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| **PREBOARD EXAMINATION (2021-22)-ANSWER KEY** | |
| **Subject: PHYSICS**  **Grade: XII** | Max. Marks:35Time: 90 Minutes |

1. A - Spherical normal to electric field
2. D - Zero
3. D - Zero
4. C - r2/ r1
5. C - 16
6. D - Q/6є0
7. A - the electrostatic energy stored in the capacitor increases
8. B - 10Ω
9. C - 0.0064 °C-1
10. D - Charge
11. D - the magnitude of the drift velocity per unit electric field
12. A -0.2
13. B - 2000 W
14. B - Reduced to half
15. A - Magnetic moment of revolving electron in 1st orbit
16. A -
17. B - west
18. D - All the above
19. A - 300
20. C - relative position and orientation of the two coils
21. A -1 H
22. B - Anticlockwise
23. C - zero
24. A - 0
25. D - is constant with time
26. C - Doesn’t change with distance
27. A -8 volt
28. A -7.2x104 towards A
29. C - Both a and b
30. B -9x10-3 J
31. C -4B
32. B - 50.0 V
33. B -90 V
34. A -40 cm
35. B -
36. D - All the above
37. B -1/3 Ω
38. A - increases
39. D - 900Ω
40. C -
41. D - 0.628V
42. A - 4:5
43. D - All of these
44. D - Zero
45. B -
46. A
47. C
48. D
49. C
50. B - Electric field between them at the distance r/2 is zero
51. B - zero
52. A - Resonant frequency to band width
53. B - Voltage leads the current by π/2
54. A - V=100V, I= 2A
55. B - Pure resistive