



RAMAGYA SCHOOL, NOIDA
WORKHEET, 2017-2018
SUBJECT: BIOLOGY

CLASS: XII

MONTH: MAY

CONCEPT BASED

1. Lactational Amenorrhea is a method of contraception Justify.
2. What is the maximum effectiveness of this method in terms of period/duration?
3. How are non medicated IUD'S different from hormone releasing IUD'S? Give examples.
4. What are implants? How do they help in preventing fertilisation?
5. Briefly explain two natural barriers for birth control.
6. Enlist any four possible reasons for infertility in human beings.
7. Give another name for sexually transmitted diseases. Name two sexually transmitted diseases which are curable and two diseases which are not curable.
8. Differentiate between Vasectomy and Tubectomy.
9. Name the techniques which are employed in following cases :
 - (a) Transfer of an ovum collected from a donor into the fallopian tube of another female who cannot produce ova but can provide suitable environment for fertilisation and development.
 - (b) Embryo is formed in laboratory in which sperm is directly injected into ovum.
 - (c) Semen collected either from husband or a healthy donor is artificially introduced either into vagina or uterus.
10. Mention the various precautions one has to take in order to protect himself/ herself form STDs.

REMEMBERING AND UNDERSTANDING

11. What are the disturbing trends observed regarding MTP?
12. Identify the sex of organism as male or female in which the sex chromosome are found as (i) ZW in bird (ii) XY in Drosophila (iii) ZZ in birds. (iv) XO in grasshopper.
13. Mention two differences between Turner's syndrome and Klinefelter's syndrome.

14. The human male never passes on the gene for haemophilia to his son. Why is it so?
15. Mention four reasons why *Drosophila* was chosen by Morgan for his experiments in genetics.
16. Differentiate between point mutation and frameshift mutations.

APPLICATION BASED

17. A woman with O blood group marries a man with AB blood group
- (i) work out all the possible phenotypes and genotypes of the progeny.
 - (ii) Discuss the kind of dominance in the parents and the progeny in this case.
18. In Mendel's breeding experiment on garden pea, the offspring of F₂ generation are obtained in the ratio of 25% pure yellow pod, 50% hybrid green pods and 25% green pods State
- (i) which pod colour is dominant
 - (ii) The Phenotypes of the individuals of F₁ generation.
 - (iii) Workout the cross.
19. A dihybrid heterozygous round, yellow seeded garden pea (*Pisum sativum*) was crossed with a double recessive plant.
- (i) What type of cross is this?
 - (ii) Work out the genotype and phenotype of the progeny.
 - (iii) What principle of Mendel is illustrated through the result of this cross?
20. What is point mutation and chromosomal mutations?
21. What is pedigree analysis? What are the symbols used in such an analysis?
22. Give the use of pedigree analysis.
23. What is haemophilia? Why do generally only human males suffer from haemophilia? Can women also suffer? Explain
24. How is sickle cell anaemia caused? What are its symptoms?
25. Write short note on Phenylketouria.
26. What is aneuploidy? Differentiate between trisomic and haploid condition.
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