

PHYSICAL WORLD

General Instructions: Answer all the questions. If you are unable to answer any question, go through the page number that is given against that particular question in the text book. You can find the answer.

Test Paper-I

Max marks: 30

Time: 90Mts

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|----|---|----|---|
| 1 | What is science? What is physics? | P1 | 2 |
| 2 | What is scientific method? Give the steps involved in it. | P1 | 3 |
| 3 | Name the experiment which established the nuclear model of atom. | P2 | 1 |
| 4 | What is the law which | P2 | 1 |
| | a. Describes the fall of an apple to the ground | | |
| | b. The motion of the moon around the earth and | | |
| | c. The motion of planets around the earth. | | |
| 5 | What are the two principal thrusts in physics? Explain How they help in the Development of physics? | P2 | 3 |
| 6 | What is Classical Physics? What are the different subjects involved in classical physics? Briefly explain about them. | P3 | 3 |
| 7 | What is Quantum Physics? | P3 | 1 |
| 8 | Explain how physics is exciting? | P4 | 2 |
| 9 | When feather and stone are dropped from the same height, which one will reach the ground first? What is the effect of gravity on the mass of the object? How will you prove this? | P4 | 3 |
| 10 | What is the difference between a hypothesis and an axiom? | P4 | 2 |
| 11 | What are the two postulates on which Einstein's special theory of relativity is based? | P4 | 2 |

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| 12 | Match the following | P5 | 3 | | | | | | | | | | | | | | |
| | <table border="0"><tr><td style="text-align: center;"><u>Group-A</u></td><td style="text-align: center;"><u>Group-B</u></td></tr><tr><td>1. Archimedes</td><td>a. Electromagnetic theory;
Light –an EM wave</td></tr><tr><td>2. Galileo</td><td>b. X-Rays</td></tr><tr><td>3. J C Bose</td><td>c. Theory of Relativity</td></tr><tr><td>4. W K Roentgen</td><td>d. Principle of buoyancy</td></tr><tr><td>5. Albert Einstein</td><td>e. Ultra short radio waves</td></tr><tr><td>6. James Clerk Maxwell</td><td>f. Law of Inertia</td></tr></table> | <u>Group-A</u> | <u>Group-B</u> | 1. Archimedes | a. Electromagnetic theory;
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| 13 | What are the fundamental forces in nature? Briefly explain. | P8 | 3 | | | | | | | | | | | | | | |
| 14 | Give the scientific principle involved in the following | P7 | 1 | | | | | | | | | | | | | | |
| | a. Production of ultra-high magnetic fields | | | | | | | | | | | | | | | | |
| | b. Electron microscope. | | | | | | | | | | | | | | | | |