2018 VI 13 1430 Seat No. : DOMESTIC AND CONSUMER APPLIANCES Time: 2 Hours Subject Code 2 3 4 Total No. of Questions : 5 (Printed Pages : 2) Maximum Marks: 50 **INSTRUCTIONS**: i) Write **each** guestion on a **fresh** page. ii) All questions are compulsory. iii) Figures to **right** indicate **full** marks. iv) Draw neat labelled diagram wherever necessary. v) Write serial number of guestion and sub-guestion clearly. 1. A) Fill in the blanks : $(1 \times 2 = 2)$ To avoid rusting, the electric iron cover is generally plated with _____ II) Intermediate frequency in AM receiver is B) Answer the following : (3×2=6) I) Explain the construction of Swan Neck Kettle with the help of neat diagram. II) List any six precautions you will take while handling wet grinder. (2×1=2) C) Answer the following : State working principle of Electric Moulded type immersion water heater. $(1 \times 2 = 2)$ 2. A) Answer the following in **one** or **two** lines : I) What is the function of gear case assembly in washing machine ? II) Why capacitor is connected in speed control method in electric mixer? B) Answer the following : (3×2=6) I) Explain the construction of simple wet grinder with the help of neat diagram. II) With the help of neat diagram explain the construction and operation of hot plate. C) Answer the following : $(2 \times 1 = 2)$ Give any four precautions to be taken while working with electric oven.

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5. Answer the following : I) Draw neat diagrams of speed control methods used in electric mixer.

- II) Draw labelled diagram of CD giving the function of coating used on the reflector surface.
- III) What is the function of driver amplifier in P.A.S.?
- IV) What is meant by horizontal and vertical scanning in TV?
- V) What is the function of demodulator and decoder in D.T.H.?

- II) Draw block diagram of monochrome television and explain the working of following blocks :

 - b) Sound detector

 - a) Video amplifier c) Yagi antenna and feeder
- OR

3. A) Answer the following in **one** or **two** words :

operation of upright vacuum cleaner.

OR

B) Answer the following :

C) Answer the following :

each block in detail.

and selection of taps.

 $(1 \times 2 = 2)$

II) Name the element in battery charging system used to prevent flow of

excessive charging current in the battery under charge.

- chamber in water heater.

- I) Name the device which prevent developing extra pressure inside the

I) Draw the block diagram of Sophisticated Emergency Light and explain

II) Explain A.C. voltage stabilizer using relay with block diagram operation

- II) Why the microphones for P.A. system should be preferably cardioid type? B) Answer the following : (3×1=3)

With the help of neat diagram explain the construction and operation of electric

- bell.
- C) Answer the following :
- (5×1=5) I) Explain with the help of neat block diagram working of AM Radio receiver.

4. A) Answer the following in short :

With the help of neat air path flow diagram explain the construction and

(5×1=5)

 $(2 \times 5 = 10)$

$(1 \times 2 = 2)$ I) Which are the two factors which influence the output of P.V. module?

$(3 \times 1 = 3)$