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| **Text  Description automatically generated** | |
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| **FIRST TERM EXAMINATION (2021-22)**  **ANSWER KEY** | |
| **Subject: Physics**  **Grade: XII** | Max. Marks:35Time:90mins |

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| **SECTION A** | | |
| **1** | **b.** | 10 V |
| **2** | **b.** | IV only |
| **3** | **a.** | 0.1 V |
| **4** | **b.** | 20V |
| **5** | **a.** | (i), (ii) and (iii) are correct |
| **6** | **b.** | F/4 |
| **7** | **b.** | 1 is parallel and 2 is series |
| **8** | **d.** | 1:1 |
| **9** | **d.** | 3.3 A |
| **10** | **c.** | A condition of no current flow through the galvanometer |
| **11** | **d.** | copper decreases and that of silicon increases |
| **12** | **a.** |  |
| **13** | **b.** | 1V |
| **14** | **c.** | 2 A |
| **15** | **b.** | curved lines |
| **16** | **c.** | Zero |
| **17** | **c.** | Torsional constant |
| **18** | **a.** | is always zero. |
| **19** | **b.** | π/3 |
| **20** | **a.** | Self-inductance |
| **21** | **c.** | N. A. B. ω |
| **22** | **b.** | anticlockwise |
| **23** | **d.** | 0 V |
| **24** | **c.** | 1/9 |
| **25** | **c.** | 4 V |
| **SECTION B** | | |
| **26** | **b.** | q/Ɛ0 , q/Ɛ0 |
| **27** | **c.** | decrease in the potential difference across the plates, reduction in stored energy, but no change in the charge on the plates |
| **28** | **a.** | Left |
| **29** | **a.** |  |
| **30** | **a.** |  |
| **31** | **b.** | 2A |
| **32** | **c.** | 14.4 W |
| **33** | **a.** | 2 : 1 |
| **34** | **d.** | Zero |
| **35** | **a.** | 0.888 A |
| **36** | **a.** |  |
| **37** | **b.** | 3:2 |
| **38** | **a.** | 2:1 |
| **39** | **a.** |  |
| **40** | **b.** | , Fa Fb  0 |
| **41** | **b.** | acceleration a<g |
| **42** | **c.** |  |
| **43** | **a.** | -B2l2v/R |
| **44** | **a.** | 3 mH |
| **45** | **a.** | Both A and R are true and R is the correct explanation of A |
| **46** | **c** | A is true, but R is false. |
| **47** | **c** | A is true, but R is false. |
| **48** | **c** | A is true, but R is false. |
| **49** | **b** | Both A and R are true but R is NOT the correct explanation of A |
| **SECTIONC** | | |
| **50** | **c.** | along the diagonal BD |
| **51** | **d.** | 1/4 |
| **52** | **b.** | f = fB |
| **53** | **d.** | All above are correct |
| **54** | **c.** | 200 V |
| **55** | **c.** | 60 degree |