

Sample exam Senior

Questions with a single best answer:

1. According to the European Directive 2012/39/EU and as far as partner donation of reproductive cells is concerned, the permitted time interval until repeat blood testing is:

- a) Up to 24 months
- b) Every 6 months
- c) Every time the samples are produced
- d) Up to 12 months
- e) Every time the samples are used

2. The biggest challenge to cells during freezing is:

- a) Their ability to endure storage at very low temperatures ($< -180^{\circ}\text{C}$)
- b) Their ability to endure storage at very low temperatures ($< -360^{\circ}\text{C}$)
- c) The lethality of an intermediate zone of temperature (-15°C to -60°C) that they must pass during cooling
- d) Tolerance to cryoprotectant agents
- e) The ability to form ice crystals

3. Vitrified embryos:

- a) Do not contain any ice crystals
- b) Are completely dehydrated
- c) Can be safely stored at -80°C
- d) Can contain ice crystals
- e) Can only be stored in liquid nitrogen

4. The genes implicated in premature ovarian failure include:

- a) SRY and SOX-9
- b) AZF and ZFX
- c) ZFX and FMR1
- d) FMR1 and AMH
- e) FSH and LH

5. During female meiosis:

- a) Meiosis I is completed during fetal development
- b) Meiosis II starts during fetal growth
- c) Meiosis I is arrested in diplotene during fetal development
- d) Meiosis II is arrested in diplotene during fetal development
- e) Meiosis I starts after puberty