defined as the amount a particular purchaser agrees to pay and a particular seller agrees to accept under the circumstances surrounding their transaction.

Keywords: cost, worth, price, value

- 2 _____ value in place is an opinion of the gross amount, expressed in terms of money, that typically could be realized from a properly advertised transaction, with the seller being compelled to sell, as of a specific date, for a failed, non-operating facility, assuming that the entire facility is sold intact.

Keywords: fair market, forced liquidation, liquidation, orderly liquidation

- 3 _____ is a macro identification.

Keywords: physical size, plant layout, capacity, serial number

- 4 _____ cost can also be estimated when an appraisal is to be compared with other value indicators developed by trending.

Keywords: replacement, reproduction, production, acquisition

- 5 The costs of similar plants or pieces of equipment of different sizes vary with the size raised to some power is _____ method.

Keywords: cost to capacity, detail, trending, engineering

- 6 The difference in value between an existing old property and a hypothetical new property taken as a standard of comparison is called _____.

Keywords: accounting depreciation, appraisal depreciation, obsolescence, loss in value

- 7 Which of the following is not cause of Depreciation?

Keywords: physical deterioration, functional obsolescence, reproduction cost economic obsolescence

- 8 _____ is the number of years that have elapsed since a property was originally built or placed in service.

Keywords: age, chronological age, effective age, useful life

- 9 A primary use of the _____ is to deflate revenue streams in order to measure real

growth in output.

Keywords: PPI, CPI, IIP, WPI

- 10 A primary use of the _____ is to adjust income and expenditure streams for changes in the cost of living.

Keywords: PPI, CPI, IIP, WPI

- 11 Fixed Asset Register is for _____ purpose.

Keywords: insurance, accounting, valuation, management

- 12 WPI is compiled by _____.

Keywords: Ministry of Finance, Ministry of Corporate Affairs, Reserve Bank of India, Ministry of Commerce & Industry

Q.2 Discuss the following topics. (Answer Any Eight)

16

- 1 Define: Salvage Value
- 2 Define: Scrap Value
- 3 Define: Effective Age
- 4 Write minimum eight examples of Direct Cost
- 5 Write minimum eight examples of Indirect Cost
- 6 Strengths of the detail method
- 7 Limitation of trending method
- 8 Producer Price Index
- 9 List out plant and machinery normally valued with the premises
- 10 Name major components of a typical industrial complex.

Q.3 Discuss: Macro and Micro identification for valuation of plant & machinery

08

OR

Discuss: Classes of machinery and equipment

Q.4 Depreciation under The Companies Act

08

OR

Discuss methods of Depreciation with example.

1. Straight Line Method and
2. Written Down Value Method

Q.5 RBI indices - their uses and limitations

08

OR

Plant records and asset registers - their compilation, uses and limitations

Q.6

Name major structural components of an industrial building.
Draw neat sketches of any two types of shallow footings.

08

OR

What are the different planning regulations for industrial buildings as per the Development Control Regulations?

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Seat No. _____

Enrollment No. _____

THE CHARUTAR VIDYA MANDAL UNIVERSITY
M. Sc. (Plant and Machinery Valuation) – Semester II
Summer (Regular) 2022 Examination

Course Title: Valuation of P&M – II

Course Code: 101380205

Total Printed Page: 03

Date: 07/05/2022

Time: 10:30 to 12:30

Total Marks: 60

Instructions:

Attempt all questions

Numbers to the right indicates full marks for each question.

Make suitable assumptions whenever necessary

Q.1 Select the most appropriate answer:

12

- 1 During change of phase process:
 - (a) Temperature remains constant
 - (b) Pressure remains constant
 - (c) Enthalpy remains constant
 - (d) Energy remains constant
- 2 Unit of pressure is:
 - (a) Bar
 - (b) Pascal
 - (c) Atm
 - (d) All of the above
- 3 With increase in pressure, saturation temperature:
 - (a) Decreases
 - (b) Increases
 - (c) Remains constant
 - (d) May increase or decrease
- 4 A sample whose temperature is more than saturation temperature is called:
 - (a) Sub cooled liquid
 - (b) Wet
 - (c) Dry
 - (d) Superheated
- 5 Following is used to increase efficiency of a boiler:
 - (a) Super-heater
 - (b) Fire tubes
 - (c) Water tubes
 - (d) Air pre-heater
- 6 Energy interaction that results in change of temperature is called
 - (a) Latent heat

- (b) Sensible heat
 - (c) Work
 - (d) Internal energy
- 7 A pump handles:
- (a) Gases
 - (b) Vapor
 - (c) Liquid
 - (d) Mixture of liquid and vapor
- 8 Selection of pump depends on:
- (a) Capacity of pump
 - (b) No of pump units
 - (c) Discharge condition
 - (d) All of the above
- 9 Priming is required in:
- (a) Centrifugal pump
 - (b) Reciprocating pump
 - (c) Gear pump
 - (d) All of the above
- 10 Air conditioning deals with:
- (a) Temperature of air
 - (b) Moisture content of air
 - (c) Velocity of air
 - (d) All of the above
- 11 COP of a refrigeration system is generally: *
- (a) Greater than one
 - (b) Less than one
 - (c) Equal to one
 - (d) Between one and zero
- 12 Which of the following is not a part of VCR system:
- (a) Compressor
 - (b) Evaporator
 - (c) Condenser
 - (d) Pump

Q.2 Discuss the following topics. (Answer Any Eight)

16

- 1 Differentiate between water tube and fire tube boiler.
- 2 Differentiate between sensible and latent heat.
- 3 Define saturation temperature.
- 4 Explain the function of air vessel in a reciprocating pump.
- 5 Explain the need for priming of a pump.
- 6 Give applications of refrigeration.

- 7 Enlist different commercial refrigerants used in refrigeration system.
- 8 Why and when a lift should be inspected?
- 9 Name the unit of Force, Power, Current and Voltage
- 10 Name the electrical installation used in industrial plant

- Q.3**
- 1 Differentiate between boiler mountings and accessories. Give two examples of each 04
 - 2 Explain working of the following: 04
 - (a) Water level indicator
 - (b) Feed check valve

OR

- Q.3.** Explain working of a Babcock and Wilcox boiler and also give detailed classification of the same. 08

- Q.4** Explain working of a centrifugal pump. 08

OR

- Q.4** Explain working of a reciprocating pump. 08

- Q.5** Define refrigeration. Draw a line diagram for VCR system and write expression for COP for the same. 08

OR

- Q.5** 1 Differentiate between a VCR and VAR system 04

- 2 Draw a line diagram for a VAR system 04

- Q.6** 1 List the drawings to be sent to Chief Elect Inspector before approval. 04

- 2 List the documents which the electrical inspector would check during annual inspection. 04

OR

- Q.6.** Discuss: Case study of Lancashire Boiler 08

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Seat No. _____

Enrollment No. _____

THE CHARUTAR VIDYA MANDAL UNIVERSITY
M. Sc. (Plant and Machinery Valuation) – Semester II
Summer (Regular) 2022 Examination

Course Title: Industrial Processes

Course Code: 101380207

Total Printed Page: 3

Date: 09/05/2022

Time: 10:30 to 12:30

Total Marks: 60

Instructions:

Attempt all questions

Numbers to the right indicates full marks for each question.

Make suitable assumptions whenever necessary

Q.1 Select the most appropriate answer: 12

1 Most suitable plant layout for manufacturing of ship is _____.

Keywords: Fixed Position Layout, Process Layout, Product Layout, Hybrid Layout

2 Most suitable plant layout for manufacturing of parts of automobile is _____.

Keywords: Fixed Position Layout, Process Layout, Product Layout, Hybrid Layout

3 Most suitable plant layout for manufacturing of sugar is _____.

Keywords: Fixed Position Layout, Process Layout, Product Layout, Hybrid Layout

4 Process layout is recommended for _____ production.

Keywords: Batch, Mass, Job, Continues

5 Rated capacity of turbine measured in _____.

Keywords: KVA, MW, kV, mWhr

6 Vulcanization process is involved in _____ industry.

Keywords: Rubber, Metal, Pharma, Paper

7 Pasteurization process is involved in _____ industry.

Keywords: Cement, Ceramic, Dairy, Sugar

8 Crystallizer machine is used in _____ industry.

Keywords: Cement, Oil, Plastic, Sugar

9 Curing machine is used in _____ industry.

Keywords: Tire, Steel, Textile, Cement

10 Raw Meal Silo is used in _____ industry.

Keywords: Rubber, Metal, Cement, Paper

11 _____ production method involves a continuous production of standardized products on large scale.

Keywords: Batch, Mass, Job, Continues

12 _____ production method is generally like job production except the quality of production.

Keywords: Batch, Mass, Tailor-made, Continues

Q.2 Discuss the following topics. (Answer Any Eight)

16

- 1 Factor affecting selection of site for thermal power plant
- 2 Factor affecting selection of site for cement plant
- 3 Factor affecting selection of site for dairy unit
- 4 Availability of Raw Materials as a one of the factors for selection of plant location
- 5 Availability of Government Policy as a one of the factors for selection of plant location
- 6 List out minimum ten core machinery used in plastic industry.
- 7 List out minimum ten core machinery used in dairy Unit
- 8 Function of carding machine & combing machine in Spinning Plant
- 9 Function of Kiln in Cement Plant
- 10 Name all raw material used in Ceramic Plant

Q.3 1 Comparison between Rural Site, Suburban Site and Urban Site for selection of plant location 04

2 Objectives of Plant Layout 04

OR

Describe factors affecting selection of Plant Layout. 08

Q.4 List out minimum ten core machinery used in Spinning Unit with its important technical specification. 08

OR

List out minimum ten core machinery used in Ginning Unit with its important technical specification.

Q.5 List out minimum ten core machinery used in Sugar Plant with its important technical specification. 08

OR

List out minimum ten core machinery used in Tire Plant with its important technical specification.

Q.6 List out minimum ten core machinery used in Fresh Paper Plant with its important technical specification. 08

OR

List out minimum ten core machinery used in Steel Plant with its process description.

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