**Expert ID/Name: Nstructive**

**Date:**

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**Answer:**

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| **Section 1:** Algorithm/Theorem Reminder / A tip for solving these type of questions |
| **Tips:**   1. Recall the method of solving thedifferential equation by splitting the partial fractions, hence find its general solution. 2. Substitute in the general solution of |

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| **Section 2:** Step-by-step answer |
| Given: Differential equation is  To find: Particular solution of  Step 1:   |  |  | | --- | --- | | Instruction | Make subject as in . | | Calculation |  |   Step 2:   |  |  | | --- | --- | | Instruction | Split  into partial fractions.  Substitute the suitable values to find the values of B and C hence find value of A by comparing the coefficients on both sides. | | Calculation | Put    Put    On comparing the coefficients of and constant terms on both sides ,we get |   Step 4:   |  |  | | --- | --- | | Instruction: | Apply the integration on both sides with respect to x. | | Calculation: |  |   Step 5:   |  |  | | --- | --- | | Instruction: | Now, substitute  in | | Calculation: | Hence the required particular solution is | |

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| **Section 3:** |
| Final answer: Particular solution of differential equation  is.  Hence, verified. |