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University Examinations 2023/2024

SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE MASTER OF
SCIENCE IN SUPPLY CHAIN MANAGEMENT

BFB 5208: SUPPLY CHAIN AND PROJECT MANAGEMENT

DATE: APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS: Answer question *one* and any other *two* questions

QUESTION ONE (24 MARKS)

Herb had been with the company for more than eight years and had worked on various R&D and product enhancement projects for external clients. He had a Ph.D. in engineering and had developed a reputation as a subject matter expert. Because of his specialized skills, he worked by himself most of the time and interfaced with the various project teams only during project team meetings. All of that was about to change. Herb's company had just won a two-year contract from one of its best customers. The first year of the contract would be R&D and the second year would be manufacturing. The company made the decision that the best person qualified to be the project manager was Herb because of his knowledge of R&D and manufacturing. Unfortunately, Herb had never taken any courses in project management, and because of his limited involvement with previous project teams, there were risks in assigning him as the project manager. But management believed he could do the job.

Herb's team consisted of fourteen people, most of whom would be full time for at least the first year of the project. The four people that Herb would be interfacing with on a daily basis were Alice, Bob, Betty, and Frank.

- Alice was a seasoned veteran who worked with Herb in R&D. Alice had been with the company longer than Herb and would coordinate the efforts of the R&D personnel.
- Bob also had been with the company longer than Herb and had spent his career in engineering. Bob would coordinate the engineering efforts and drafting.
- Betty was relatively new to the company. She would be responsible for all reports, records management, and procurements.
- Frank, a five-year employee with the company, was a manufacturing engineer. Unlike Alice, Bob, and Betty, Frank would be part time on the project until it was time to prepare the manufacturing plans.

For the first two months of the program, work seemed to be progressing as planned. Everyone understood their role on the project and there were no critical issues. Herb held weekly teams' meetings every Friday from 2:00 to 3:00 p.m. Unfortunately, the next team meeting would fall on Friday the 13th, and that bothered Herb because he was somewhat superstitious. He was considering canceling the team meeting just for that week but decided against it.

At 9:00 a.m., on Friday the 13th, Herb met with his project sponsor as he always did in the past. Two days before, Herb casually talked to his sponsor in the hallway and the sponsor told Herb that on Friday the sponsor would like to discuss the cash flow projections for the next six months and have a discussion on ways to reduce some of the expenditures. The sponsor had seen some expenditures that bothered him. As soon as Herb entered the sponsor's office, the sponsor said: It looks like you have no report with you. I specifically recall asking you for a report on the cash flow projections. Herb was somewhat displeased over this. Herb specifically recalled that this was to be a discussion only and no report was requested. But Herb knew that "rank has its privileges" and questioning the sponsor's communication skills would be wrong. Obviously, this was not a good start to Friday the 13th. At 10:00 a.m., Alice came into Herb's office and he could see from the expression on her face that she was somewhat distraught. Alice then spoke: Herb, last Monday I told you that the company was considering me for promotion and the announcements would be made this morning. Well, I did not get promoted. How come you never wrote a letter of recommendation for me? Herb remembered the conversation vividly. Alice did say that she was being considered for promotion but never asked him to write a letter of recommendation. Did Alice expect Herb to read between the lines and try to figure out what she really meant? Herb expressed his sincere apologies for what happened. Unfortunately, this did not make Alice feel

any better as she stormed out of Herb's office. Obviously, Herb's day was getting worse and it was Friday the 13th.

Friday the 13th No sooner had Alice exited the doorway to Herb's office when Bob entered. Herb could tell that Bob had a problem. Bob then stated: In one of our team meetings last month, you stated that you had personally contacted some of my engineering technicians and told them to perform this week's tests at 70°F, 90°F and 110°F. You and I know that the specifications called for testing at 60°F, 80°F and 100°F. That's the way it was always done and you were asking them to perform the tests at different intervals than the specifications called for. Well, it seems that the engineering technicians forgot the conversation you had with them and did the tests according to the specification criteria. I assumed that you had followed up your conversation with them with a memo, but that was not the case. It seems that they forgot. When dealing with my engineering technicians, the standard rule is, "if it's not in writing, then it hasn't been said." From now on, I would recommend that you let me provide the direction to my engineering technicians. My responsibility is engineering and all requests of my engineering personnel should go through me. Yes, Friday the 13th had become a very bad day for Herb. What else could go wrong, Herb thought? It was now 11:30 a.m. and almost time for lunch. Herb was considering locking his office door so that nobody could find him and then disconnecting his phone. But in walked Betty and Frank, and once again he could tell by the expressions on their faces that they had a problem. Frank spoke first: I just received confirmation from procurement that they purchased certain materials which we will need when we begin manufacturing. We are a year away from beginning manufacturing and, if the final design changes in the slightest, we will be stuck with costly raw materials that cannot be used. Also, my manufacturing budget did not have the cash flow for early procurement. I should be involved in all procurement decisions involving manufacturing.

I might have been able to get it cheaper than Betty did. So, how was this decision made without me? Before Herb could say anything, Betty spoke up: Last month, Herb, you asked me to look into the cost of procuring these materials. I found a great price at one of the vendors and made the decision to purchase them. I thought that this was what you wanted me to do. This is how we did it in the last company I worked for. Herb then remarked: I just wanted you to determine what the cost would be, not to make the final procurement decision, which is not your responsibility. Friday the 13th was becoming possibly the worst day in Herb's life. Herb decided not to take any further

chances. As soon as Betty and Frank left, Herb immediately sent out e-mails to all of the team members canceling the team meeting scheduled for 2:00 to 3:00 p.m. that afternoon.

Required;

- a) Explain the importance of communication skills in project management (8 marks)
- b) Was Herb the right person to be assigned as the project manager? Discuss (8 marks)
- c) There were communications issues with Alice, Bob, Betty, and Frank. For each communication issue, where was the breakdown in communications: encoding, decoding, feedback, and so on? (8 Marks)

QUESTION TWO (12 MARKS)

- a) Justify the role of procurement in project management (6 marks)
- b) Explain how you would mitigate supply failure in projects (6 marks)

QUESTION THREE (12 MARKS)

- a) Choice in the manufacturing sector
- b) Propose three supply chain risk management strategies for (a) above (6 marks)

QUESTION FOUR (12 MARKS)

- a) Discuss some of the Supply chain management skills required in project management (6 Marks)
- b) Would you propose sub-contracting in projects? Justify your answer (6 Marks)

QUESTION FIVE (12 MARKS)

- a) Discuss technological tools available for project management (6 Marks)
- b) Explain the benefits to project management team on application of technology in their operations (6 Marks)