

Physical Agents and Electrotherapy 2

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Q → 1

Ans:-

- a) Energy move from \uparrow potential to \downarrow patient \uparrow Body —& \downarrow ice. Body temperature has 37°c & ice have 0°c . when ice applied in body they becomes felt. Body heat move to ice & ice becomes melt.
- b) Nerue condition cold receptor large diameter warm have short. Cold receptor compress these short diameter receptor and slow down his conductor.
- c) They have cardiac when initially applied ice they caused vasoconstriction. Vasoconstrictor $\rightarrow \uparrow$ BP the concert nerue problem to patient due to BP
 - \rightarrow They eliminate puffiness
 - \rightarrow Reduce swelling
 - \rightarrow Reduce oiliness
 - \rightarrow Reduce inflammation
 - \rightarrow They remove wrinkles
- d) They are used to soothe they unknown they reduce redness they improv circulation they reduce pain sensation and blood mobilized the soft tissue.



Q → 2

Ans:-

- a) pain receptor when pain cooled receptor activitied sensorry inflammation goes toward brain spinal cart
 - \rightarrow two types of nerue include long in short diameter
 - \rightarrow Pain has short diameter in large diameter nerue compressed short diameter nerue and reduced.
- b) Spassiticty:- occur when there is a and nerue fiber caused fast moment and they inress muscle tune when ice theraphy applied fiber nerue conduction becomes slow and then signal moves slowly and reduced capacity.



Q → 3

Ans:-

a) Luminous:- Those generators or object which has ability to emit their own light to culled e.g Sun, Moon, Candle ect.

Non-Luminous:- those meterials which don not have the ability to emit their light culled e.g Book, Chair, Pencil etc.

Luminous	Non-Luminous
<ol style="list-style-type: none">1. Which emits light2. They are electrical heated filament3. It's wavelength from 350→4000Nm4. They emit infrared roughs and UV rays and visable light5. They are used for cronic inflammation6. They are used to reduced pain viacounter irritatent effect7. This treatment is from 15→20 Minutes8. They covered 40→60 CM from treated ares9. They are penetrate epidemics dreams10. Produced by 1 or more	<ol style="list-style-type: none">1. Don not emits light2. Electrically heated resistance wire3. Take about 5→15 minutes to be heated and emits these maximum intensity4. Wave length 1500→12000 NM5. They emit farIRR6. Ainatrate into epidemics in hypodermic (20 NM)7. Used in acute condition8. Reduced pain via sedative effect9. Treatment time 20→ 30 minutes10. Cause 75 → 90 cm from treatment area made up of insuling materials

b) IR are more effective to relieving pain than UV radiation because UV rays have low wave length then IR and lugher th frequency then IR. Those having light frequency they moves deeply and are more dangerous while IR is a thermal radiation, they are thermally very strong, there they are more effective then UV rays.

Pain and inflammation:- since infrared therapy enhances and improves circulation in the skin and other parts of the body, it can bring oxygen and nutrients to injured tissues, promoting healing. It helps ease pain, relieve inflammation, and protect against oxidative stress.

Infrared Therapy:- Is a new and innovative light-based method to treat pain and inflammation in various parts of the body. Unlike ultraviolet light, which can damage the skin, infrared light enhances cell regeneration. Infrared light is delivered to the site of injury or inflammation at certain wavelengths, promotion cell repair.

