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| ***KENDRIYA VIDYALAYA VEHICLE FACTORY JABALPUR*** | | |
| ***Ist Pre Board (2019 -20)*** | | |
| ***Class – 12 (Mathematics)*** | | |
| ***Time : 3 Hrs M.M : 80*** | | |
| **General Instructions :**  **1. All the questions are compulsory.**  **2. Section A comprises of 20 questions of 1 mark each.**  **3. Section B comprises of 6 questions of 2 marks each.**  **4. Section C comprises of 6 questions of 4 marks each.**  **5. Section D comprises of 4 questions of 6 marks each.** | | |
| **SECTION – A** | | |
| ***( Q1 - Q10 are multiple choice type questions. Select the correct option )*** | | |
| ***1*** | ***Value of k is (a) 8 (b) 9 (c) 10 (d) 12*** | ***1*** |
| ***2*** |  | ***1*** |
| ***3*** | **is (a) (b) (c) (d)** | ***1*** |
| ***4*** |  | ***1*** |
| ***5*** |  | ***1*** |
| ***6*** |  | ***1*** |
| ***7*** |  | ***1*** |
| ***8*** |  | ***1*** |
| ***9*** |  | ***1*** |
| ***10*** | ***(C) 5 , 1 , 0 (D) 5, 1, -2*** | ***1*** |
| ***( Q11 - Q15 : Fill in the blanks )*** | | |
| ***11*** | **Let A = {1, 2, 3}, B = {4, 5, 6, 7} and let f = {(1, 4), (2, 5), (3, 6)} be a function from A to B then f in one –one, this statement is \_\_\_\_\_\_\_\_\_\_\_\_\_(True/ False)** | ***1*** |
| ***12*** |  | ***1*** |
| ***13*** |  | ***1*** |
| ***14*** | ***The function given by f (x) = 3x + 17 is strictly \_\_\_\_\_\_\_\_\_\_\_\_\_\_on R.(Increasing/Decreasing)*** | ***1*** |
| ***15*** | **The area of parallelogram, whose adjacent sides are determined by the vectors is\_\_\_\_\_\_\_\_ .** | ***1*** |
| ***(Q16 - Q20 : Answer the following questions )*** | | |
| ***16*** | **Find the value of the determinant** | ***1*** |
| ***17*** |  | ***1*** |
| ***18*** | **Integrate w.r.t. x** | ***1*** |
| ***19*** | **Integrate w.r.t. x** | ***1*** |
| ***20*** |  | ***1*** |
| **SECTION – B** | | |
| ***21*** | **OR** | ***2*** |
| ***22*** |  | ***2*** |
| ***23*** |  | ***2*** |
| ***24*** |  | ***2*** |
| ***25*** |  | ***2*** |
| ***26*** |  | ***2*** |
| **SECTION – C** | | |
| ***27*** |  | ***4*** |
| ***28*** | **OR** | ***4*** |
| ***29*** |  | ***4*** |
| ***30*** | **Evaluate** | ***4*** |
| ***31*** | **OR** | ***4*** |
| ***32*** |  | ***4*** |
| **SECTION – D** | | |
| ***33*** | **Prove**    **OR** | ***6*** |
| ***34*** |  | ***6*** |
| ***35*** | **OR** | ***6*** |
| ***36*** |  | ***6*** |

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