## **GOVERNMENT POLYTECHNIC JAJPUR**

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## **DEPARTMENT OF MINING ENGINEERING**

|                                              | DEMONSTRATION PLAN                         |                                                                 |  |
|----------------------------------------------|--------------------------------------------|-----------------------------------------------------------------|--|
| Discipline: MINING                           | Semester: 4th                              | Name of the Teaching faculty: PRABHUDUTTA MISHRA                |  |
| Subject:Pr.2<br>(MINE<br>VENTILATION<br>LAB) | No of<br>Days/Week<br>class alloted:<br>6p | Semester from Date: 14/02/23 To Date: 23/05/23 No of weeks: 15  |  |
| Week                                         | Class Day                                  | Topics                                                          |  |
|                                              | Group1(3p)                                 | Determine the relative humidity by stationary hygrometer.       |  |
| 1st                                          | Group2(3p)                                 | Determine the relative humidity by stationary hygrometer.       |  |
|                                              | Group1(3p)                                 | EXPT-1-RECORD EVALUATION/SESSIONAL/VIVA VOCE                    |  |
|                                              | Group2(3p)                                 | EXPT-1-RECORD EVALUATION/SESSIONAL/VIVA VOCE                    |  |
|                                              | Group1(3p)                                 | Determine the relative humidity by storrow's hygrometer.        |  |
| 2nd                                          | Group2(3p)                                 | Determine the relative humidity by storrow's hygrometer.        |  |
|                                              | Group1(3p)                                 | EXPT-2-RECORD EVALUATION/SESSIONAL/VIVA VOCE                    |  |
|                                              | Group2(3p)                                 | EXPT-2-RECORD EVALUATION/SESSIONAL/VIVA VOCE                    |  |
|                                              | Group1(3p)                                 | Determine the cooling power of mine air using Kata thermometer. |  |
|                                              | Group2(3p)                                 | Determine the cooling power of mine air using Kata thermometer. |  |

|  | 3rd   |            |                                                                                                                                                        |
|--|-------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |       | Group1(3p) | EXPT-3-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group2(3p) | EXPT-3-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group1(3p) | Study and sketching of air crossing, ventilation doors at pit-top & different types of explosive proof fire stopping                                   |
|  | · 4th | Group2(3p) | Study and sketching of air crossing, ventilation doors at pit-top & different types of explosive proof fire stopping                                   |
|  | 401   | Group1(3p) | EXPT-4-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group2(3p) | EXPT-4-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group1(3p) | Study & use of Vane Anemometer, Digital Anemometer, Velometer, Pitot static-tube measurement of quantity of air flow. Study of digital pressure meter. |
|  | 5th   | Group2(3p) | Study & use of Vane Anemometer, Digital Anemometer, Velometer, Pitot static-tube measurement of quantity of air flow. Study of digital pressure meter. |
|  | Jul   | Group1(3p) | EXPT-5-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group2(3p) | EXPT-5-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |
|  |       | Group1(3p) | Determination of duct characteristic.                                                                                                                  |
|  | 6th   | Group2(3p) | Determination of duct characteristic.                                                                                                                  |
|  |       | Group1(3p) | EXPT-6-RECORD EVALUATION/SESSIONAL/VIVA VOCE                                                                                                           |

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|      | Group2(3p) | EXPT-6-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group1(3p) | Study of constructional features of axial flow and centrifugal fans. |
| 7th  | Group2(3p) | Study of constructional features of axial flow and centrifugal fans. |
| 7.01 | Group1(3p) | EXPT-7-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group2(3p) | EXPT-7-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group1(3p) | Determination of fan characteristic curve.                           |
| 8th  | Group2(3p) | Determination of fan characteristic curve.                           |
|      | Group1(3p) | EXPT-8-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group2(3p) | EXPT-8-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group1(3p) | Study and sketching of regulator, airlocks.                          |
| 9th  | Group2(3p) | Study and sketching of regulator, airlocks.                          |
|      | Group1(3p) | EXPT-9-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |
|      | Group2(3p) | EXPT-9-RECORD EVALUATION/SESSIONAL/VIVA VOCE                         |

|      | Group1(3p) | Study and use of digital anemometer.                       |
|------|------------|------------------------------------------------------------|
|      | Group2(3p) | Study and use of digital anemometer.                       |
| 10th | Group1(3p) | EXPT-10-RECORD EVALUATION/SESSIONAL/VIVA VOCE              |
|      | Group2(3p) | EXPT-10-RECORD EVALUATION/SESSIONAL/VIVA VOCE              |
|      | Group1(3p) | Measurement of quantity of air flow by digital anemometer. |
| 4414 | Group2(3p) | Measurement of quantity of air flow by digital anemometer. |
| 11th | Group1(3p) | EXPT-11-RECORD EVALUATION/SESSIONAL/VIVA VOCE              |
|      | Group2(3p) | EXPT-11-RECORD EVALUATION/SESSIONAL/VIVA VOCE              |
|      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE         |
| 401  | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE         |
| 12th | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE         |
|      | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE         |
|      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE         |

| 13th                 | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|----------------------|------------|----------------------------------------------------|--|
|                      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
| 14th                 | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
| . 15th               | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
| 25                   | Group1(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
|                      | Group2(3p) | REDEMONSTRATION OF EXPERIMENTS/SESSIONAL/VIVA VOCE |  |
| Signature of Faculty |            |                                                    |  |
| g                    |            |                                                    |  |