

THIRD YEAR, SEM VI, PHARMACEUTICAL ANALYSIS-II					
SAMPLE QUESTIONS CBGS/CBCS					
	Option a	Option b	Option c	Option d	
Q.1	What is the wavelength range for UV spectrum of light				
	400 nm – 700 nm	200-400nm	0.01 nm to 10 nm	200nm to 800 nm	
Q.2	The scattering of waves in Bragg's law experiment is due to				
	Einstein's scattering	Rayleigh scattering	Newton scattering	Inelastic scattering	
Q.3	X-rays are generated by				
	Geiger tube	Goniometer	Coolidge tube	Rotameter	
Q.4	Diffraction gratings work on the basis of				
	Max-Well Boltzman's equation	Bragg's equation	Noise-whitney equation	Beer's law	
Q.5	During relaxation, the electron spin is reversed in				
	Fluorescence	Phosphorescence	IR	NMR	
Q.6	Fluorescence is a result of transition of electron from				
	Singlet ground state to singlet excited state	Lower singlet excited state to singlet ground state.	Triplet excited state to singlet ground state	Triplet ground state to singlet excited state	
Q.7	Which of the following statement is not correct				
	Absorptivity changes with the intensity of the light	Absorbance is independent of intensity of the light	Absorbance has no units	Absorptivity is a constant and depends on the nature of the molecule	
Q.8	Which of the following is a non-dispersive wavelength selector				
	Gratings	Prisms-glass	Filters	Prism-Quartz	
Q.9	Quantum yield of fluorescence is the ratio of intensities of				
	Incident radiation to fluorescent radiation	Fluorescent radiation to incident radiation	Absorbed radiation to fluorescent radiation	Fluorescent radiation to absorbed radiation	
Q.10	Which of the following material is used to coat the cathode in photo tube				
	Copper	Sodium	Bromium	Cesium	
Q.11	Collimator is a device used in monochromators to				
	Focus the required range of wavelength of radiation	Eliminate interferences from other amines	Eliminate reflection and scattering	Focus the incident radiation parallel on to the dispersing device	
Q.12	Sample size for student t-test is:				
	More than 30	Less than 30	Between 50 and 100	Between 100 and 200	

Q.13	The light which reaches the detector without passing through the cell is known as				
	Dark radiation	Stray radiation	Photoluminescence	Chemiluminescence	
Q.14	Which of the following is an example of anionic interference in atomic emission spectroscopy?				
	Interference of high concentration of sodium ions in assay calcium ions.	Interference by formation of less volatile salt with sulphates by calcium.	Increased viscosity of the analyte solution by sugars.	Decreased drop size of the analyte solution by alcohols	
Q.15	The selectivity and sensitivity of fluorescence spectroscopy is higher than that of absorption spectroscopy because of all of the following EXCEPT				
	Fluorescence substance have different λ_{max} of excitation and emission	Rigid molecules can only fluoresce	Fluorescence intensity depends on the intensity of the incident radiation	Every molecule that absorbs in UV region can show fluorescence	
Q.16	Dynodes are present in				
	Barrier layer detector	Phototube	Photomultiplier tube	Diode array	
Q.17	Cut off wave length is the wavelength				
	Below which a solvent absorbs too much radiation	Above which a solvent absorbs too much radiation	Below which an analyte absorbs too much radiation	Above which a analyte absorbs too much radiation	
Q.18	In fluorescence spectroscopy, emission spectra is obtained by keeping				
	Excitation wavelength constant	Emission wavelength constant	Both excitation and emission wavelength constant	Both excitation and emission wavelength varying	
Q.19	The purpose of secondary filter in fluorescence spectroscopy is				
	Allows only excitation radiation	Allows only emission radiation	Allows both excitation and emission radiations	Allows transmitted radiation	
Q.20	Thermal analysis is defined as				
	Measurement of concentration of materials as a function of temperature	Measurement of solubility of materials as a function of temperature	Measurement of physical properties as a function of temperature	Measurement of line positions of crystals as a function of temperature	
Q.21	Fluorescence quenching is				
	Conversion of fluorescence to phosphorescence	Enhancement of fluorescence	Absence of fluorescence	Repression of fluorescence	

Q.22	Which of the following is true about radiochemical methods?				
	Eliminate the need for chemical preparation	Not sensitive	Not accurate	Not specific	
Q.23	Phosphorescence mainly results from				
	Internal conversion	Vibrational relaxation	Intersystem crossing	Crossover	
Q.24	The compound C ₈ H ₈ O shows the following IR absorption data: 1450, 1265, 1360, 1680 cm ⁻¹ . What will be this compound?				
	acetophenone	p-cresol	Benzyl alcohol	p-tolualdehyde	
Q.25	Which of the following source is continuous source for fluorometry				
	Deuterium discharge lamp	Xenon arc lamp	Mercury vapor lamp	Hollow cathode lamp	