# Bengal Engineering and Science University, Shibpur

## B. Arch. Part - I, 1st Semester Examination, 2012

### **DESIGN FUNDAMENTALS (AR-101)**

Time: 3 Hours Full Marks: 70

#### Answer to Question no. 1 and any other five questions. Neat appropriate sketches will be given due credit.

1.	Fill in the gaps with appropriate word / words: —	1 X 10
	(i) relates to the sense of temperature each colour imparts, and it refer	rs to the
	relative warmth or coolness, degree of hotness or coldness of any colour.	
	(ii) Design may be said to be a attitude that fulfils its purpose.	
	(iii) In three dimensional composition, one deals with a series of systems of	
	relationships.	
	(iv) Natural forms are diagram of internal and external forces environment.	in the
	(v) Our interpretation of space depends on the themselves, not	on the
	particular method that is used to organize them.	
	(vi) The apparent of a figure, which is due to our projection of gravitation	nal pull,
	also affects its position in a visual field.	• ,
	(vii) The horizon is always at our own level.	
	(viii) The most common example of colour wheel is	
	(ix) Until there is, there will be no visible form.	
	(x) We see through the eyes, but we perceive with the	
2.	(a) Explain the process of perceiving the spread and depth of a visual field.	6
	(b) With the aid of examples, illustrate how are the ideas of "change" and "time" i	nvolved
	with "movement in visual design".	6
3.	(a) Define the term "balance in visual design".	2
_	(b) Classify balance and explain the different types.	10
4.	Compare additive and subtractive colour systems. How do you propose controlling	hue of
	pigments?	4+8
5.	(a) What do you understand by the term "colour relationships"?	3
	(b) Explain the term "simultaneous contrast". How does one bring "intensity of	
	between complimentary and near-complimentary hues of different intensities?	5 + 4
5.	(a) What form will "streams of sand" take, if they are allowed to fall from one's han	d? How
	will it be different if the material is "pieces of wood" instead of "streams of sand"? Wh	
		+1+2
	(b) Explain with illustrations the difference between working with a homogeneous i	
	and that with assembled ones.	8

(a) While undertaking a design assignment, which amongst "form" and "function" you would prefer? Justify with examples. 6 (b) Discuss the steps that one should follow while undertaking an architectural design problem.

6 x 2

- Write short notes on the following: (a) Atmospheric perspective;
  - (b) Effect of light on 3-D modelling.