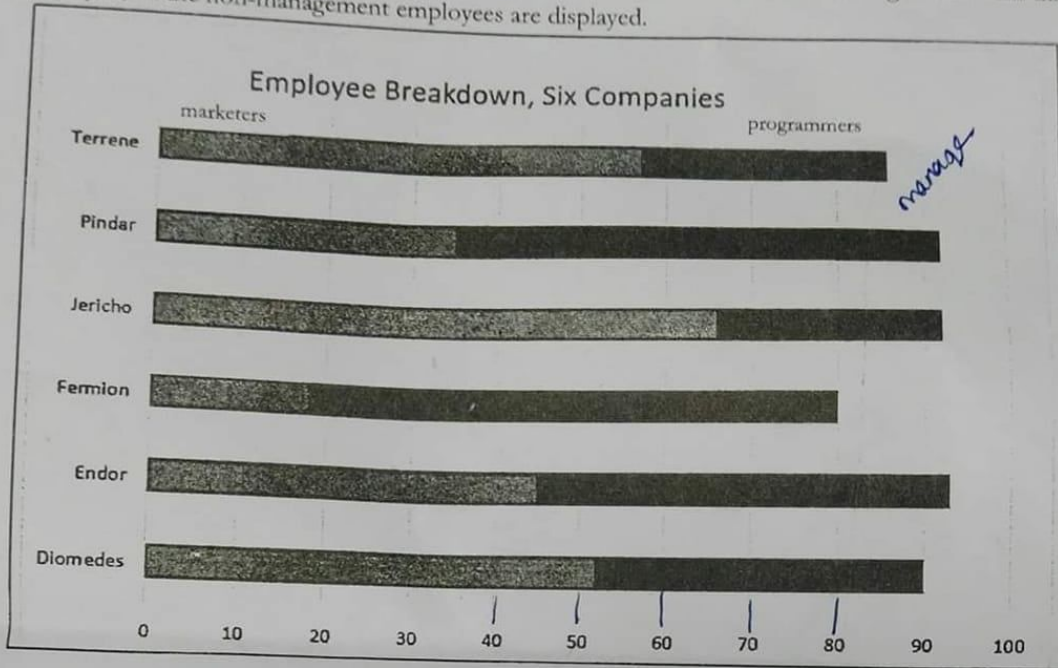


Instruction: Answer all the questions in the order they are laid out on the question paper

1. The following chart shows the employee breakdown, number of marketers vs. number of programmers, at six similarly sized companies in a particular internet market. All six have similar sized management teams that are not displayed; all the non-management employees are displayed.



- A. At Pindar, there are approximately how many more programmers than marketers? (5)
- B. At Jericho, approximately what percent of the non-management employees are marketers? (5)
- C. If were to take the average number of marketers at five of the companies, excluding Fermion, then this average would be approximately how many employees larger than if Fermion were included in the average? (10)
2. Without capital punishment our lives are less secure and crimes of violence increase. Capital punishment is essential to control violence in society. To what extent do you agree or disagree with this opinion? You should write approximately 250 words. Use your ideas, knowledge, and experience and support your arguments with examples and with relevant evidences. (25)
3. Assume that you have taken a personal loan from a bank. Of late you find yourself in some financial crunch because of which you are unable to repay it on time. Write a letter to your bank regarding this. (15)
4. **Translate the following into English:**
- ২০২১ সাল আমাদের মহান মুক্তিযুদ্ধের সুবর্ণজয়ন্তীর বছর। পেছনে তাকালে নিশ্চিত যে, গেল ৫০ বছরে আমরা অনেক এগিয়েছি। মাথাপিছু আয়, রাস্তাঘাট, দালানকোঠা, নগরায়ণ, প্রবাসী আয়, আমদানি-রফতানি, রাজস্ব আয়, শিক্ষার হারসহ প্রায় সবকিছুরই অগ্রগতি হয়েছে। প্রযুক্তির ব্যবহার বেড়েছে, চিকিৎসা ব্যবস্থাও এগিয়েছে। বাংলাদেশে ব্যক্তি খাতের প্রসার এবং একটি শিক্ষিত তরুণ উদ্যোক্তা সমাজও গড়ে উঠেছে। এ দেশে নারীর উঠে দাঁড়ানোর গল্প অপরাপর সমমানের দেশের তুলনায় উল্লেখযোগ্য। এরই মধ্যে যাত্রা হয়েছে একটি নতুন বছরের। অনেকের আশা স্বাধীনতার ৫০ বছরে এসে নবোদ্যমে যাত্রা করবে বাংলাদেশ। (20)
5. On average, the bottle-nosed dolphin comes up for air once every two minutes; the beluga whale, a close relative, comes up for air on average once every five minutes. The number of times a bottle-nosed dolphin would come up for air in a 24 hour period is approximately what percent greater than the number of times a beluga whale would come up for air in that same period? (10)
6. One pump drains one-half of a pond in 3 hours, and then a second pump starts draining the pond. The two pumps working together finish emptying the pond in one and half hour. How long would it take the second pump to drain the pond if it had to do the job alone? (10)