



Rao IIT Academy

Symbol of Excellence and Perfection

JEE | MEDICAL-UG | BOARDS | KVPV | NTSE | OLYMPIADS

Date: 27 Nov 2016

IAPT / Physics / Code P162/ Solutions-2016

ANSWERKEY

- | | | | |
|-----------|-------------|-------------|-------------|
| 1. B | 2. C | 3. C | 4. D |
| 5. B | 6. B | 7. B | 8. B |
| 9. C | 10. C | 11. B | 12. B |
| 13. D | 14. C | 15. D | 16. B |
| 17. B | 18. A | 19. B | 20. D |
| 21. B | 22. D | 23. D | 24. B |
| 25. B | 26. C | 27. A | 28. D |
| 29. B | 30. A | 31. B | 32. C |
| 33. A | 34. D | 35. B | 36. C |
| 37. B | 38. C | 39. A | 40. A |
| 41. D | 42. D | 43. D | 44. D |
| 45. A | 46. B | 47. B | 48. D |
| 49. D | 50. C | 51. D | 52. C |
| 53. C | 54. B | 55. C | 56. C |
| 57. A | 58. A | 59. A | 60. A |
| 61. B,C | 62. C | 63. A,C | 64. A,B,C,D |
| 65. A,B,C | 66. B | 67. A,B,C,D | 68. A,B,C |
| 69. C,D | 70. A,B,C,D | | |

1. B

Topics :

Electrostatics,

$$E = 9 \times 10^9 \times \frac{Q}{\left(\frac{10^{-1}}{2}\right)^2} = 2 \times 10^6$$

$$\therefore Q = 2 \times 10^6 \times \frac{10^{-2}}{4} \times \frac{10^{-9}}{9}$$

$$\frac{100}{18} \times 10^{-7}$$

$$Q = 5.55 \times 10^{-7} C$$