

- A.
1. In asexual reproduction, an individual produces offspring without the help of another individual.
 2. The male gamete is known as the sperm and the female gamete is known as the ovum in human beings.
 3. In frogs, reproduction takes place outside the body.
 4. The organs that form the male reproductive system are the testes, epididymis, vas deferens, penis and some glands.
 5. In human beings, fertilisation occurs inside the body of the female.
 6. The embryo receives nutrition from the mother through the placenta.
 7. The female reproductive system consists of the ovaries, Fallopian tubes, uterus and vagina.
 8. The zygote formed after fertilisation of the ovum divides repeatedly and travels to the uterus. It gets attached to the wall of the uterus and forms the embryo.
 9. The hormone that regulates secondary sexual characters in males is called testosterone.
- B.
1. When a girl attains puberty, either of the ovaries releases an ovum into the Fallopian tube once in every 28 days or so. This is called ovulation. If the ovum does not get fertilised, it is expelled through the vagina. And together with it is expelled the lining of the uterus and blood. This is called menstruation. The entire process of ovulation, thickening of the uterine wall and menstruation is called the menstrual cycle.
 2. When two mature ova are released at the same time and are fertilised by two sperms, this results in the birth of twins. Twins born this way are called fraternal or nonidentical twins. It can also happen that the fertilised egg divides into two. This leads to the birth of identical twins.
 3. The endocrine glands are different from other glands. They discharge the chemicals they produce directly into the blood. The chemicals produced by the endocrine glands are called hormones. Hormones act like chemical messengers. They are carried by the blood to specific organs or tissues with messages for them to function in particular ways.
 4. A taboo is a social or religious custom that prohibits or restricts a certain behaviour or practice. For example, Elizabeth Blackwell (the first woman doctor) had to overcome considerable resistance to study medicine. However, nowadays it is not uncommon for women to become doctors.
- C.
1. Physical and emotional changes that occur in boys and girls around the age when they attain puberty are known as secondary sexual characters. Generally, girls attain puberty between 11 and 14 years and boys, between 13 and 16 years. Puberty is marked by the onset of menstruation in girls and the production of sperms in boys. In the case of girls, the secondary sexual characters are enlargement of the breasts, widening of the pelvic girdle, and growth of hair in the pubic region and armpits. In the case of boys, the characters are deepening of the voice caused by enlargement of the larynx; growth of hair on the face, pubic region and armpits; enlargement of the penis and scrotum; and increase in muscle mass.
 2. Gender roles are functions that society sees as feminine or masculine. These roles are encouraged in children from a very early age. There is no law that binds a girl to behave in a particular way or compels a boy to perform certain functions. However, since most people in a society have certain ideas of what is feminine and what is masculine, boys and girls grow up performing these roles. For example, an Indian girl may be encouraged by her parents to learn cooking, while a boy may automatically help his father mend a fuse or fix a leaking tap. The idea of the roles men and women should perform is often reflected in their choice of profession. For example, women are associated with nurturing, caring for and looking after the old and the young. Thus, quite often, women become nurses, dietitians, counsellors or primary school teachers. Men are associated with protection, valour, physical stamina and the ability to put up with physical hardships. Thus, young boys often dream of joining the army, navy or airforce.
 3. The sex of a foetus in the mother's womb can be determined by testing its cells. The cells of the foetus are obtained by withdrawing amniotic fluid with the help of a special needle. There are other methods of determining the sex of a foetus, for example, by ultrasonography or taking a 'sound picture' of the mother's abdomen. Testing the mother's urine is yet another method.
- Sex determination is prohibited by law. It is a punishable act. This is because people often want to know the sex of their child before birth since they do not want daughters. When they get to know that the unborn child is female, they try to kill the foetus. This is called foeticide.
- D.
1. umbilical cord 2. fraternal 3. oestrogen 4. pituitary 5. kidneys
 6. semen
- E.
1. (a) 2. (c) 3. (b) 4. (c) 5. (a)
- F.
- (a) urinary bladder, vas deferens, urethra, skin of penis, epididymis, testis, scrotum