DPP - Daily Practice Problems

Chapter-wise Sheets

Date : Start Time :	End Time :	
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BIOLOGY

(CB26)

SYLLABUS: Reproductive Health

Max. Marks: 180 Marking Scheme: + 4 for correct & (-1) for incorrect Time: 60 min.

INSTRUCTIONS: This Daily Practice Problem Sheet contains 45 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

- 1. Consider the statements given below regarding contraception and answer as directed thereafter:
 - (i) Medical Termination of Pregnancy (MTP) during first trimester is generally safe
 - (ii) Generally chances of conception are nil until mother breast-feeds the infant upto two years
 - (iii) Intrauterine devices like copper-T are effective contraceptives
 - (iv) Contraception pills may be taken upto one week after coitus to prevent conception

Which two of the above statements are correct?

- (a) ii and iii
- (b) iii and iv
- (c) i and iii
- (d) i and ii
- 2. Amniocentesis is a technique
 - (a) by which the essential amino acids in the body can be estimated
 - (b) by which any chromosomal anomalies in the foetus can be detected
 - (c) in which the sex of the foetus can be reversed

- (d) that can be used for correcting genetic disorders of the foetus
- 3. Tying up or removing a small part of fallopian duct is called
 - (a) Vasectomy
- (b) Ductus arteriosus
- (c) Archidectomy
- (d) Tubectomy
- **4.** Copper-T is a device that prevents
 - (a) implantation of blastocyst
 - (b) ovulation
 - (c) fertilization
 - (d) egg maturation
- 5. The diaphragm, cervical cap and vaults are
 - (a) Disposable contraceptive devices
 - (b) Reusable contraceptives
 - (c) IUDs
 - (d) Implants
- 6. The transfer of zygote or early embryo (up to 8 blastomere) into fallopian tube is
 - (a) IVF and ET
- (b) ZIFT
- (c) GIFT
- (d) IUT

RESPONSE GRID

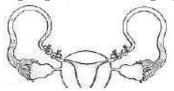
- 1. **abcd**
 - <u>) d</u> 2. abcd
- 3. **abcd**
- 4. **abcd**
- 5. **@b©d**

6. **(a) (b) (c) (d)**

- The technique called gamete intrafallopian transfer (GIFT) is recommended for those females:
 - (a) who cannot produce an ovum
 - who cannot retain the foetus inside uterus. (b)
 - (c) whose cervical canal is too narrow to allow passage for the sperms
 - (d) who cannot provide suitable environment for fertilisation
- 8. The copper ions of IUDs
 - (a) Suppress the motility and fertilization capacity of
 - (b) Make the uterus unsuitable for implantation
 - (c) Increase phagocytosis of sperms
 - (d) Make cervix hostile to sperms
- Condoms are barriers that cover-9.
 - (a) Penis in male and ovary in female.

 - (b) Penis in male and cervix and vagina in female.
 - (c) Scrotum in male and cervix and vagina in female.
 - (d) Cervix in male and vagina in female.
- 10. Birth control pills check ovulation in female by inhibiting the secretion of
 - follicle stimulating hormone
 - (b) luteinizing hormone
 - (c) Both (a) and (b)
 - (d) None of the above
- Identical twins are produced when
 - (a) One fertilized egg divides and two blastomeres separate
 - (b) One sperm fertilizes two eggs
 - (c) One egg is fertilized with two sperms
 - (d) Two eggs are fertilized
- 12. Progestasert and LNG-20 are
 - (a) Implants
- (b) Copper releasing IUDs
- (c) Non-medicated IUDs (d) Hormone releasing IUDs
- Read the following 4-statements and mark the option that has both correct statements
 - MTP was legalized in 1971
 - Inability to conceive or produce children even after 2 years of unprotected sexual cohabitation is called infertility
 - (iii) Surgical method of contraception prevents gamete formation
 - (iv) MTPs are relatively safe up to 12 weeks of pregnancy
 - (a) (i) and (ii)
- (b) (ii) and (iii)
- (c) (iii) and (iv)
- (d) (i) and (iii)
- 14. Medical Termination of Pregnancy (MTP) is considered safe up to how many weeks of pregnancy?

- Eight weeks
- (b) Twelve weeks
- Eighteen weeks (c)
 - (d) Six weeks
- Ultrasound of how much frequency is beamed into human body for sonography?
 - (a) $15 30 \,\text{MHZ}$
- (b) 1 15 MHZ
- (b) $45 70 \,\text{MHZ}$
- (d) 30-45 MHZ.
- 16. What is the figure given below showing in particular?



- (a) Ovarian cancer
- Uterine cancer (b)
- (c) Tubectomy
- (d) Vasectomy
- 17. *In vitro* fertilisation is a technique that involves transfer of which one of the following into the fallopian tube?
 - Zygote only
 - (b) Embryo only, upto 8 cell stage
 - Either zygote or early embryo upto 8 cell stage
 - (d) Embryo of 32 cell stage
- MTP is practised mainly to
 - (a) get rid of unwanted female child legally.
 - (b) get rid of unwanted pregnancies due to failure of contraception.
 - (c) both (a) and (b).
 - (d) decrease population size.
- 19. In amniocentesis, the fluid is taken from –
 - (a) foetal blood
 - (b) mother's blood
 - (c) body fluid of mother
 - (d) fluid surrounding foetus
- 20. Which of the following is not true about the birth control pill?
 - (a) The pill works by preventing ovulation.
 - The pill works by preventing implantation.
 - The ovarian cycle is suspended by the birth control
 - The birth control pill contains low doses of estrogen and progesterone.
- Which of the following birth control measures can be 21. considered as the safest?
 - The rhythm method
 - The use of physical barriers
 - Temination of unwanted pregnancy
 - (d) Sterilization techniques

RESPONSE GRID

- **22.** Using which contraceptive also provides protection from contracting STDs and AIDS?
 - (a) Diaphragms
- (b) Spermicidal foams
- (c) Condoms
- (d) Lactational amenorrhoea
- **23.** Copper-T is a device that prevents
 - (a) implantation of blastocyst
 - (b) ovulation
 - (c) fertilization
 - (d) egg maturation
- **24.** Cu ions released from copper releasing Intra Uterine Devices (IUDs):
 - (a) make uterus unsuitable for implantation
 - (b) increase phagocytosis of sperms
 - (c) suppress sperm motility
 - (d) prevent ovulation
- **25.** Which one of the following is the most widely accepted method of contraception in India, as at present?
 - (a) Cervical caps
 - (b) Tubectomy
 - (c) Diaphragms
 - (d) IUDs. (Intra uterine devices)
- **26.** The test-tube Baby Programme employs which one of the following techniques?
 - (a) Intra cytoplasmic sperm injection (ICSI)
 - (b) Intra uterine insemination (IUI)
 - (c) Gamete intra fallopian transfer (GIET)
 - (d) Zygote intra fallopian transfer (ZIFT)
- 27. Oral contraceptive pills are composed of
 - (a) progestrogens only
 - (b) progestrogen and estrogen combination
 - (c) progestrogen-testosterone combination
 - (d) both (a) or (b)
- **28.** Which of the following cannot be detected in a developing foetus by amniocentesis?
 - (a) Sex of the foetus
 - (b) Down syndrome
 - (c) Jaundice
 - (d) Klinefelter syndrome
- **29.** One of the legal methods of birth control is :
 - (a) by abstaining from coitus from day 10 to 17 of the menstrual cycle
 - (b) by having coitus at the time of day break
 - (c) by a premature ejaculation during coitus
 - (d) abortion by taking an appropriate medicine
- **30.** One of the following is **not** a method of contraception which one?
 - (a) Tubectomy
 - (b) Condoms

- (c) Pills of a combination of oxytocin and vasopressin
- (d) Lippes loop
- 31. Which one of the following statements is correct regarding Sexually Transmitted Diseases (STD)?
 - (a) The chances of a 5 year boy contacting a STD are very little
 - (b) A person may contact syphilis by sharing milk with one already suffering from the disease
 - (c) Haemophilia is one of the STD
 - (d) Genital herpes and sickle-cell anaemia are both STD
- **32.** The stage transferred into the uterus after induced fertilization of ova in the laboratory is:
 - (a) Zygote
 - (b) Embryo at 4 blastomere stage
 - (c) Embryo at 2 blastomere stage
 - (d) Morula
- **33.** Reproductive health in society can be improved by
 - (i) Introduction of sex education in schools.
 - (ii) Increased medical assistance.
 - (iii) Awareness about contraception and STDs.
 - (iv) Equal opportunities to male and female child.
 - (v) Ban on aminocentesis.
 - (vi) Encouraging myths and misconceptions.
 - (a) All of these
- (b) (i), (ii), (iv) and (vi)
- (c) (i), (ii), (iii), (iv) and (v) (d) (ii) and (v)
- **34.** What is true for "Lactational amenorrhoea"?
 - (i) It means absence of menstruation.
 - (ii) Ovulation does not occur during the lactational period.
 - (iii) Chances of failure of contraception are almost nil upto six months following parturition.
 - (iv) Side effects are almost nil.
 - (v) Contraceptive efficiency reduces after the period of intense lactation.
 - (vi) It is natural method of contraception.
 - (vii) It increases phagocytosis of sperms
 - (a) (ii), (iii), (iv), (v) and (vi)
 - (b) All except (vii)
 - (c) (ii), (iii), (iv) and (v)
 - (d) All of these
- **35.** IUDs-
 - (i) Increase phagocytosis of sperms.
 - (ii) Release Cu ions that suppress sperm motility and fertilising capacity of sperms.
 - (iii) Make the uterus unsuitable for implantation.
 - (iv) Make the cervix hostile to sperms.
 - (v) Prevent semen from entering the female reproductive tract.
 - (a) (i), (ii), (iii), (iv) and (v) (b) (i), (ii), (iii) and (iv)
 - (c) (i) and (ii)
- (d) (ii), (iii) and (iv)

22.(a)(b)(c)(d) 23. (a) (b) (c) (d) 24. (a) (b) (c) (d) 25. (a) (b) (c) (d) 26. (a)(b)(c)(d) RESPONSE 28. (a) b) c) d) 29. (a) (b) (c) (d) 31. (a) b) c) d) 27. (a) (b) (c) (d) 30. (a) (b) (c) (d) GRID 33.(a)(b)(c)(d) 32.(a)(b)(c)(d) **34.** (a) (b) (c) (d) 35. (a) (b) (c) (d)

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Match Column - I with Column - II.

Column I

- Non-medicated IUDs A.
- B. Hormone releasing IUDs
- C. Copper releasing IUDs
- (iii) CuT

(i)

- (iv) Cu7
- (v) LNG-(ii)0
- (vi) Progestasert

Column II

Lippes loop

(ii) Multiload (iii)7

- (a) A-(i); B-(ii, vi); C-(iii, iv, v)
- (b) A-(i); B-(v, vi); C-(ii, iii, iv)
- (c) A-(ii); B-(v, vi); C-(i, iii, iv)
- (d) A-(ii); B-(i, vi); C-(iii, iv, v)
- 37. Progesterone pill helps in preventing pregnancy by not allowing -
 - (a) ova formation
- fertilization (b)
- (c) implantation
- (d) None of these
- 38. The permissible use of the technique amniocentesis is for
 - (a) detecting sex of the unborn foetus
 - artificial insemination
 - transfer of embryo into the uterus of the surrogate mother
 - (d) detecting any genetic abnormality
- 39. The family planning programmes in India were initiated in
 - (a) 1951
- (b) 1961
- (c) 1971
- (d) 1981
- RCH stands for
 - (a) Routine Check-up of Health
 - (b) Reproduction Cum Hygiene
 - Reversible Contraceptive Hazards (c)
 - Reproductive and Child Health Care (d)
- 41. 'Saheli' a new oral contraceptive developed by
 - All Indian Institute of Medical Science
 - (b) Central Drug Research Institute
 - (c) Health Care Pvt. Ltd.
 - (d) Bharat Immunologicals & Biologicals corp. Ltd.
- 42. Artificial insemination mean
 - (a) transfer of sperms of husband to a test tube containing ova.
 - artificial introduction of sperms of a healthy donor into the vagina.

- (c) introduction of sperms of a healthy donor directly into the ovary.
- (d) transfer of sperms of a healthy donor to a test tube containing ova.
- 43. What is true for an ideal contraceptive?
 - It should be user-friendly.
 - It should be easily available.
 - (iii) It should be ineffective and reversible with least side effects.
 - (iv) It should be effective and reversible with least side effects.
 - It should interfere with the sexual act of the user.
 - (a) All of these
- (b) (i), (ii) and (iii)
- (c) (i), (ii) and (iv)
- (d) (i),(ii), (iv) and (v)
- 44. Choose the correct statements -
 - According to the WHO, reproductive health is total well-being in the physical, social, emotional, behavioural aspects of reproduction.
 - According to the WHO, reproductive health is total well being in the physical, social and emotional aspects of reproduction.
 - (iii) A reproductively healthy society has people with physically and functionally normal reproductive organs.
 - (iv) Reproductively healthy societies have abnormal sexrelated emotional and behavioural interactions.
 - (a) (i), (ii) and (iii)
- (b) (ii) and (iv)
- (i) and (iii) (c)
- (d) (i) only
- Study the given reasons on the basis of which pregnancy can be terminated. Identify the correct reasons.
 - To get rid of unwanted pregnancies.
 - To prevent the fatality or harmfulness to the mother or to foetus or both due to the continuation of pregnancy.
 - Termination of pregnancy is safe in each and every (iii) case.
 - If the foetus is male.
 - (v) It plays an important role in decreasing the population.
 - (i), (ii), only
- (b) (ii), (iii) only
- (iii), (iv), (v) only
- (d) All of these

RESPONSE GRID

36.(a)(b)(c)(d) 41.(a)(b)(c)(d)

37.(a)(b)(c)(d) 42. (a) b) c) d) 38. (a) (b) (c) (d) 43. (a) (b) (c) (d) 39. (a) (b) (c) (d) 44. (a) (b) (c) (d) **40.** (a) (b) (c) (d) 45. (a)(b)(c)(d)

Space for Rough Work

DAILY PRACTICE PROBLEM DPP CHAPTERWISE 26 - BIOLOGY				
Total Questions	45	Total Marks	180	
Attempted		Correct		
Incorrect		Net Score		
Cut-off Score	48	Qualifying Score	55	
Success Gap = Net Score - Qualifying Score				
Net Score = (Correct × 4) – (Incorrect × 1)				

HINTS & SOLUTIONS

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- 1. (c) Statements (i) and (iii) are correct.
 - Medical Termination of Pregnancy (MTP) during first trimester is generally safe.
 - Intrauterine device like copper-T are effective contraceptives.
- **2. (b)** Amniocentesis is the most widely used method for prenatal detection of many genetic disorders. It is also a technique used for determining the sex of the foetus.
- 3. (d)
- **4. (a)** Copper T is an intrauterine device which prevents the fertilized egg becoming implanted in the wall of the womb.
- 5. (b) 6. (a)
- 7. (a) Gamete intrafallopian transfer (GIFT) is recommended for those females who cannot produce an ovum. In this process, the eggs of the donor woman are removed and in a form of mixture with sperm, transferred into fallopian tube of another woman who cannot produce ovum, but can provide suitable environment for fertilization. Thus in GIFT, site of fertilization is fallopian tube, not laboratory.
- 8. (a)
- 9. (b) Condoms are barriers made of thin rubber/latex sheath that are 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.
- 10. (c) 11. (a) 12. (d) 13. (a) 14. (b) 15. (b)
- 16. (c) 17. (c) 18. (b) 19. (d)
- **20. (b)** The birth control pill interferes with the maturation of the follicles and the ova, inhibiting release of an egg.
- 21. (d) Sterilization techniques can be considered as the safest birth control measures. It provides a permanent and sure birth control. It is called vasectomy in male and tubectomy in female.
- 22. (c)
- 23. (a) Copper 'T' is an intrauterine device which prevents the fertilized egg from becoming implanted in the wall of the womb.
- 24. (c) Cu ions released by copper releasing intra uterine devices suppresses sperm motility.

 Intra-uterine devices are inserted by doctors in the uterus through vagina. They are available as the non-medicated IUDs, copper releasing IUDs and hormonereleasing IUDs.
- **25. (d)** Intra uterine device (IUD) is a method of contraception in India. The IUD is inserted in the woman's uterus through the cervix.
- 26. (d) Test-tube baby programme employs zygote intrafallopion transfer (ZIFT) technique. In this technique fusion of ovum and sperm is done outside the body of woman to form zygote which is allowed to divide forming 8 blastomeres, then it is transfered the fallopion tube of the woman.
- 27. (d)
- **28.** (c) Jaundice cannot be detected in a developing foetus by amniocentesis. It is a foetal sex determination test based on chromosomal pattern in the amniotic fluid surrounding the developing embryo. It is now legally ban in India.
- 29. (d) Medical termination of pregnancy (MTP) or induced abortion became legal in India from 1971 with some strict conditions to avoid its misuse. Such restrictions are important to check indiscriminate and illegal female foeticides which are reported to be high in India. All the other options are of natural methods of contraception.

- 30. (c) Oxytocin is birth hormone and acts on the smooth muscles of our body and stimulates their contraction. Vasopressin acts mainly at the kidney and stimulates resorption of water and electrolytes and reduces loss of water through urine. Hence, it is also called as anti-diuretic hormone (ADH).
- 31. (a) STDs are more common in 15-24 years age group. Gonorrhoea, syphilis, genital herpes, chlamydiasis, genital warts, trichomoniasis, hepatitis-B and AIDS are some of the common STDs. Haemophilia is sex-linked recessive disease, which show its transmission from unaffected carrier female to some of male progeny. Sickle cell anaemia is an autoimmune linked recessive trait in which both the partners are carriers for the gene.
- **32. (d)** In Intra-Uterine Transfer (IUT), embryo with more than 8-blastomeres stage (morula) is used for transfer into the uterus.
- **33. (c)** Reproductive health in society can be improved by creating awareness among people about various reproduction related aspects and providing facilities and support for building up a reproductively healthy society.
- 34. (b) 35. (b) 36. (b) 37. (a)
- **38.** (d) Amniocentesis involves prenatal diagnosis of metabolic error and other genetic abnormalities.
- **39.** (a) The programmes called 'family planning' for reproductive health awareness were initiated in 1951.
- **40. (d)** Reproduction-related areas are currently in operation in India come under the popular name 'Reproductive and Child Health Care (RCH) programmes.
- **41. (b)** 'Saheli'—an oral contraceptive for the females was developed at Central Drug Research Institute (CDRI) in Lucknow, India.
- **42. (b)** In artificial insemination (AI) technique, the semen collected either from the husband or a healthy donor is artificially introduced either into the vagina or into the uterus (IUI intrauterine insemination) of the female.
- **43. (c)** An ideal contraceptive should be user-friendly, easily available, effective and reversible with no or least side-effects.
- **44. (c)** Reproductive health is a crucial part of general health and a central feature of human development. It is a reflection of health during childhood, and crucial during adolescence and adulthood, Reproductively healthy societies have normal sex related emotional and behavioural interactions.
- **45.** (a) To get rid of unwanted pregnancies and to prevent the fatality or harmfulness to the mother or to foetus or both due to the continuation of pregnancy are the reasons on the basis of which pregnancy can be terminated