MODEL EXAMINATION: 2024 PHYSICS

Max. Score:40

1.Magnetic effect12.Slp rings13.50°14.Mechanical energy to electrical energy15.2 hours16.1 Use energy judiciously2ii. Use renewable sources of energy like solar energy maximum as possible.2iii. Construct houses so as to get sufficient sun light and air circulation.2iv. Use machines having high efficiency.27.a. R = 1250 Q, V = 200 V2P = \sqrt{R} = 200/1250 = 32 W2b. H = Pt = 32x10 = 320 J38.Green: solar power plant, hydroelectric power station.2Brown: Atomic reactor, Diesel Engine29.a.water2b e on = 3x10 ⁶ /1.33 = 2.26x 10° m/s210.a. False. According to New Caresian Sign convention, the distance of the object from a mirror is always2negative.b. False. Right hand rule is used to identify the direction of magnetic field around a current2corrying conductor.OR Fleming's left hand rule is used to identify the direction of magnetic force on a current carrying, conductor placed in a magnetic field.311.a. Circuit.A3b.Circuit.A3b.Circuit.A3b.Circuit.A3b.Circuit.A3b.Circuit.A3b.L Eye ball is larger than normal size.1c.Carave mirror - esar view mirror - Larger field of view3Concave mirror - esar view mirror - Larger field of view33b.Fleming's left hand rule.3c. Electric motor, moving coil loud speaker.133b.Tene		
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Ebrahim Vathimattom.Ph:9495676772		
	Ebrahim Vathimattom.Ph:9495676772	

18.a. DC Generator.

b. Armature, field magnet and split ring commutator.

c.



19.a. concave lens

b.

c. erect, virtual, smaller than the object.

20.a.Violet, Indigo,Blue, green, yellow, orange and red. [All visible colours]

b. Red

c. dispersion,

d. There is no dispersion. (splitting). That is, only red colour is obtained on the screen.

4

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4