

**C. ABDUL HAKEEM COLLEGE (AUTONOMOUS),
MELVISHARAM - 632 509.
SEMESTER EXAMINATIONS, APRIL - 2018**

FOR ALL II YEAR UG COURSE

SEMESTER IV

U15NPH401 - BASIC PHYSICS (NME - II)

Time: Three Hours

Maximum: 40 Marks

SECTION - A (10 X 1 = 10 Marks)

Answer **ALL** Questions.

1. Define weight.
2. Which physical quantity has the unit of horsepower hour?
3. Give the principle of pressure cooker.
4. State Bernoulli's principle.
5. Write the unit of power of a lens.
6. When a vehicle with a siren passes, the pitch of the sound gets reduced as it passes away. This explains _____.
7. Who discovered X-rays?
8. Name the device that is used to measure earthquake.
9. Which was the first Indian artificial satellite?
10. What is the wavelength range of radio waves?

SECTION - B (5 X 3 = 15 Marks)

Answer **ALL** Questions.

11. a) Distinguish between energy and power.

(Or)

- b) Write a note on centrifuge.

12. a) Give the working principle of air conditioner.

(Or)

- b) Give the example of Bernoulli's principle.

13. a) State the differences between long sight and short sight.

(Or)

- b) Tabulate the differences between microscope and telescope.

14. a) Write a note on Richter scale.

(Or)

- b) What are cosmic showers?

15. a) State Newton's law of gravitation and write the expression for it.

(Or)

- b) Write a note on communication satellites.

SECTION - C (3 X 5 = 15 Marks)

Answer **ANY THREE** Questions.

16. Explain with the principle and working of washing machine.
17. With the help of a schematic diagram explain the working the principle of a refrigerator.
18. Explain the different parts and the formation of images in a camera.
19. Briefly explain the ultrasound scan systems.
20. Explain with the block diagram the working of AM transmission system.
