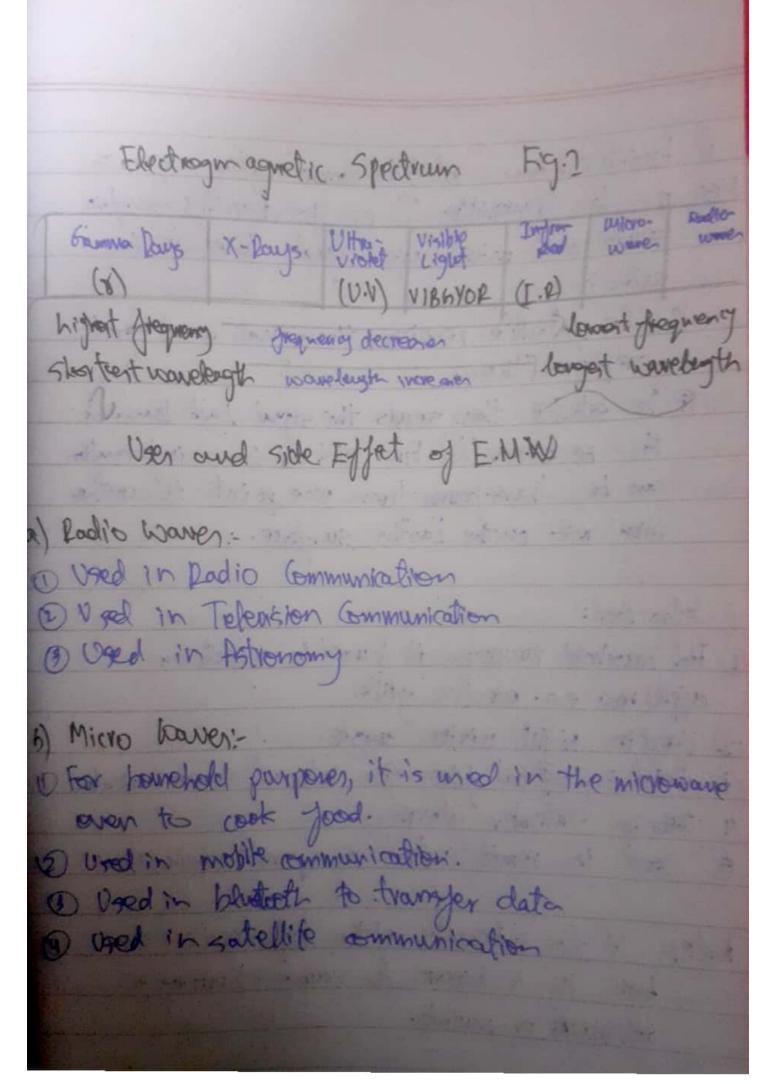
Electro magnetic honnier (Electro magnetic spath what are the Proporties of Electromagnetic Waves Ans) O All Eille are Trousverge waves 2 AR E.M.W can travel in vacuum 3 At The speed of all E.M.W. in airor vaccum is the same on the speed of light i.e. 3x10m/ (9) All E.M.W transfer energy

(5) All E.M.W undergo reflection, reprodion and E.M.W can be displayed on a deat which is brown on melectromagnetic spectrum. This display is shown in Fig. ?



a) Explainton gatellite communication greats. 1905) O The transmitter (1) on the Earth's sample sends out microwave signals towards the satellite ... The satellife receives the signals and anythe amplifier them. 1) The satellite then sends the signal book toward the receiver (R.) And this is how informal on be transferred from one point to another way mix on the Earth's sunface. c) Infra-Ded: 1) For howehold purposes, it is ared in electrical apphoner eq. electric grills. @ vaed in night vision goggles 3 Doed in optical giber for ratemet commenication (9) ched in introder alarms. 6) Used in venite controls to operate televisions Notei- If the intensity of the singles-real is very Light it is known to come burning of softfissues or murder

9) Explain how an indivader alove works. that The infra ted sonson detects heat signature from the human body during night time and the alarm gets triggered if the heat signature rises. QI Explain the working of a 7:0. Premote. Ans) Infra-Red signals are produced by the emitter inside the remote control. The T.V. sensor/ recover receives there signals and course out the derived Junction d Visible Light --> Used in comever for photography e) Ultra-Violetz O Skin tour 10 Used to sterilise water 3) used to process good material 19) Used to Identify Jake currency notice 5 Used to scan fingerprints Note: Excessive exposure to U.V. Light leads to skin concer.

D In the field of medicine, X-Rays are une uned to kill concerous cells and they are uned to locate fractures in bonnes.

O In the field of engineering, X-Rays are und to defect chacks in metals:

Note: high exponent to X-Rays can came genetic mutation or cancers.

Explain how X-Roys are used to locate fractures in method of the X-Roy detector, solso called the X-Roy dilm or photographic film is originally white. Disher exposed to X-Roys, the film turns black. If there is a fracture in a bone, the firm will absorb the X-Roys which results in a white image but the fracture fets the X-Roys pass through, regulting in a black and white allows the radiologist to defect the location and the intensity of the fracture.

June side effects on X-Rouge were and the chief Oltisalso used in stevilising surgical instruments (medical une)