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| **HY/PHAK/1220/B 05/11/2020** | | | |
| **HALF YEARLY EXAMINATION (2020-21)** | | | |
| **Subject: PHYSICS (ANSWER KEY)**  **Grade: XII** | | Max. Marks:70Time:3 Hours | |
| 1. | Balanced wheatstone bridge | | 1 |
| 2. | Current is constant along a conductor.  (OR) | | 1 |
| 3. | Zero | | 1 |
| 4. |  | | 1 |
| 5. |  | | 1 |
| 6. | At poles | | 1 |
| 7. | Two definitions  (OR) | | 1  1 |
| 8. | Mono poles do not exist in magnets | | 1 |
| 9. | (OR)  Speed | | 1 |
| 10. |  | | 1 |
| 11. | d) A is false and R is also false | | 1 |
| 12. | b) Both A and R are true but R is NOT the correct explanation of A | |  |
| 13. | c) A is true but R is false | | 1 |
| 14. | d) A is false and R is also false | | 1 |
| 15. | 1. b) i=e  2. d) violet  3. c) 300  4. d) All the above  d) Yellow  (any 4 parts to be attempted) | | 1 |
| 16. | 1. b) Increases  2. d) all the above  3. c) Straight line  4. b) nλ  5. c) Equal to the width of bright fringes  (any 4 parts to be attempted) | | 1 |
|  |  | |  |
| 17. |  | | 1  1 |
| 18. |  | | 1  ½  ½ |
| 19. |  | | ½  ½  ½  ½ |
| 20 |  | | 1  1 |
| 21. | **(OR)** | | 1  1  1  1 |
| 22. | **(OR)** | | 1  1  1  1 |
| 23. |  | | 1  1 |
| 24. |  | | 1  1 |
| 25. | Definition  Unit  Scalar | | 1  ½ ½ |
|  | **Section -D** | |  |
| 26. |  | | 1  1  1 |
| 27. |  | | 1  1  1  1  1  1 |
| 28. |  | | 1  1  1  1  1  1 |
| 29. |  | | 1  1  1 |
| 30. |  | | 1  1  1 |
|  | **Section – E** | |  |
| 31. | **a) Diagram**  **Principle**  **Working**      **(OR)**   1. **Derivation** | | 1  1  1  1  1  2  1  1  1 |
| 32. | a) Principle  Diagram  Explanation for comparison of two cells  b) Any two reasons for one sided deflection  (OR)   1. State Kirchhoff’s rules 2. balance condition of Wheatstone bridge. | | 1  1  2  1  1  2  1  1 |
| 33. | a) Statement Huygen’s principle.  b) Figure  Diffraction explanation with conditions    (OR)  (a) Superposition Principle and Derivation     1. Any Two conditions for constructive and two for destructive interference | | 1  1  2  1  1  1  1  2 |

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