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| Text  Description automatically generated | | | |
| **PT-1 (2023-24)**  **ANSWER KEY** | | | |
| **Subject: MATHEMATICS**  **Grade: 11** | | **Max. Marks:35**  **Time:1hr20mins** | |
|  | **SESSION I** | |  |
| 1. | C | | 1 |
| 2. | d | | 1 |
| 3. | c | | 1 |
| 4. | a | | 1 |
| 5. | S = {x | x is a positive multiple of 3 less than 100}  ⇒ S = {3, 6, 9, 12, 15,……, 99}  n(S) = 99/3 = 33 P = {x | x is a prime number less than 20} ⇒  P = {2, 3, 5, 7, 11, 13, 17, 19}  ⇒ n(P) = 8 n(S) + n(P) = 33 + 8 = 41 | | 1  1 |
| 6. |  | | 2 |
| 7. | Graph  Modulus function | | 1  1 |
| 8. | = A = B = C =  = | | 1  1  1 |
| 9 | R = { ( 2,4),( 2,6),( 2, 18), ( 2, 54), ( 6, 18),(6, 54),( 9, 18),(9, 27),(9, 54)}  Domain = {2,6,9}  Range = {4,6,18,27,54} | | 1  1  1 |
| 10 |  | | 1  1  1 |
| 11 |  | | 1  1  1 |
| 12. | i) the number of people who read at least one of the newspapers=52  (ii) the number of people who read exactly one newspaper=30 | | 2  2 |
| 13 |  | | 2  2 |
| 14. |  | | 2.5 |
|  |  | | 2.5 |

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