

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Analytical Chemistry-II

Subject Code: 5SC02ACH1

Branch: M.Sc. (Chemistry)

Semester: 2

Date: 29/10/2018

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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SECTION – I

- Q-1** **Attempt the Following questions** **(07)**
- A** Write the full form of AOs & SOP. **02**
- B** What is precision? **02**
- C** What is confidence limit? **02**
- D** Define quantitative analysis. **01**

- Q-2** **Attempt all questions** **(14)**
- A** Give differences between quality assurance and quality control. **05**
- B** Discuss methods for minimization of errors. **05**
- C** Write a note on data processing limit. **04**

OR

- Q-2** **Attempt all questions** **(14)**
- A** Explain determinant and indeterminate errors. **05**
- B** Write a note on test of significance. **05**
- C** Write a note on applications of confidence limit. **04**

- Q-3** **Attempt all questions** **(14)**
- A** What is error? Discuss the types of errors. **08**
- B** Discuss the classical and instrumental methods for analytical techniques **06**

OR

- Q-3** **Attempt all questions** **(14)**
- A** Discuss the validation of analytical methods. **08**
- B** Discuss GLP- standard operating procedures. **06**

SECTION – II

- Q-4** **Attempt the Following questions** **(07)**
- A** How do we accurate calibration curve? **02**



	B	What is method for sampling?	02
	C	Give the name of source used in visible spectroscopy.	01
	D	What are ditopic solvents?	01
	E	Define linearity range?	01
Q-5		Attempt all questions	(14)
	A	Write a note on internal standard.	05
	B	Write a note on sample preparation.	05
	C	Discuss calibration curves.	04
		OR	
Q-5		Attempt all questions	(14)
	A	Discuss the effects solvent in UV-Vis Spectroscopy.	05
	B	Write a note on choose of solvent in UV Visible spectroscopy.	05
	C	Write a note on standard addition technique.	04
Q-6		Attempt all questions	(14)
	A	Explain instrumentation of UV-Vis spectroscopy.	08
	B	Discuss the applications of UV-Vis spectroscopy.	06
		OR	
Q-6		Attempt all Questions	(14)
	A	What is emission? Discuss the theory of electronic spectroscopy.	08
	B	Discuss the steps involved in chemical analysis.	06

