

- 1) Explain the fault management process in the case of short circuit fault in medium voltage overhead line. What is the role of modern automation in the process.
- 2) Remote control of disconnectors is traditional feeder automation function. Explain, what else functions there could be in feeder level (disconnector stations, MV/LV substations, LV network) as part of modern distribution automation system.
- 3) Explain briefly what kind of communication is typically used in the following applications of distribution automation and why:
 - a) Communication inside substation
 - b) Communication between control center and substations
 - c) Customer meter reading
- 4) Calculate the reliability indices SAIFI, SAIDI and MAIFI in the following simple feeder. Calculate the indices also in case when the disconnector is remote controlled (switching time is 5 minutes) and in the case when the disconnector is replaced by a circuit breaker. What else method could be used to evaluate reliability?

