Low Vision Aid & Visual Rehabilitation BVOCOP-505

**Unit:1.**

Definition-old, new, proposed, b) Grades of low vision, c) Statistics/ Epidemiology d) Relation between disorder, impairment & handicapped,

**Unit:2**

Low vision optics: Magnification-relative distance/ relative size/ approach/angular Optics of Galilian & Keplarian telescope- advantage/disadvantage, significance of exit & entrance pupil. Optics of spectacle magnifier/ determination/ calculation/ disadvantage/advantage. Optics of stand magnifier, significance of equivalent viewing distance & calculations. Telescope- distance/ near/ telemicroscope/ monocular/ binocular/ bioptic. Determination of decentration of lenses /prism/calculation/Lebenson’s formula/simple dioptric formula. Hand held magnifier-illuminated/ non-illuminated. Spectacle magnifier / half eye/ prism correction/ bar magnifier/ CCTV/ magni-cam/ low vision imaging system or V-max / contact lens & IOL telescope.

**Unit:3.**

Low vision examination: Task/ Goal oriented history-medical/ visual/ psychological history/ task analysis/ mobility/distance vision/ near vision / daily living/ illumination/ work & school. Visual acuity measurement-distance/ near/ use of log MAR chart (distance & near)/ light house, picture chart/ visual field/ Amsler chart/ contrast sensitivity/ overview of glare testing. Low vision refraction.

**Unit:4.**

Assessment & prescription of low vision devices-optical/ non-optical/ rehabilitation services. Non- optical devices-pen/umbrella/ boldline note book/ illumination/ letter writer/ environmental modification/ signature guide/ needle threader/ eccentric viewing strategies.

**Unit:5**

Overview of Rehabilitation Services:- definition/ implementation/ vocational guidance/educational guidance/ mobility & orientation training / special teacher/ special school/ Braille system/ integrated system/referral center- activity/ support/ loan.

**Unit:6**

Overview of systematic / retinal diseases in relation to low vision:- acromatopsia/ LMBB syndrome/ labers congenital anomaly/ down syndrome/ retinitis pigmentosa/ diabetic retinopathy/ optic atrophy/ albinism/ aniridia.

**Unit:7.**

Counseling of low vision patient/ parents/ guardians/relatives.

Text Books:

1.Monica Chaudhry:Low Vision Aids,Jaypee Brothers Medical Publishers,2010

Reference:

2.The Art & Practice of Low Vision , By Freeman & Jose, Butterwort Pub.

3.Understanding Low Vision , AFB Publication

4.Low Vision, Fayea E.E.