

## Solution

### CET25B3 REPRODUCTIVE HEALTH

#### Class 12 - Biology

1. **(a)** Prevents fertilization  
**Explanation:** Prevents fertilization
2. **(a)** 1891  
**Explanation:** 1891
3. **(d)** Assisted reproductive technologies  
**Explanation:** Some couples are not able to reproduce normally due to the malfunctioning of the reproductive system. Assisted reproductive technologies can assist them in different ways depending upon the need of couples such as IVF, GIFT, ICSI, IUI, etc.
4. **(c)** India and Morocco  
**Explanation:** India and Morocco
5. **(c)** Ovulation  
**Explanation:** Oral contraceptives contain progestins or progestin-estrogens combinations which keep LH level low to check ovulation.
6. **(c)** Gestation  
**Explanation:** Gestation
7. **(c)** LNG-20  
**Explanation:** LNG-20
8. **(a)** Total fertility rate  
**Explanation:** The total fertility rate is the average number of children that the average couple has or would have during their lifetime. It is different from the reproductive potential of a healthy female.
9. **(b)** Prevents the movement of sperms into the urethra.  
**Explanation:** Prevents the movement of sperms into the urethra.
10. **(b)** Artificial insemination  
**Explanation:** Artificial insemination is not a contraceptive device. It is an assisted reproductive technology for infertile people. The natural method, barrier method, and surgical methods are categories of contraceptive methods.
11. **(d)** Determine any disease of the embryo.  
**Explanation:** Determine any disease of the embryo.
12. **(c)** Fertilization is external but foetus formation is internal.  
**Explanation:** Fertilization is external but foetus formation is internal.
13. **(d)** Culture medium  
**Explanation:** In vitro fertilization technique involves fertilization outside the body in culture media followed by embryo transfer in fallopian tube or uterus.
14. **(b)** AIDS

**Explanation:** Regular use of contraceptive methods may cause some side effects such as abdominal pain, breast cancer, and nausea. AIDS is a viral disease caused by HIV and not a side effect of the contraceptive methods.

15.

(b) Ecosystem

**Explanation:** Ecosystem

16.

(c) All of these

**Explanation:** Condoms are barriers made of thin rubber/ latex sheath that is used to cover the penis in the male or vagina and cervix in the female, just before coitus so that the ejaculated semen would not enter into the female reproductive tract. This can prevent conception. The use of condoms has increased in recent years due to its additional benefit of protecting the user from contracting STDs and AIDS.

17.

(c) Fertilization

**Explanation:** Fertilization

18.

(c) Zygote is collected from a female donor and transferred to the fallopian tube.

**Explanation:** The zygote or early embryos (with up to 8 blastomeres) could then be transferred into the fallopian tube (ZIFT– zygote intrafallopian transfer) and embryos with more than 8 blastomeres, into the uterus (IUT – intrauterine transfer), to complete its further development.

19.

(d) Surrogate mother

**Explanation:** Sometimes eggs of females and sperm of males are able to produce but a fallopian tube is either blocked or uterus is not capable of implantation. In this case, ovum collected from females and sperm collected from males is fertilized and transferred to another female called surrogate mother for further development.

20.

(a) Chikungunya Virus

**Explanation:** Chikungunya Virus

21.

(a) RNA instead of DNA

**Explanation:** RNA instead of DNA

22.

(c) S-shaped

**Explanation:** S-shaped

23.

(d) Detect genetic disorder

**Explanation:** Amniocentesis is a method to know the chromosome type of foetus. It is used to detect the genetic disorder of foetus by analyzing chromosome. It is misused to know the sex of the foetus.

24.

(c) Better medical facilities

**Explanation:** A high increase in the human population is due to the availability of better medical facilities to increase IMR and decrease MMR.

25.

(b) Intracytoplasmic sperm injection

**Explanation:** Intracytoplasmic sperm injection is a specialized procedure to form an embryo in a laboratory in which a sperm is directly injected into ovum for fertilization to form a zygote.

26.

(a) Parthenogenesis

**Explanation:** **Parthenogenesis** is a type of asexual reproduction in which the offspring develops from unfertilized eggs.

27.

(c) Point Q

**Explanation:** Point Q

28.

(d) Fertilization

**Explanation:** Fertilization

29.

(c) Inhibiting the secretion of FSH and LH that are necessary for ovulation.

**Explanation:** Inhibiting the secretion of FSH and LH that are necessary for ovulation.

30.

(b) Tubectomy

**Explanation:** Tubectomy is not a natural method of birth control. In the tubectomy method, a fallopian tube of the female is cut and tied to prevent ovulation. To abstain, coitus interrupts and the rhythm period is a natural method of birth control.

31. (a) 16

**Explanation:** 16

32.

(c) Suppression of gonadotropins

**Explanation:** Suppression of gonadotropins

33. (a) Diaphragm

**Explanation:** Diaphragm

34.

(c) IVF

**Explanation:** IVF

35. (a) Easily available and cheaper

**Explanation:** Good birth control measures should be easily available and cheaper. There should be no interference with sexual desire without any side effects.

36. (a) Amniocentesis

**Explanation:** Amniocentesis

37.

(d) Trichomoniasis

**Explanation:** Trichomoniasis

38.

(b) Vasectomy

**Explanation:** Surgical intervention blocks gamete transport and thereby prevent conception. The sterilization procedure in the male is called 'vasectomy'.

39. (a) Check ovulation

**Explanation:** Check ovulation

40. (a) 12 weeks

**Explanation:** 12 weeks

41. (a) Mycoplasma

**Explanation:** Mycoplasma

42.

(b) ICSI

**Explanation:** Intracytoplasmic sperm injection (ICSI) is a specialized procedure to form an embryo in the laboratory in which a sperm is directly injected into the ovum.

43.

(b) IUDs

**Explanation:** IUDs

44. (a) S-shaped growth curve

**Explanation:** S-shaped growth curve

45.

(b) Culex

**Explanation:** Culex

46. **(a) Vasectomy**  
**Explanation:** Vasectomy
47. **(d) Suppression of gonadotropins**  
**Explanation:** Breastfeeding delays the resumption of normal ovarian cycles by disrupting the pattern of pulsatile release of GnRH from the hypothalamus and hence LH from the pituitary. The plasma concentrations of FSH during lactation are sufficient to induce follicle growth, but the inadequate pulsatile LH signal results in a reduced estradiol production by these follicles. When follicle growth and estradiol secretion does increase to normal, lactation prevents the generation of a normal preovulatory LH surge, and follicles either fail to rupture or become atretic or cystic. Only when lactation declines sufficiently to allow generation of a normal preovulatory LH surge to occur will ovulation take place with the formation of a corpus luteum of variable normality.
48. **(b) Copper-T**  
**Explanation:** Copper-T is a contraceptive method under intrauterine contraceptive device which prevents implantation and reduces the motility of sperm. It is implanted inside the uterus and works up to five years. So, it is the best method for spacing between two children.
49. **(c) Movement of sperm into the urethra**  
**Explanation:** Vasectomy is the surgical method of birth control in which vas deference of male is cut and tied to prevent the release of sperm into the vagina during coitus.
50. **(d) Combination of progestogen and estrogen within 72 hours**  
**Explanation:** The emergency contraceptives used to avoid possible pregnancy due to rape or unprotected sexual intercourse is a combination of progestogen and estrogen within 72 hours of sexual intercourse.
51. **(d) Sterilization techniques**  
**Explanation:** A number of birth control measures are used to prevent unwanted pregnancy. The sterilization technique is considered as the safest way. Condom prevents unwanted pregnancy as well as sexually transmitted diseases.
52. **(b) Preventing ovulation**  
**Explanation:** Preventing ovulation
53. **(a) 1st December**  
**Explanation:** 1st December
54. **(b) Copper-T**  
**Explanation:** Copper-T
55. **(d) Vasectomy**  
**Explanation:** Vasectomy
56. **(d) Consap**  
**Explanation:** Central drug research institute, Lucknow, India has developed a spermicidal cream called Consap. It has the capability of killing the sperm released during insemination.
57. **(a) 929**  
**Explanation:** 929
58. **(c) ZIFT- Zygote inters fertilization transfer.**  
**Explanation:** ZIFT- Zygote intrafallopian transfer is part of the test-tube baby program in which in vitro fertilized zygote is transferred to a fallopian tube for implantation and further growth of foetus.

59. (c) LNG-20  
**Explanation:** LNG-20
60. (d) A normal distribution  
**Explanation:** A normal distribution
61. (c) Gonorrhoea, hepatitis-B, chlamydia  
**Explanation:** Gonorrhoea, hepatitis-B, chlamydia
62. (b) Male  
**Explanation:** Vasectomy is a surgical method of birth control in males in which vas deferens is cut and tied to prevent the release of sperm during coitus. This method cannot be reversed back.
63. (c) Zygote Intra Fallopian transfer  
**Explanation:** Fertilization outside the followed by embryo transfer is called test-tube. The zygote or early embryo up to 8 blastomeres could transfer into the fallopian tube is called zygote intrafallopian transfer (ZIFT).
64. (c) Progesterone  
**Explanation:** Progesterone
65. (b) Haemophilus  
**Explanation:** Haemophilus
66. (a) Not cause significant change in growth rate  
**Explanation:** IMR (infant mortality rate) and MMR (maternal mortality rate) are two factors that affect population growth. If IMR is increased and MMR is decreased then there will be not any significant effect on population growth rate.
67. (d) Fertilization outside the female body.  
**Explanation:** Fertilization outside the female body.
68. (d) 1950s  
**Explanation:** India was amongst the first countries in the world to initiate action plans and programs at a national level to attain total reproductive health as a social goal. These programmes called 'family planning' were initiated in 1951 and were periodically assessed over the past decades.
69. (b) Population explosion  
**Explanation:** Population explosion
70. (a) Tissue culture cells  
**Explanation:** Exponential growth is maximum in tissue culture because each cell divides continuously to form a callus of cells. A sufficient amount of nutrients is also available in culture media.
71. (a) Avoiding chances of ovum and sperm meeting  
**Explanation:** The natural method of contraception works on the principles of avoiding meeting of ovum and sperm for fertilization. Ovum is released in the middle of the menstrual cycle, avoiding sex during that interval is necessary for this method.
72. (a) Periodic abstinence  
**Explanation:** Periodic abstinence is a natural method of birth control in which the couples avoid sexual intercourse from day 10 to 17 of the menstrual cycle during which ovulation takes place in females.
73. (d) Birth control  
**Explanation:** Birth control

74.

(c) Gonorrhoea

**Explanation:** Gonorrhoea is caused by bacteria.

75.

(a) Birth control

**Explanation:** Birth control

ABHINAV ACADEMY