

**Sub: Rasashastra & Bhaishajya Kalpana**

**CO-PO**

**Paper I - Rasashastra**

<b>Course Outcome</b>	<b>Program Outcome</b>						
	01	02	03	04	05	06	07
<b>1. History of Rasashastra</b>							
CO-1: Define the word Rasa and its etymology.	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>
CO-2: Describe History of Rasashastra	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>
CO-3: Describe importance of Rasaushadhi	<b>3</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>2. Paribhasha prakaran &amp; dravya varga</b>	01	02	03	04	05	06	07
CO-1: Define Paribhasha with suitable example	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>
CO-2: Describe Aavapa, Dhalana and Nirvapana	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-3: Describe the term Madhurtranya, Lavanpanchak, Panchagvya and Panchamritika	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-4: Describe Beejabhaga , Rudra bhaga ,Dhanvantari bhaga	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>3. Yantras and their uses</b>	01	02	03	04	05	06	07
CO-1: Define Yantra with suitable example	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>
CO-2: Describe Udukhala yantra and Khalwa yantra	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-3: Describe Patan yantra, Damaru yantra and dola yantra	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-4: Describe Palika yantra, Puta yantra, Valuka yantra	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-5: Describe pH Meter and Electronic balance and its applicability	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>4. Musha</b>	01	02	03	04	05	06	07
CO-1: Define Musha synonyms and its types.	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>
CO-2: Describe constituents of Samanya musha	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-3: Describe in brief about Gostani Moosha and Vajramoosha	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-4: Describe in brief about Vrintaka musha & Pakwa musha	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-5: Describe in brief Modern form of Crucibles with its Application	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>5. Koshthi</b>	01	02	03	04	05	06	07
CO-1: Define Koshthi and its types.	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>2</b>
CO-2: Describe Angar Koshthi and Patala Koshthi with its applications.	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>

CO-3: Describe Modern form of Koshti with its applications	0	0	0	3	0	2	2
<b>6. Puta</b>	01	02	03	04	05	06	07
CO-1: Define Puta and its types.	1	1	1	3	1	2	2
CO-2: Describe uses and quantity of fuel used in Mahaputa	0	0	0	3	0	2	2
CO-3: Describe uses and quantity of fuel used in Gajputa	0	0	0	3	0	2	2
CO-4: Describe uses and quantity of fuel used in Lawakputa, Varahaputa and kukkutputa	0	0	0	3	0	2	2
CO-5 : Describe application of Electrical furnace in Ayurveda pharmaceutical industry	0	0	0	3	0	2	2
<b>7. Description of Parada</b>	01	02	03	04	05	06	07
CO-1: Define the term rasa and its synonyms.	1	1	1	3	1	2	2
CO-2: Describe sources and ores of mercury.	1	1	1	3	1	2	2
CO-3: Describe various types of Doshas and its effects	1	1	1	3	1	2	2
CO-4 : Describe characteristics of grahya & Agrahya Parad.	1	1	1	3	1	2	2
CO-5 : Describe samanya and vishesh shodhana of mercury.	1	1	1	3	1	2	2
CO-6 : Describe method of extraction of Parad from Hingula	1	1	1	3	1	2	2
<b>8. Murchhana &amp; Jarana of Parada</b>	01	02	03	04	05	06	07
CO-1: Define Murchhana of Parad and its types..	1	1	1	3	1	2	2
CO-2: Describe preparation, doses, and therapeutic uses of Rasa Karpura, Rasa Pushpa	3	3	1	3	1	2	2
CO-3: Describe preparation, doses, and therapeutic uses of Rasa Sindoor	3	3	1	3	1	2	2
CO-4 : Describe preparation, doses, and therapeutic uses of Kajjali and Rasaparpati	3	3	1	3	1	2	2
CO-5 : Describe preparation, doses, and therapeutic uses of Tribhuvankirti ras, Sootasekhar ras	3	3	1	3	1	2	2
CO-6 : Describe Types and Purpose of Parad bandha	3	3	1	3	1	2	2
<b>9. Description of Maharasa</b>	01	02	03	04	05	06	07
CO-1: Describe Occurance, Synonyms, sources, varieties, Grahyta & Agrahyta, shodhana, marana, satvapana, properties, doses & therapeutic uses of <i>Abhraka</i>	3	2	1	3	0	2	2
CO-2: Describe Occurance, Synonyms, sources, varieties, Grahyta & Agrahyta, shodhana, marana, sa, properties, doses & therapeutic uses of <i>Vaikrant</i>	3	2	1	3	0	2	2

CO-3: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of Makshika	3	2	1	3	0	2	2
CO-4 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of Vimal	3	2	1	3	0	2	2
CO-5 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of Shilajeet	3	2	1	3	0	2	2
CO-6 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of Sasyaka	3	2	1	3	0	2	2
CO-7 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of <i>Chapala &amp; Rasak</i>	3	2	1	3	0	2	2
CO-8 : Describe Physical properties of <i>Maharas</i>	3	2	1	3	0	2	2
CO-9 : Describe Minerological identification of <i>Maharasa</i>	3	2	1	3	0	2	2
<b>9. Description of Uparasa</b>	01	02	03	04	05	06	07
CO-1: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, , properties , doses & therauptic uses of <i>Gandhaka</i>	3	2	1	3	0	2	2
CO-2: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, doses & therauptic uses of <i>Gairika</i>	3	2	1	3	0	2	2
CO-3: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , properties , doses & therauptic uses of <i>Kasis</i>	3	2	1	3	0	2	2
CO-4 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, properties , doses & therauptic uses of <i>Kankshi</i>	3	2	1	3	0	2	2
CO-5 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana, properties , doses & therauptic uses of <i>Hartala</i>	3	2	1	3	0	2	2
CO-6 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of <i>Manshila</i>	3	2	1	3	0	2	2

CO-7 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of <i>anjana &amp; Kankustha</i>	3	2	1	3	0	2	2
CO-8 : Describe Physical properties of <i>Uparas</i>	3	2	1	3	0	2	2
CO-9 : Describe Minerological identification of <i>Uparasa</i>	3	2	1	3	0	2	2
<b>Description of Sadharan Rasa</b>	01	02	03	04	05	06	07
CO-1: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, , properties , doses & therauptic uses of <i>Kampillaka</i>	3	2	1	3	0	2	2
CO-2: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, doses & therauptic uses of <i>Gauripashan</i>	3	2	1	3	0	2	2
CO-3: Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , properties , doses & therauptic uses of <i>Kaparda</i>	3	2	1	3	0	2	2
CO-4 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, properties , doses & therauptic uses of <i>Navasadar</i>	3	2	1	3	0	2	2
CO-5 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana, properties , doses & therauptic uses of <i>Agnijar</i>	3	2	1	3	0	2	2
CO-6 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of <i>Girisindura</i>	3	2	1	3	0	2	2
CO-7 : Describe Occurance, Synonyms, sources,varities, Grahyta & Agrahyta , shodhana, marana , sa, properties , doses & therauptic uses of <i>Hingula</i>	3	2	1	3	0	2	2
CO-8 : Describe Physical properties of <i>Sadharan rasa</i>	3	2	1	3	0	2	2
CO-9 : Describe Minerological identification of <i>Sadharan rasa</i>	3	2	1	3	0	2	2
<b>10. Sudha Varga Dravya</b>	01	02	03	04	05	06	07
CO-1: Describe Source, origin and chemical composition, synonyms, pharmacological properties, Shodhana, marana, doses & therauptic uses of <i>Godanti</i>	3	2	1	3	0	2	2
CO-2: Describe Source, origin and chemical composition, synonyms, pharmacological properties, Shodhana, marana, doses & therauptic uses of <i>Shukti</i>	3	2	1	3	0	2	2

CO-3: Describe Synonyms, sources, varieties, Grahyta & Agrahyta , shodhana, marana , properties , doses & therapeutic uses of Shankha	3	2	1	3	0	2	2
CO-4 : Describe Occurance, Synonyms, sources, varieties, Grahyta & Agrahyta , shodhana, properties , doses & therapeutic uses of <i>Kukkutanda twak</i>	3	2	1	3	0	2	2
CO-5 : Describe Physical properties of <i>sudhavarga dravya</i>	3	2	1	3	0	2	2
<b>11. Sikhata Varga Dravya</b>	01	02	03	04	05	06	07
CO-1: Describe Shodhana, marana, dose, use & indications of <i>Sikhata</i> , <i>Dugdhapashana</i>	1	1	0	3	0	2	2
CO-2: Describe Shodhana, marana, dose, use & indications of <i>Vyomashama</i> , & <i>Sange Yeshab</i>	1	1	0	3	0	2	2
CO-3: Describe Shodhana, marana, dose, use & indications of <i>Jaharmohara</i>	1	1	0	3	0	2	2
CO-4 : Describe Shodhana, marana, dose, use & indications of <i>Kousheyasham</i> & <i>Akik</i>	1	1	0	3	0	2	2
<b>12. Kshara Varga Dravya</b>							
CO-1: Describe Source, origin and chemical composition, synonyms, physical properties, pharmacological properties, dose, use of <i>Sarja kshara</i>	3	2	1	3	0	2	2
CO-2: Describe Source, origin and chemical composition, synonyms, physical properties, pharmacological properties, dose, use of <i>Yava Kshara</i>	3	2	1	3	0	2	2
<b>13. Miscellinous drugs</b>	01	02	03	04	05	06	07
CO-1: Describe Occurance, Synonyms, Natural & artificial sources, varieties, Grahyta & Agrahyta, properties, dose & therapeutic use of <i>Bola</i> & <i>Krishna Bola</i>	1	1	0	3	0	2	2
CO-2: Describe Occurance, Synonyms, Natural & artificial sources, varieties, Grahyta & Agrahyta, properties, dose & therapeutic use of <i>Mayurpiccha</i> & <i>Madhucchishta</i>	1	1	0	3	0	2	2
CO-3: Describe Occurance, Synonyms, Natural & artificial sources, varieties, Grahyta & Agrahyta, properties, dose & therapeutic use of <i>Kasturi</i> & <i>Bhoonag</i>	1	1	0	3	0	2	2

<b>14. Dhatu</b>	01	02	03	04	05	06	07
CO-1: Define Dhatu and Updhatu	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -2: Define the concept of Suddha Lauha, Puti Lauha & Mishralauha	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -3 Describe Varieties, pharmacological properties, source, types, shodhana, marana, doses ,theraaptic properties, vishisht yog of Suddha Lauha	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -4 Describe Varieties, pharmacological properties, source, types, shodhana, marana, doses ,theraaptic properties, vishisht yog of Puti Lauha	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -5 Describe Varieties, pharmacological properties, source, types, shodhana, marana, doses ,theraaptic properties, vishisht yog of Mishra Lauha	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -6 Describe Physical properties of <i>Dhatu,Upadhatu</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -7 Describe Chemical properties of <i>Dhatu, Upadhatu</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>15. Ratnas &amp; Uparatnas</b>	01	02	03	04	05	06	07
CO-1: Define the term Ratna and their relationship with Grahas	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -2: Describe Doshas of Ratnas	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-3 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Manikyā</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-4 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Mukta</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-5 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Praval</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-6 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Tarkshya</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-7 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Pushparag</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO.-8 : Describe Varities, Synonyms, General method for Shodhana and Marana, properties, dose, theraaptic uses & vishishta yog of <i>Vajra</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -9 Describe Physical properties of <i>Ratna, Uparatna</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>

<i>CO -10 Describe Chemical properties of Ratna, Uparatna</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>16. Visha and Upavisha</b>	01	02	03	04	05	06	07
CO-1: Describe the classification and synonyms of visha & upvisha	<b>1</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO -2: Describe Shodhana Antidotes, uses, therapeutic & toxic doses and formulations of Visha & Upvisha	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO- 3 : Describe Physical properties of <i>Visha ,Upavisha</i>	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO- 4 : Describe Chemical Composition of <i>Visha,Upavisha</i>							
<b>17. Aushadhi Yoga Gyanam</b>	01	02	03	04	05	06	07
CO-1: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of – Arogyavardhini Gutika & Chandraprabha gutika	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-2: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Karpura Rasa & Kasturi Bharava rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-3: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Kumar Kalyana Rasa & Garbhapala rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-4: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Chandramrit rasa, Hinguleshwar rasa & Anand bhairava rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-5: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of PravalPanchamrit rasa , Shankha vati, Kamdhudha rasa and Laghusutsekhar rasa.	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-6: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Yogendra rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-7: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Laxmivilasa rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-8: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Vasant Kusumakar rasa, Vasant malti rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-9: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Vatakulantaka rasa and Vatavidhvamsan rasa.	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>
CO-10: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Swasakuthar rasa	<b>3</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>2</b>	<b>2</b>

CO-11: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Swarnavanga,Makardhwaja	3	3	1	3	0	2	2
CO-12: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Brihat vata Chintamani rasa and Hridarnava rasa	3	3	1	3	0	2	2
CO-13: Describe Ingredients,Method of Preparation,Dose & Therapeutic uses of Navayasa loha,Saptamrita loha	3	3	1	3	0	2	2
CO-14: Describe Pharmacopeal Standards of the Ayurvedic Formulations	1	1	0	3	0	2	2
<b>18. Brief knowledge of Standardization of Rasaushadhi</b>	01	02	03	04	05	06	07
CO-1: Describe the methods of Standardization of Rasaushadhi	2	2	0	3	0	3	3
<b>19. Concept of pharmacovigilience</b>							
CO-1: Describe the Concept of pharmacovigilience and its importance	3	3	3	3	1	3	3
<b>20. Mineralogical Identification</b>							
CO-1: Describe Mineralogical Identification of rasa drugs	2	2	0	3	0	3	3
<b>21. Concept of Nano-Technology in Ayurveda</b>							
CO-1: Describe Concept of Nano-Technology in Ayurveda	2	2	0	3	0	3	3