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| **BHARAT INSTITUTE OF POLYTECHNIC, SONEPAT (168)** |  |  |

 **LESSON PLAN**

**\*Name of the Faculty** : Mr. Himanshu (Theory and Practical)

**Discipline** : Mechanical Engineering

**Semester** : 2nd

**Subject** : Engg. Drg.-II (170025)

**Lesson Plan Duration** : 15 weeks (from January, 2018 to April 2018)

**\*\*Work Load (Lecture/Practical)per week (in hours):** Lecturers + Practical – 8 Lecture

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| **Week No.** | **Theory** | **Practical** |
| **Lecture Day** | **Topic (including assignment/test)** | **Practical Turn** | **Topic** |
| **1st** |  |  | **1st** | **Sheet-1**Principle and utility of detail and assembly drawings |
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|  |  | **2nd** | **Sheet-2**Wooden joints i.e. corner mortise and tenon joint, Tee halving joint, Mitre faced corner joint, Tee bridle joint |
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| **2nd** |  |  | **3rd**  | **Sheet-3**Crossed wooden joint, Cogged joint, Dovetail joint, Through Mortise and Tenon joint |
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|  |  | **4th**  | **Sheet-4**furniture drawing – freehand and with the help of drawing instruments. |
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| **3rd** |  |  | **5th**  | **Sheet-5**Screw Thread Terms and Nomenclature |
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|  |  | **6th**  | **Sheet-6**Types of threads-External and Internal threads, Right and Left hand threads (Actual and Conventional representation), single and multiple start threads. |
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| **4th** |  |  | **7th**  | **Sheet-7**Different Forms of screw threads-V threads (B.S.W threads, B.A thread, American National and Metric thread), Square threads (square, Acme, Buttress and Knuckle thread) |
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|  |  | **8th**  | **Sheet-8**Different views of hexagonal and square nuts. Square and hexagonal headed bolt. |
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| **Week No.** | **Theory** | **Practical** |
| **Lecture Day** | **Topic (including assignment/test)** | **Practical Turn** | **Topic** |
| **5th** |  |  | **9th**  | **Sheet-9**Assembly of Hexagonal headed bolt and Hexagonal nut with washer.Assembly of square headed bolt with hexagonal nut and with washer. |
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|  |  | **10th**  | **Class Test – 1st** |
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| **6th** |  |  | **11th**  | **Sheet-10**Different types of locking devices-Lock nut, castle nut, split pin nut, locking plate, slotted nut and spring washer. |
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|  |  | **12th**  | **Sheet-11**Foundations bolts-Rag bolt, Lewis bolt, curved bolt and eye bolt. Drawing of various types of studs and screws |
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| **7th** |  |  | **13th** | **Sheet-12**Various types of keys and cotters - their practical application, drawings of various keys and cotters showing keys in position. |
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|  |  | **14th** | **Sheet-13**Spigot and socket joint |
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| **8th**  |  |  | **15th**  | **Sheet-14**Gib and cotter joint |
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|  |  | **16th**  | **Sheet-15**Knuckle joint |
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| **9th**  |  |  | **17th**  | **Students Problem Solution** |
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|  |  | **18th**  | **Class Test – 2nd** |
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| **10th**  |  |  | **19th** | **Sheet-16**Types of general purpose-rivets headsCaulking and fullering of riveted joints |
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|  |  | **20th**  | **Sheet-17**Lap joint-Single riveted, double riveted (chain and zig-zag type) |
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| **Week No.** | **Theory** | **Practical** |
| **Lecture Day** | **Topic (including assignment/test)** | **Practical Turn** | **Topic** |
| **11th**  |  |  | **21st**  | **Sheet-18**Single riveted, Single cover plate butt joint, Single riveted, double cover plate butt joint |
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|  |  | **22nd**  | **Sheet-19**Double riveted, double cover plate butt joint(chain and zig-zag type) |
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| **12th**  |  |  | **23rd**  | **Sheet-20**Introduction to coupling, their use and types, Muff coupling both types |
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|  |  | **24th**  | **Sheet-21**Flange coupling (protected) |
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| **13th**  |  |  | **25th**  | **Sheet-22**Flexible Coupling |
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|  |  | **26th**  | **Solution of Students Problem** |
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| **14th**  |  |  | **27th** | **Class Test – 3rd**  |
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|  |  | **28th** | **Solution of Student Problem** |
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| **15th** |  |  | **29th** | **Solution of old Question Papers** |
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|  |  | **30th** | **Solution of old Question Papers** |
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