INTERNATIONAL NDIAN SCHOOL RIYADH

CHAP 4:Reproductive Health

Worksheet:4

- 1. Expand ZIFT ,IUD, MTP, IVF, GIFT, RTI, IUI, ART, ICSI.
- 2. Why is CuT considered as good contraceptive device to space childrens?
- 3. How are ZIFT and GIFT different from intra uterine transfers? Explain
- 4. Why is 'Saheli' considered as to be an improved form of oral contraceptive for human female?
- 5. How do surgical procedures prevent conception in humans? Mention the way it is achieved in human males.
- 6. At the time of independence, the population of India was 350 millions, which exploded to over 1billion by may 2000.List any two reasons for this rise in population and any 2steps taken by government to check this population explosion.
- 7. At which stage zygote is introduced in the fallopian tube in ZIFT?
- 8. What is amniocentesis? Why has government impose statutory ban in spite of its importance in the medical field?
- 9. Why is Tubectomy considered a contraceptive method?
- 10. Describe lactational amenorrhea method of birth control.

INTERNATIONAL NDIAN SCHOOL RIYADH

CHAP 5: Principles of inheritance and variation

Worksheet:5

- 1. Explain Pleiotrophy with the help of example.
- 2. Who proposed Chromosomal theory of inheritance? Point out any two similarities in the behavior of chromosomes and genes
- 3. In a Dihybrid cross white eyed, yellow bodied female Drosophila crossed with red eyed, brown bodied male Drosophila produced in F₂-generation, 1.3%recombinants and 98.7% progeny with parental type combinations. This observation of Morgan was deviated from Mendelian F₂ phenotypic dihybrid ratio. Explain giving reasons, Morgan's observations.
- 4. (a) Explain sex determination in human.
 - (b) How do human males with 'XXY' abnormality suffer
- 5. Explain how trisomy of 21st chromosome occur in humans .List any

4characteristic features in individuals suffering from it.

- 5. Name a disorder ,give the karyotype and write the symptoms a human suffers from as a result of monosomy of the sex chromosome.
- 6. Write about Klinefelter's syndrome ad its symptoms?
- 7. (a) Write the blood group of people with genotype I^AI^B.Give reason in support of your answer

(b) in one family, the 4 children each have a different blood group.Their Mother has blood group A and their father has blood groupB. Work out a cross to explain how it is possible

8. The map distance in certain organisms between gene A and B is 4units, B and C is 2 units and between C and D is 8 units which one of these gene pairs will shoe more recombination frequency? Give reason in support of your answer. Map distance



8. (a) Haemophilia is a sex linked recessive disease. Study the pedigree analysis given below showing the inheritance of the disease in a family and answer the following question

Refer last page fig. 1

- (i) Give the evidence from the analysis which suggest that the disease is (1) sex linked and (2) caused by recessive allele.
- (ii) Write the possible genotypes of the individual '2' and '5'.

(b) Why is Thalassemia categorized as a Mendelian disorder? State the condition when an individual will suffer from the disease.

9. A particular garden pea plant produce only violet flowers.

(a) Is it homozygous dominant for the trait or heterozygous?

(b) How would you ensure its genotype? Explain with the help of crosses.

10. In Snapdragon, a plant with red flower was crossed with a plant with white flowers. Work out all the possible genotypes and phenotypes of F_1 and F_2 generations comment on this pattern of inheritance in this case.



Fig 1