TEST BIOLOGY CLASS : 10TH

Topic :How Do Organisms Reproduce

Olympiad Test-3

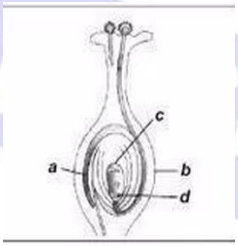
Q.1 Given below are the characteristics of different types of vegetative reproduction in higher plants . State which among them is/are false.

(i) Scion is a term related to grafting
(ii) Micro propagation is not a method of vegetative propagation
(iii) Vegetative reproduction can also be called parthenogenesis
(iv) Stem cuttings are commonly used for propagation in jasmine

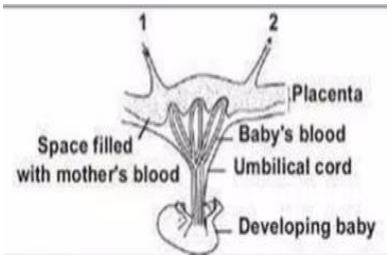
a) (i), (iii) & (iv)
b) (iii) & (iv)
c) (ii) & (iv)
d) (ii), (iii) & (iv)
e) None of these

Q.2 Refer the given figure and select the correct option.

a) The parts labelled a & b give rise to seed & fruit respectively.
b) The parts labelled c and b give rise to seed and fruit respectively.
c) The part labelled d results in endosperm
d) Both (a) and (c)



Q.3 The figure shows the arrangement of blood vessels in the uterus wall and placenta of a pregnant women. Which of the following will increase in concentration in the blood as it as it flows from 1 and 2?



(a) Amino acids
(b) Carbon Dioxide
(c) Glucose
(d) Oxygen

Q.4 Each ovule consists of a large oval shaped cell called the embryo sac and the mature embryo sac contains _____ nuclei.

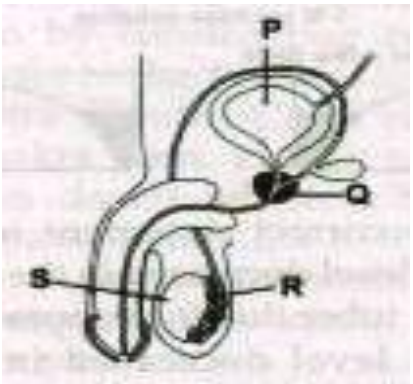
a) Two
b) Three
c) Five
d) Eight

Q.5 Sperms travel during an ejaculation form the (i) where they are stored to the (ii) from where they are transported to the ejaculatory duct and then to the (iii), which carries both reproductive and excretory fluids. A vasectomy is a surgical procedure for contraceptive purposes in which the (iv) is cut and blocked so as to prevent sperms from being present in the semen. Select the correct sequence of terms to complete the above paragraph.

	(i)	(ii)	(iii)	(iv)
(a)	Vas deferens	Epididymis	Urethra	Vas deferens
(b)	Vas deferens	Epididymis	Urethra	Seminiferons tubules
(c)	Epididymis	Vas deferens	Urethra	Vas deferens
(d)	Epididymis	Vas deferens	Urethra	Seminiferons tubules

Q.6 Which labelled parts in the given figure produce and store sperms respectively?

a) S & Q
b) P & R
c) S & R
d) R & Q

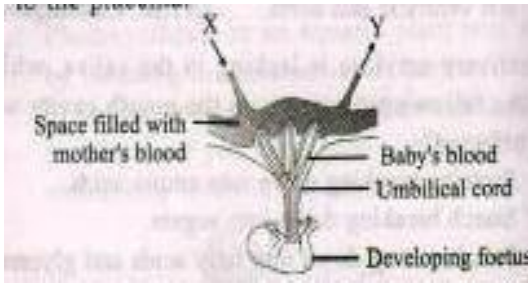


Q.7 The diagram

below shows a developing foetus in the uterus of a pregnant woman and its attachment to the placenta.

Which substance will decrease in concentration in the blood as it moves from X to Y?

a) Amino acids
b) Urea
c) Caron dioxide
d) Growth hormone

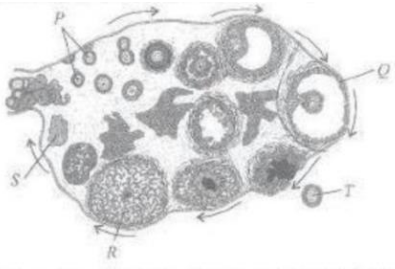


Q.8 Which of the following is not an example of natural method of vegetative propagation in plants?

a) **Roots in case of sweet potato and Dahlia**
b) **Stem in case of potato and ginger**
c) **Leaves in case of Bryophyllum and Kalanchoe**
d) **Stem in case of rose and sugarcane**

Q.9 The given figure shows monthly changes in the human ovary during the reproductive cycle. Which of the following statements is most accurate regarding the labelled structure (s)?

a) Before puberty, only structure 'T' undergoes meiosis
b) The hormone produced by structure 'R' stimulates the pituitary gland to secrete luteinizing hormone.
c) The hormone produced by structure 'S' is responsible for the development of female secondary sex characters.
d) The hormone produced by 'P' and 'Q' stimulate the proliferation of the endometrial lining of the uterine wall.



Q.10 The graph below shows the hormonal changes during a normal menstrual cycle. What would be a likely consequence if the hormone represented by graph Q is lacking in an adult female?

a) The uterine lining might not be sufficiently stable to support an implanted embryo.
b) Levels of the hormone represented by graph P would be higher than normal
c) Fertilization of ovum would fail to occur
d) There would be no significant effect since the functions of the hormones overlap.