Lab 12

## Review

**Questions (only one correct answer)**

The correct answers are written at the end of this file. Take your time!

**Q1. Which of the following programming frameworks was used during the class?**

1. **Angular**
2. **Ruby on Rails**
3. **Pymc**

**Q2. Formula 1 can be used for:**

1. **Computing coefficients in a frequentist approach.**
2. **Creating Bayesian models.**

**Q3. In constructing a model, if we assume that the data has a Gaussian distribution, we would choose the following type of distribution for modelling:**

1. **Normal distribution**
2. **Uniform distribution**
3. **Bernoulli distribution**

**Q4. In constructing a model, if we assume that the data has a constant probability, we would choose the following type of distribution for modelling:**

1. **Normal distribution**
2. **Exponential distribution**
3. **Uniform distribution**

**Q5. Trace is used in probabilistic programming for:**

1. **Generating posterior samples**
2. **Reading data**
3. **Defining the variables of the model**

**Q6. A general algorithm used in probabilistic programming is:**

1. **k-Means**
2. **Markov chain Monte Carlo**
3. **Decision Tree**

**Q7. Let us assume a probability distribution of text messages over a month with the highest probability in day two and lower and lower probabilities over the days. Which of the following type of distribution we would choose for modelling:**

1. **Poisson distribution**
2. **Bernoulli distribution**
3. **Exponential distribution**

**Q8. We use stochastic variables for:**

1. **Reading a database with data for n variables.**
2. **Defining random processes.**

**Q9. Stochastic objects create:**

1. **Log-probabilities**
2. **The value of a deterministic object**

**Q10. Which of the following types of distribution we use for modeling if an event occurred (1) or not (0)?**

1. **Poisson**
2. **Bernoulli**
3. **Exponential**

**Q11. How are known pairs of prior and posterior distributions with a certain type of data called?**

1. **Conjugate Priors**
2. **Multinomial distributions**
3. **Connected probability distributions**

**Correct answers: Q1. c), Q2. b), Q3. a), Q4. c), Q5. a), Q6. b), Q7. a), Q8. b), Q9. a), Q10. b), Q11. a)**