**JAIPURIA INSTITUTE OF MANAGEMENT, INDORE**

**PGDM SECOND TRIMESTER (Batch 2020-22)**

**END TERM (Improvement) EXAMINATION, March-2021**

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| Course Name | **Operations Management** | Course Code | **OM 202** |
| Max. Time | **2 hours** | Max. Marks | **40** |

**INSTRUCTIONS:**

* *Attempt all questions. Please mention name of the organization at the beginning of each question.*
* *Students must send the picture of all answers and pages via Moodle or Email as per instructions from examination department.*

**Q.1** Examine the Service – System Design Matrix with a business example. Also Critically compare them on parameters like Degree of customer/server contact, sale opportunity and production efficiency.  **(8 Marks)**

**Q.2** Examine job shop, batch shop, assembly line and continuous flow processes with one business example of each process.  **(8 Marks)**

**Q.3** Examine following Operations Management concepts with a business illustration and example.  **(4 + 4 Marks)**

a. Just in Time and Lean Manufacturing

b. Elements of Operation Strategy

**Q.4** “Float and Sail” is an organization engaged in manufacturing of fiber glass boats. The company received an order to make Ten fiber glass boats for Coast Guards. The contract was to manufacture two boats initially and then to make remaining eight boats. The first boat required 1200 hours to manufacture whereas the second boat required 1020 hours to manufacture. The current labor cost is Rs 1000/- per hour. The raw material cost for first boat was Rs. 50,000/- whereas the raw material cost for the second boat was Rs. 47,500/-. The company has a policy of charging profit @ 100 % of the total cost. What price the company should quote to the coast guards for the contract of these Ten boats? **(8 Marks)**

**Q.5 “Great Biscuits”** is a producer of milk biscuits. The company has four markets. The coordinates of markets and monthly biscuit demand is given below. The transportation cost is Rs. 100 per unit load per unit distance. The company wish to establish a centralized warehouse to serve these four markets. Determine the location of the warehouse so as to minimize total distance and cost. Also compute the total transportation cost for this location decision. **(8 Marks)**

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| --- | --- | --- | --- |
| **Market** | **X Coordinate** | **Y Coordinate** | **Total Load (MT)** |
| A | 15 | 40 | 1200 |
| B | 30 | 55 | 1600 |
| C | 70 | 90 | 2500 |
| D | 10 | 20 | 3000 |