GL BAJAJ
Institute of Management & Research. PGDM Institute
FIND YOUR SPARK
GREATER NOIDA (Approved by A.I.C.T.E., Ministry of HRD, Govt. of India)

Roll No…………

Plot No. 2, Knowledge Park-III, Greater Noida (U.P.) –201306

POST GRADUATE DIPLOMA IN MANAGEMENT (2020-22)
END TERM EXAMINATION (TERM -V)

Subject Name: **Material and Purchase Management**	Time: **02.30 hrs.**
Sub. Code: **PGO-01**	Max Marks: **60**

Note:
1. All questions are compulsory. Section A carries 10 marks: 5 questions of 2 marks each, Section B carries 30 marks having 3 questions (with internal choice question in each) of 10 marks each and Section C carries 20 marks one Case Study having 2 questions of 10 marks each.

SECTION - A

Attempt all questions. All questions are compulsory. **2× 5 = 10 Marks**

Q. 1 (A): Explain the role of Material Management in New Normal.

Q. 1 (B): Discuss the steps Acceptance Sampling.

Q. 1 (C): What are the tools of Inventory Control?

Q. 1 (D): Differentiate between Census and Sampling Inspection.

Q. 1 (E): A standard quantity of 0.75 Kg of material at a standard price of Rs. 7 per kg is allowed for the production of one unit of Product D. During the period, 550 Kg of material was used to make 1800 units of Product D. Calculate Material Quantity Variance.
(CO1)

SECTION - B

All questions are compulsory (Each question has an internal choice. Attempt any one (either A or B) from the internal choice) **10 x 3 = 30 Marks**

Q. 2: (A). "5S is the core of Lean Manufacturing." Explain. (CO2)

Or

Q. 2: (B). "Optimization is an essential skill to have in the context of Material & Purchase Management". Discuss. (CO2)

Q. 3: (A). Discuss the process of Industrial Material Purchase with reference to IT Sector. (CO3)

Or

Q. 3: (B). Discuss the scenarios where we should go for Make or Buy Decisions. (CO3)

Q. 4: (A). How Amazon is enjoying the rewards of Standardization? Explain. (CO4)

Or

Q. 4: (A). Compare the strategies of Vivo vs Samsung in the context of Vendor Management. (CO4)

SECTION - C

Read the case and answer the questions **10×02 = 20 Marks**

Q. 5: Case Study:

XYZ Ltd. is a manufacturing company engaged in the manufacturing of valves. They have been in the business for last 3 years and have been manufacturing only one type of valves. They started their business initially with sales of 10,000 valves per month and now they have grown the volume to about 50,000 valves per month. They have been buying all the raw material for the valve and were doing all the manufacturing in house. Now they have established themselves in the market and are planning to expand and produce different varieties of valves. They have their plant in the main city and the total area of the plant is 50,000 sq. ft. Now if they want to expand and continue doing all the activities of manufacturing of all the varieties in house, they would need another 50,000 sq.ft. of the area. In the recent times, the land prices in the area have more than doubled in the last 3 years and still land is available with great difficulty. Mr. Mohan is the production head of XYZ Ltd. and has been successful with the production and the level is continuously increasing. But in recent times, he is facing the problem of quality complaints which have gone up from average 0.2 % in previous 2 years to 0.5 % this year. Also, he is finding that there is a high level of dissatisfaction among the workers regarding workload as well as salary levels. The workers are regularly complaining about the over work.

Although, Mr. Mohan has found that the workers have been spending lot of time on tea breaks, lunch breaks and even in between the production spending lot of time talking to each other. But, due to insufficient workers and staff, he is unable to take strict action and the workers are taking advantage of this situation. For completing the work and delivering the products timely, he has to employ workers on overtime and his overtime cost has also increased 3 times. Mr. Mohan is worried about the new expansion plan of the management and is worried where the new workers would come from as he is already finding shortage of workers for the existing job. He has requested the management not to go for expansion immediately and look at improving and consolidating the existing set up. He has sent his request to Mr. S. Kumar Director – Operations. Mr. Kumar has gone through the request of Mr. Mohan and called a meeting of all the department heads and explained the situation to all concerned. The marketing manager has expressed very bullish prospect about the company's growth and said that the company should take advantage of growing economy and established brand image of the company and definitely go for expansion. The finance manager also expressed that this will result in economy of scale for the products and will further increase the profitability of the products. Mr. Mohan again expressed his problems regarding availability of manpower as well as production control and effect on quality and productivity. The Marketing manager asked the Production manager about the option of outsourcing. Mr. Mohan is skeptical about the outsourcing option as he felt that the outside agency will always charge more as he will try to make his profit as well and also is worried about the possible problems of deliveries. Mr. Kumar asked the Mr. Naresh who is the Purchase manager about his views. He said that since the suppliers would also be interested in doing the business, they would not like to delay as with delay they also incur loss. The Finance manager said that we can look at cost comparison for buying against in house manufacturing.

After listening to all the views, Mr. Kumar told Mr. Mohan to work out the cost of production for future sales as per the forecast given by the Marketing department. He also told Mr. Naresh to collect the details of the future requirements to get the purchase cost details for few components of the valve. Mr. Mohan and Mr. Naresh have collected their data and they have presented the data in the meeting called by Mr. Kumar to review the plan. First the marketing head Mr. Suresh presented his market forecast and then Mr. Mohan presented his report and explained the details as follows.

One supervisor with monthly salary of Rs. 5000 with expected increase of 10 % per year. Direct wages of worker as Rs. 4 per unit. With 10 % reduction in second year, no change in 3rd year and increase of 10 % every subsequent year. Material cost of Rs. 14 per unit with an increase of 10 % every year. Power and fuel cost of Rs. 2 per unit with increase of 10 % every year. Indirect labor as

50 % of direct labor. They will have to buy a new machine with a cost of Rs. 50 lac. With usable life of 5 years Mr. Naresh explained his details as follows:
Component price from supplier at Rs. 20 for the first 2 years with an increase of 10 % every subsequent year. Transportation cost of Rs. 2 per unit for the first year with increase of Rs. 0.20 every subsequent year. Inventory cost (storage cost) as 5 % per year of the basic material cost. The Marketing manager has given the sales forecast for next 5 years as follows:

Year	1	2	3	4	5
Sales quantity	300000	500000	700000	900000	1000000

Question:

Q. 5: (A). Based on this data, is it economical for XYZ Ltd.to go for buying the product from market or manufacturing in house.

Q. 5: (B). What other factors should XYZ Ltd. look at for making this decision?

Mapping of Questions with Course Learning Outcome

Question Number	**COs**	**Marks Allocated**
Q. 1:	**CO1**	**10 marks**
Q. 2:	**CO2**	**10 marks**
Q. 3:	**CO3**	**10 marks**
Q. 4:	**CO4**	**10 marks**
Q. 5:	**CO3, CO4**	**20 marks**

Note: Font: Times New Roman, Font size: 12.