Summer Essay

[Name of the Writer]

[Name of the Institution]

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**Question # 1**

**If you were blind in one eye, why might you misjudge your distance from a painting on the wall, but not the distance to buildings a block away?**

Suppose that if I was blind on my one eye, I will have to face issues in judging the distance of color or painting on a wall but not on the distance far to building a block away. Because of the deeper perception, monocular and binocular cues, it is fully true. Depth or deeper perception is the ability of a person of living thing to judge or know the actual distance of an item or object which may be reaching to get the mobile phone put on the table.

Binocular cues made it possible to judge the actual distance of any painting or color on the wall in front of your eyes. And it uses both of the eyes to critic or judges any distance. The brain cannot process the critic or distance if one of two eye does not function and both eyes work collectively to process the distance of a near of close item or object. The eyes might collect or receive a bit altered visual cues if the object is too close or near to eyes. It also called retinal disparity (Bazerman, & Tenbrunsel, 2012). So the ability of judging things which are near or close is effected when one eye loses its ability to take visual cues.

At far distances, each of the eyes can see the same pictures or images. Rain and eyes pick same things like size light and height etc. when judging a faraway thing. So it could be much easy to know and judge with a single eye because the same image would be there which will be processed by the brain.

It becomes difficult to judge the distance of nearer things or objects than the away objects when there is losing vision in one eye. It is the outcome of the way through which retinas perceive the item or object in the close view (Bazerman, & Tenbrunsel, 2012). The pictures or image remain close to the eyes in the far away view, so there are no huge efforts needed for processing and differentiating between the eyes.

**Question # 3**

**Explain the theory of color vision that would account for the fact that we can describe a color as bluish green, but not as reddish green?**

There are two major theories which are used to describe the color vision which is named as opponent-process theory and three-color theory. These theories clarify that a bluish green color can be seen but not a reddish one.

Based on the theory of Young Helmholtz, three color receptors are there in the retina. Each one of them works for processing various colors separately while sometimes they work collectively. These three color receptors in the eye are colored green, red and blue. This theory articulates that we see color whenever the cones or receptors are stimulated (Wyszecki, & Stiles, 1982).

Another theory (opponent process theory) states the receptors with colors in pairs. These pairs are helpful in enabling color vision. Within front color, when neurons stimulate in green cone then stimulation of red cone cannot be done. Red cannot be looked reddish because of this process. So blue may appear bluish green because the green and blue cones maybe enthused at matching time (Wyszecki, & Stiles, 1982). As well as blue and green colors never go in a similar way or channel which enables us to see both of the colors as one (bluish green).

Imagining a reddish green appears impossible owing to the fact it's impossible for the colors to be perceived composed because of the color cones in retinas. Those two different colors cannot be processed by the eyes that this is reddish green or bluish green (Wyszecki, & Stiles, 1982).

**References**

Bazerman, M. H., & Tenbrunsel, A. E. (2012). *Blind spots: Why we fail to do what's right and what to do about it*. Princeton University Press.

Wyszecki, G., & Stiles, W. S. (1982). *Color science* (Vol. 8). New York: Wiley.