

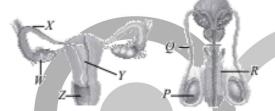
Olympiad Practice Sheet

Class: Genesis 8th

Topic: Reproduction & Adolescence

Subject: Biology

- 1. Mature Graafian follicle is generally present in the ovary of a healthy human female around
 - (a) 5-8 day of menstrual cycle
 - (b) 11-17 day of menstrual cycle
 - (c) 18-23 day of menstrual cycle.
 - (d) 24-28 day of menstrual cycle
- 2. Refer to the given figures and select the incorrect statement regarding them



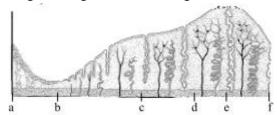
- (a) Z is an organ that receives the sperm which fertilizes ovum in X.
- (b) Secretions of both Q and Y help in development of male and female gametes, respectively.
- (c) Both P and W secrete hormones that control development of secondary sexual characters in males and females, respectively.
- (d) R is an erectile organ that releases its contents into Z which also serves as birth canal during parturition.
- 3. Refer to the given graph showing thickness of the uterine layer of an adult woman during a period of time



Which of the following occurs if the curve continues along the dotted line?

- (a) Corpus luteum has degenerated resulting in formation of blood clot.
- (b) An embryo has been embedded in the uterine layer.
- (c) The amount of menstrual flow has increased.
- (d) Two ova are simultaneously released from the ovary
- 4. Mrs. Mehra, who is 32 years old, underwent a surgery to get her oviducts removed after having girl. Now, she wants to have another baby. Do you think she can have another baby?
 - (a) Yes, she can have another baby as her ovaries are still functional to produce eggs.
 - (b) No, she cannot have another baby because fertilization of egg takes place in the oviduct.
 - (c) Yes, she can have another baby because the surgery can be reversed.
 - (d) No, she cannot have another baby as the hormones associated with the oviduct will not be present

5. The given diagram shows changes in uterine lining during a menstrual cycle (divided in five phases, a to f)



- (i) When release of the egg from the ovary is expected to happen?
- (ii) When menstruation is expected to occur?
- (iii) If the egg gets fertilized, when implantation of embryo is expected to occur?
- (a) i-d, ii-a to b, iii- e to f
- (b) i-c to d, ii-e to f, iii- a to b
- (c) i-c, ii-a to b, iii- d to e
- (d) i-d to c, ii-c, iii- e to f
- 6. The part of sperm that helps in the penetration of ovum is
 - (a) Acrosome
 - (b) Nucleus
 - (c) Tail
 - (d) Middle piece
- 7. The process of fertilization can be included in which of the following phases?
 - (a) Prezygotic
 - (b) Zygotic
 - (c) Post Zygotic
 - (d) Gametic phase
- 8. In the case of test tube baby , fertilization process is completed outside the female's body. In this process zygote is allowed to develop
 - (a) For one week before implantation
 - (b) Permanently in test tube
 - (c) For few months before implantation
 - (d) All of these
- 9. Which of the following statement/s is/are correct?
 - (I) In Amocba, nucleus and cytoplasm divide simultaneously during binary fission.
 - (II) In budding, the new offspring detaches immediately from the parent.
 - (III) In amoeba, cytoplasm divides first followed by the division of nucleus.
 - (IV) In budding, the new offspring detaches after it is fully matured.
 - (a) I and II
 - (b) I and IV
 - (c) III only
 - (d) IV only
- 10. Which one of the following is not a feature of viviparous animals?
 - (a) They give birth to young ones.
 - (b) Embryo development takes place inside the female body.
 - (c) Less embryonic care and protection
 - (d) Provides nutrition to the foetus through placenta.