

APPENDIX

QUESTIONNAIRE

Title of the research: Misconceptions in Biology Among 12th Class Students

Personal information

Name:

Gender: Male

Female

School:

Instructions:

1. Choose the correct answer and give the reason for choosing the particular option.
2. All provided information will be kept confidential and will be used sole for research purpose only.

Details of Researcher:

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Question 1. Arrange the stages of sexual reproduction in correct order.

- a. Embryogenesis, Zygote Formation, Fertilization, Gametogenesis
- b. Zygote Formation, Embryogenesis, Fertilization, Gametogenesis
- c. Fertilization, Zygote Formation, Embryogenesis, Gametogenesis
- d. Gametogenesis, Fertilization, Zygote Formation, Embryogenesis

Reason:

Question 2. Which among the following comes under unisexual organisms?

- a. Organisms who possess both sex organs in a single body.
- b. Organisms which are either male or female.
- c. Organisms who can have sex, once in a lifetime.
- d. Organisms who have sexuality other than male and female.

Reason:

Question 3. Where is stigma present in a flower?

- a. In the pistil
- b. In the stamen
- c. In filament
- d. In anther near pollen sac.

Reason:

Question 4. Why pollen grains cannot be destroyed so easily in nature?

- a. Due to its small size it gets stronger.
- b. Due to presence of sporopollenin.
- c. As it remains well preserved in the skin of insects while pollination.
- d. Due to presence of element iron in its exine.

Reason:

Question 5. A typical mature angiosperm embryo sac is 8-nucleated, 7 celled. Where are those two nucleus present?

- a. In one of the antipodal cells
- b. In polar nuclei
- c. In egg cell
- d. In between the two synergid cells

Reason:

Question 6. What does Double Fertilization mean?

- a. Here one male gamete fuses with egg cells and another male gamete fuses with two polar nuclei.
- b. Here one male gamete fuses with zygote and other male gamete fuses with two polar nuclei.
- c. Here two nucleus from polar nuclei fuse with two male gametes separately.
- d. Here one egg cell fuses with two male gametes, one by one.

Reason:

Question 7. Why do you think amniocentesis is banned?

- a. Because the machine used for amniocentesis is very costly and government hospitals cannot afford it.
- b. Because the government Couldn't aware people about the sideeffects of amniocentesis, in that short period of time.
- c. Because it encouraged female foeticide.
- d. Because the way amina was extracted from the mother's body was unethical.

Reason:

Question 8. Which among the following is illegal?

- a. Taking contraceptive measures to avoid unwanted pregnancy.
- b. Medical Termination of Pregnancy when there is harm to mother or foetus or both due to pregnancy.
- c. Aborting female foetus due to lack of money.
- d. Consuming contraceptive pills to avoid pregnancy.

Reason:

Question 9. When does the first meiotic division of primary oocyte complete?

- a. At the time of menopause.
- b. In the stage between birth till puberty.
- c. At the starting of every menstrual cycle.
- d. After fertilization of male and female gametes.

Reason:

Question 10. When the probability of fertilization of gametes is highest during a menstrual cycle?

- a. During day 10 to 17 of a menstrual cycle at the time of ovulation.
- b. During day 8 to 11 of a menstrual cycle in follicular phase.
- c. During day 17 to 24 of a menstrual cycle in luteal phase.
- d. During day 1 to 3 of a menstrual cycle between menstrual flow.

Reason:

Question 11. What is the role of oxytocin in pregnancy?

- a. It causes uterine contractions leading to further release of oxytocin to do the same.
- b. It induces mammary gland after pregnancy for lactation,
- c. It stops the secretion of unwanted hormones like estrogen and progesterone during pregnancy.
- d. It provides oxygen to the foetus just after child birth.

Reason:

Question 12. Which among the following is haploid?

- a. Morula
- b. Spermatozoa
- c. Blastocyst
- d. Zygote

Reason:

Question 13. Which among the following helps in the transportation of essential substances from placenta to foetus?

- a. Placental villi
- b. Umbilical chord
- c. Chorionic villi
- d. Stem cell

Reason:

Question 14. What is the part of apple we eat called?

- a. Fruit
- b. Thalamus
- c. Perianth
- d. Endosperm

Reason:

Question 15. What is the function of cotyledon in seeds?

- a. Provides food to seed during germination.
- b. Provides nutrients to seeds during dormancy.
- c. Provides pressure in seed for delayed germination during dormancy.
- d. Provides passage of air through micropyle during germination.

Reason:
