

## ਬਾਟਨੀ ਵਿਭਾਗ

## ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ-147002

(1961 ਦੇ ਪੰਜਾਬ ਐਕਟ ਨੰ: 35 ਤਹਿਤ ਸਥਾਪਤ)

ਫੋਨ: 0175-3046265(ਮਖੀ), 0175-3046266(ਦਫ਼ਤਰ) (ਮੋ: 99881-95434)



ਨੰਬਰ:**ੈ...ਿ.**/ਬਾਟਨੀ ਮਿਤੀ: *6-7-ੈ.* 

## Specifications of Double Beam UV-Visible Spectrophotometer (Shimadzu)

1. Microprocessor based UV-Vis Spectrophotometer with the following specifications:

(Model UV-1900)

Photometric System

Double beam optics

Photometric range

Absorbance: -4 to +4.0 Abs,

Transmittance

Photometric Accuracy

0.0 to 400%

Wavelength Range

+/-0.0025 Abs. at 1.0 Abs & +/-0.002 Abs. at 0.5 Abs 190 to 1100 nm or better

Wavelength Display & Setting Wavelength Accuracy

0.1 nm increment +/- 0.05 nm or better

Wavelength Repeatability Photometric Repeatability

+/- 0.1 nm or better +/- 0.0001 Abs or better

Scanning speed studies

Up to 25,000 nm/min or better for fast kinetic

Spectral Bandwidth

1 nm or better

Stray light Baseline Stability

Less than 0.01% at 340 nm or better less than 0.0003 Abs/H

**Baseline Flatness** Noise Level

less than 0.0006 Abs/H Less than 0.00003 Abs

Monochromator Detector

Czerny Turner blazed holographic grating

Silicone photodiode

USB Port connectivity

2-3 USB ports for data Transfer, PC, Printer

Light source Quartz Cuvette

Tungsten and Deuterium lamp. 3.5 mL pathlength of 10mm (01 Pair)

Spectrophotometer should have built in hardware validation for Wavelength accuracy, wavelength repeatability, resolution, stray light, photometric accuracy, photometric repeatability, baseline flatness, baseline stability, noise level and validation software alongwith optical filter for wavelength calibration.

Windows based Operating software should have built in features like real time concentration display, Photometric mode Single / multi-wavelength, Enzyme Kinetics calculation, event recording such as Addition of reagents during measurement, DNA/protein quantification etc. Spectrophotometer should have built-in color touch screen display so that user can use the Spectrophotometer without PC/Laptop also.

a. Online UPS with 30 minutes back up for Spectrophotometer(1 Kva): 01

b. Power Cable (240 V): 01

c. Lab Solutions UV software: 01

d. UV 10 mm, 3 mL Cell Quartz: 02

## 2. Laminar, Fume Hood and Biosafety Cabinets

(NU-157) C: Size: 4'x2x2' S.S.: Horizontal Laminar Air Flow Cabinet

Note: Bids of those will be considered who cap athourized dealer /sole supplier/sole distributer /stokest or manufcture of the equipment whose bid has been called.,

- ਟੈਂਡਰ ਮਿਤੀ 15-07-2020 ਤੱਕ Sealed ਲਿਫਾਫੇ ਵਿੱਚ Coordinator, UGC-DSA-I, Department of 1) Botany, Punjabi University, Patiala ਦੇ ਨਾਮ ਤੇ ਭੇਜਿਆ ਜਾਵੇ।
- ਟੈਂਡਰ Acept ਕਰਨ ਦਾ ਅਧਿਕਾਰ UGC-DSA-I, Department of Botany, Punjabi University, Patiala ਪਾਸ 2)

**ਡਾਇਰੈਕਟਰ, ਯੂਨੀਵਰਸਿਟੀ ਕੰਪਿਊਟਰ ਸੈਂਟਰ** (ਵੈਬਸਾਈਟ ਤੇ ਅਪਡੇਟ ਕਰਨ ਸੰਬੰਧੀ)