| Performa: Hindu College of Pharmacy                 |                    |  |                           |                                       |  |  |  |
|---|--------------------|--|---------------------------|---------------------------------------|--|--|--|
|   |                    | Lesson Plan                                |                           |                                       |  |  |  |
| Name of the faculty                                 |                    | Mrs. Jyoti                                 |                           |                                       |  |  |  |
| Discipline  |                    | Pharmacy                                   |                           |                                       |  |  |  |
| Semester  |                    | 1 <sup>st</sup> Year                       |                           |                                       |  |  |  |
| Subject   |                    | Pharmacognosy                              |                           |                                       |  |  |  |
| Lesson plan Duration                                |                    | 25 weeks (July 16, 2018 to March 30, 2019) |                           |                                       |  |  |  |
| Work Load/week(In hour)                             |                    | Lecture- 03; Practical- 09                 |                           |                                       |  |  |  |
| Week  |                    | Theory                                     | Practical                 |                                       |  |  |  |
|   | <b>Lecture Day</b> | Topic                                      | Practical Day             | Topic                                 |  |  |  |
| 1st (July 3rd                                       | 1 <sup>st</sup>    | History of Pharmacognosy                   | 1 <sup>st</sup> (Batch A) | Study of microscope & its parts       |  |  |  |
| week)   | 2 <sup>nd</sup>    | Scope of Pharmacognosy                     | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
| -   | 3 <sup>rd</sup>    | Development of                             | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
|   |                    | Pharmacognosy including                    |                           |                                       |  |  |  |
|   |                    | indigenous system of medicine.             |                           |                                       |  |  |  |
| 2 <sup>nd</sup> (July 4 <sup>th</sup>               | 1 <sup>st</sup>    | Tutorial/Test                              | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Coriander and        |  |  |  |
| week)   |                    |  |                           | fennel                                |  |  |  |
|   | 2 <sup>nd</sup>    | Alphabetical, chemical and                 | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   |                    | taxonomical classification of              |                           |                                       |  |  |  |
|   |                    | drugs                                      |                           |                                       |  |  |  |
|   | 3 <sup>rd</sup>    | Morphological and Pharma-                  | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
|   |                    | cological classification of drugs          |                           |                                       |  |  |  |
| 3 <sup>rd</sup> (August 1 <sup>st</sup>             | 1 <sup>st</sup>    | Tutorial/Test                              | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Cinnamon and         |  |  |  |
| week)   |                    |  |                           | Cardamom                              |  |  |  |
|   | 2 <sup>nd</sup>    | Isolation, Identification and              | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   | ord                | applications of alkaloids                  | ard (5 . 1 a)             |                                       |  |  |  |
|   | 3 <sup>rd</sup>    | Isolation, Identification and              | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
| 4 <sup>th</sup> (August 2 <sup>nd</sup>             | 1 <sup>st</sup>    | applications of glycosides                 | 1 <sup>st</sup> (Batch A) | Dhawara a garage of Newton a gard     |  |  |  |
| week)   | 1                  | Tutorial/Test                              | 1" (Batch A)              | Pharmacognosy of Nutmeg and Tulsi     |  |  |  |
| week)   | 2 <sup>nd</sup>    | Isolation, Identification and              | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   | 2                  | applications of terpenoids                 | 2 (Batch b)               |                                       |  |  |  |
|   | 3 <sup>rd</sup>    | Isolation, Identification and              | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
|   |                    | applications of Volatile oils              | 3 (Batch C)               |                                       |  |  |  |
| 5 <sup>th</sup> (August 3 <sup>rd</sup>             | 1 <sup>st</sup>    | Isolation, Identification and              | 1st (Batch A)             | Pharmacognosy of Ginger and           |  |  |  |
| week)   | _                  | applications of tannins                    | 1 (Buttern 74)            | Clove                                 |  |  |  |
| ,   | 2 <sup>nd</sup>    | Isolation, Identification and              | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   | _                  | applications of Resin                      | - (20002)                 |                                       |  |  |  |
|   | 3 <sup>rd</sup>    | Tutorial/Test                              | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
| 6 <sup>th</sup> (August 4 <sup>th</sup>             | 1 <sup>st</sup>    | Aloes, Rhuburb                             | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Rhubarb and          |  |  |  |
| week)   |                    |  |                           | Aloe                                  |  |  |  |
|   | 2 <sup>nd</sup>    | Castor oil, Ispaghula                      | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   | 3 <sup>rd</sup>    | Senna, Digitalis                           | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
| 7 <sup>th</sup> (August 5 <sup>th</sup> week)       | 1 <sup>st</sup>    | Arjuna, Coriander                          | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Senna and            |  |  |  |
|   |                    |  | ,                         | Isabgol                               |  |  |  |
|   | 2 <sup>nd</sup>    | Fennel, Ajowan                             | 2 <sup>nd</sup> (Batch B) | do                                    |  |  |  |
|   | 3 <sup>rd</sup>    | Cardamom, Ginger                           | 3 <sup>rd</sup> (Batch C) | do                                    |  |  |  |
| 8 <sup>th</sup> (September<br>1 <sup>st</sup> week) | 1 <sup>st</sup>    | Tutorial/Test                              | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Digitalis and Arjuna |  |  |  |
|   | 2 <sup>nd</sup>    | Dlask nonner Assfestide                    | 2nd (Patch P)             | do                                    |  |  |  |
|   | <b>4</b>           | Black pepper, Asafoetida                   | 2 <sup>nd</sup> (Batch B) | uU                                    |  |  |  |

|   | 3 <sup>rd</sup> | Nutmeg, Cinnamon  | 3 <sup>rd</sup> (Batch C) | do                                 |
|---|-----------------|---|---------------------------|------------------------------------|
| 9 <sup>th</sup> (September                          | 1 <sup>st</sup> | Clove, catechu  | 1st (Batch A)             | Pharmacognosy of Turmeric and      |
| 2 <sup>nd</sup> week)                               |                 | ,   |                           | Neem                               |
|   | 2 <sup>nd</sup> | Hyoscyamus, Belladonna                                  | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Aconite, Ashwagandha                                    | 3 <sup>rd</sup> (Batch C) | do                                 |
| 10 <sup>th</sup> (September                         | 1 <sup>st</sup> | Ephedra, Opium  | 1st (Batch A)             | Pharmacognosy of Rauwolfia and     |
| 3 <sup>rd</sup> week)                               |                 |   |                           | Ipecac                             |
| ·   | 2 <sup>nd</sup> | Cannabis, Nux vomica                                    | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Tutorial/Test   | 3 <sup>rd</sup> (Batch C) | do                                 |
| 11 <sup>th</sup> (Septemer                          | 1 <sup>st</sup> | Rauwolfia, Vasaka                                       | 1st (Batch A)             | Pharmacognosy of Aconite and       |
| 4 <sup>th</sup> week)                               |                 |   |                           | Ashwagandha                        |
|   | 2 <sup>nd</sup> | Vasaka, Tolu balsam                                     | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Tulsi, Vinca  | 3 <sup>rd</sup> (Batch C) | do                                 |
| 12 <sup>th</sup> (October<br>1 <sup>st</sup> week)  | 1 <sup>st</sup> | Guggul, Colchicum                                       | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Ephedra and Opium |
|   | 2 <sup>nd</sup> | Chaulmoogra Oil,  | 2 <sup>nd</sup> (Batch B) | do                                 |
|   |                 | Pterocarpus   |                           |                                    |
|   | 3 <sup>rd</sup> | Gymnema sylvestris, Ipecac                              | 3 <sup>rd</sup> (Batch C) | do                                 |
| 13 <sup>th</sup> (October                           | 1 <sup>st</sup> | Tutorial/Test   | 1st (Batch A)             | Pharmacognosy of Nuxvomica and     |
| 2 <sup>nd</sup> week)                               |                 |   |                           | colchicum                          |
|   | 2 <sup>nd</sup> | Gokhru, Punarrnava                                      | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Benzoin, Myrrh  | 3 <sup>rd</sup> (Batch C) | do                                 |
| 14 <sup>th</sup> (November                          | 1 <sup>st</sup> | Neem, curcuma   | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Catharanthus      |
| 1 <sup>st</sup> week)                               | 2 <sup>nd</sup> | Cinchona, Ergot   | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Shark liver Oil, Amla                                   | 3 <sup>rd</sup> (Batch C) | do                                 |
| 15 <sup>th</sup> (November                          | 1 <sup>st</sup> | Papaya, Diastase  | 1st (Batch A)             | Pharmacognosy of Ergot             |
| 3 <sup>rd</sup> week)                               | 2 <sup>nd</sup> | Yeast, Peppermint Oil                                   | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Tutorial/Test   | 3 <sup>rd</sup> (Batch C) | do                                 |
| 16 <sup>th</sup> (November                          | 1 <sup>st</sup> | Collection of crude drugs                               | 1 <sup>st</sup> (Batch A) | Pharmacognosy of Amla              |
| 4 <sup>th</sup> week)                               | 2 <sup>nd</sup> | Preparation of crude drugs                              | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Collection & preparation of Ergot                       | 3 <sup>rd</sup> (Batch C) | do                                 |
| 17 <sup>th</sup> (November                          | 1 <sup>st</sup> | Collection & preparation of                             | 1st (Batch A)             | Pharmacognosy of Garlic and        |
| 5 <sup>th</sup> week)                               |                 | opium, Senna  |                           | Glycyrrhiza                        |
|   | 2 <sup>nd</sup> | Collection & preparation of Rauwolfia, Digitalis        | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Study of cotton and wool                                | 3 <sup>rd</sup> (Batch C) | do                                 |
| 18 <sup>th</sup> (December 1 <sup>st</sup> week)    | 1 <sup>st</sup> | Study of silk and regenerated fibres                    | 1 <sup>st</sup> (Batch A) | Microscopy of Fennel               |
| -   | 2 <sup>nd</sup> | Tutorial/Test   | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Adulteration, types and method of adulteration          | 3 <sup>rd</sup> (Batch C) | do                                 |
| 19 <sup>th</sup> (December<br>2 <sup>nd</sup> week) | 1 <sup>st</sup> | Evaluation and significance of Pharmacopoeial standards | 1 <sup>st</sup> (Batch A) | Microscopy of Coriander            |
|   | 2 <sup>nd</sup> | Anatomical studies of Senna,<br>Datura                  | 2 <sup>nd</sup> (Batch B) | do                                 |
|   | 3 <sup>rd</sup> | Anatomical study of Cinnamon, Cinchona                  | 3 <sup>rd</sup> (Batch C) | do                                 |
| 20 <sup>th</sup> (January                           | 1 <sup>st</sup> | Anatomical study of Fennel,                             | 1st (Batch A)             | Microscopy of Clove                |

| 2 <sup>nd</sup> week)                              |                 | Clove, Ginger               |                           |                                   |
|--|-----------------|-----------------------------|---------------------------|-----------------------------------|
|  | 2 <sup>nd</sup> | Anatomical study of Nux     | 2 <sup>nd</sup> (Batch B) | do                                |
|  |                 | vomica & Ipecacuanha        |                           |                                   |
|  | 3 <sup>rd</sup> | Tutorial/Test               | 3 <sup>rd</sup> (Batch C) | do                                |
| 21st(January 3rd                                   | 1 <sup>st</sup> | Lemon Oil, Orange Oil       | 1st (Batch A)             | Microscopy of Cinnamon bark       |
| week)  | 2 <sup>nd</sup> | Lemon grass Oil,            | 2 <sup>nd</sup> (Batch B) | do                                |
|  |                 | sandalwood.                 |                           |                                   |
|  | 3 <sup>rd</sup> | Honey, Arachis Oil          | 3 <sup>rd</sup> (Batch C) | do                                |
| 22 <sup>nd</sup> (January<br>4 <sup>th</sup> week) | 1 <sup>st</sup> | Starch                      | 1 <sup>st</sup> (Batch A) | Study of absorbent cotton         |
|  | 2 <sup>nd</sup> | Kaolin, Pectin              | 2 <sup>nd</sup> (Batch B) | do                                |
|  | 3 <sup>rd</sup> | Olive oil, Lanolin          | 3 <sup>rd</sup> (Batch C) | do                                |
| 23 <sup>rd</sup> (January 5 <sup>th</sup>          | 1 <sup>st</sup> | Beeswax, Acacia             | 1st (Batch A)             | Study of Silk fibres              |
| week)  | 2 <sup>nd</sup> | Tutorial/Test               | 2 <sup>nd</sup> (Batch B) | do                                |
|  | 3 <sup>rd</sup> | Tragacanth, Sodium alginate | 3 <sup>rd</sup> (Batch C) | do                                |
| 24 <sup>th</sup> (February                         | 1 <sup>st</sup> | Agar, Guar gum              | 1 <sup>st</sup> (Batch A) | Study of wool fibres              |
| 2 <sup>nd</sup> week)                              | 2 <sup>nd</sup> | Gelatin, Liquorice          | 2 <sup>nd</sup> (Batch B) | do                                |
|  | 3 <sup>rd</sup> | Picrorhiza, Dioscorea       | 3 <sup>rd</sup> (Batch C) | do                                |
| 25 <sup>th</sup> (February                         | 1 <sup>st</sup> | Linseed, Shatavari          | 1st (Batch A)             | Final record submission/ practice |
| 3 <sup>rd</sup> week)                              |                 |                             |                           | turn                              |
|  | 2 <sup>nd</sup> | Shankhapusphi, Pyrethrum,   | 2 <sup>nd</sup> (Batch B) | do                                |
|  |                 | Tobacco                     |                           |                                   |
|  | 3 <sup>rd</sup> | Tutorial/Test               | 3 <sup>rd</sup> (Batch C) | do                                |