



Ratna Varga

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DEPARTMENT OF RASA SHASTRA AND BHAISHAJYA
KALPANA

Course objectives with matched program objectives

SR 1 C O No	A1 Course learning Outcomes (CO) AyUG-RB At the end of the course AyUG-RB, the students should be able to-	B1 Course learning Outcomes matched with program learning outcomes.
CO1	Demonstrate application of principles of Ayurvediya Aushadhi Nirmana (Ayurvedic Pharmaceutics)	PO1,PO5,PO7
CO2	Demonstrate application of principles of Ayurvediya Aushadhi Prayoga Vigyana (Clinical Pharmacology)	PO1,PO5,PO7
CO3	Prepare Ayurvedic formulations in adherence to quality control parameters for raw materials, in-process and finished products	PO1,PO3,PO4,P O5, PO6,PO7,PO8
CO4	Justify rationality of selection and administration of Ayurvedic formulations	PO3,PO5,PO6,P O7, PO8,PO9
CO6	Appraise research in current and emerging trend in Ayurvedic pharmaceuticals and allied sciences.	PO7,PO9

Domain and level

- CLASSIFICATION OF THE TOPIC

MUST KNOW (MK)/NK



- DOMAIN IN BLOOM'S TAXONOMY

COGNITIVE
COMPREHENSION (CC)/ CK



- LEVEL IN MILLER'S PYRAMID

KNOWS/ KNOWS HOW
(K/KH)

रत्न परिभाषा

धनार्थिनो जनाः सर्वे रमन्ते अस्मिन्नतीव यत् ।
अतो रत्नमिति प्रोक्तं शब्दशास्त्रे विशारदैः॥

The substance, which attracts the individuals who wish to become rich and prosperous is called as RATNA

जातौ जातौ यदुत्कृष्टं तद्धिं रत्नं प्रचक्षते
रत्नं च वरपाषाणं रमनो यत्र मानवाः ॥

The substance which is the best in qualities amongst the class is said to be a RATNA

GEM FORMATION

According to mineralogy,
Gemstones found in rocks.

Rocks are made of more minerals and may be divided into three types

1. metamorphic rocks- formed by heat and pressure within the earth, gems grow in it.
2. sedimentary rocks- formed by accumulation of the fragments produced by weathering, these fragments settle down and harden into rock in layers
3. igneous rocks- have solidified from molten rock, which comes from deep beneath earth's surface. The slower the rock cools and solidifies the larger the crystals and therefore gems are formed in it.

VARIETIES OF GEMSTONES

around 84 varieties of gems have been identified. But according to vedic literature, relating with नवग्रह their are 9 most potent , important & precious gemstones, grouped and called as “नवरत्न”

•Another 8 gemstones which are of less potency are grouped as ‘उपरत्न’

नवरत्न

माणिक्य मुक्ताफलविद्रुमाणि ताक्षर्यञ्च पुष्पं भिदुरञ्च नीलम् ।
गोमेदकञ्चाथ विदुरकञ्च क्रमेण रत्नानि नवग्रहाणाम् ॥

1. माणिक्य [RUBY] → सूर्य
2. मुक्ता [PEARL] → चन्द्र
3. प्रवाल [CORAL] → मंगल
4. ताक्षर्य [EMERALD] → बुध
5. पुष्पराग [TOPAZ] → गुरु

(र.र.सं. ४/५)

SALIENT FEATURES OF GEMSTONES

- They are crystals and have peculiar constant shape
- They are either transparent or opaque.
- They are hard, beautiful, durable, colourful and rare
- They should be,
 1. स्वच्छ[pure]
 2. लघु[light]
 3. चमकदार[shining]
 4. अष्टफलकयुक्त[8 surfaces]
 5. षट्कोणयुक्त[6 angles]

रत्न दोष[defects]

According to classics, 5 types of defect are explained

They are:-

1. ग्रास – some part of a gem is opaque or possesses blackcoloured part
2. त्रास – gemstone possesses other than its natural colour gemstone.
3. बिन्दु – different coloured dots are found in the natural colour
4. रेखा – few lines found in the gemstone
5. जलगर्भता – a water drop like opacity inside the gemstone

GEMSTONES USAGE

- Used in jewelry – as they are glittering and more attractive
- Given as a charity
- Used in देवता पूजा
- In astrology, for healing the ill effects of ग्रहदोष in the person
- In rasashastra, it is used in the preparation of रसायन- औषधि, and other medicines

Therapeutic usage

It can be classified according its method of usage

- 1] a) आभ्यन्तरचिकित्सा(internally)
b) बाह्यचिकित्सा(externally)
- 2] a) दैवव्यपाश्रय चिकित्सा
b) युक्तिव्यपाश्रय चिकित्सा

Medicinal properties and its actions

- All रत्नs are usually मधुर and कषाय रस,
- सर गुण, शीत वीर्य
- They are दीपक, अग्निवर्धक, कान्तिवर्धक, विषहर, नेत्ररोगहर, पित्तशामक

MERITS & DEMERITS

Merits

- ill effects of planets gets away
- It maintains good health
- It gives longevity of life
- It brings enthusiasm and courage in a person
- Problems of evil spirits are subsided
- Protection from poisons,snakes,& forcoming diseases

Demerit

- By wearing wrong gems,mismatched gem, defective gem will result into bad effects,it give rises to different diseases,and other problems which will be dangerous

General method of purification [सामान्य शोधन]

For the purification of gems, they are subjected to स्वेदन in जयन्ति स्वरस, कुमरि स्वरस or any अम्लद्रव्य, क्षारद्रव्य for 1प्रहर of period.

or

It can be subjected to निर्वाप 7times in the same द्रव्य.



विशेष शोधन(SPECIFIC METHODS OF PURIFICATION)

रत्न

द्रव द्रव्य used in स्वेदन

- 1.माणिक्य → अम्ल द्रव
- 2.मुक्ता → जयन्ति स्वरस
- 3.प्रवाल → क्षारयुक्त द्रव्य
- 4.तार्क्ष्य → गोदुग्ध
- 5.पुष्पराग → कांजी+कुलत्थ क्वाथ
- 6.वज्र → तण्डुलीय स्वरस
- 7.इन्द्रनील → नील स्वरस
- 8.गोमेद → निम्बुक स्वरस
- 9.वैडूर्य → त्रिफला क्वाथ

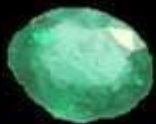
रत्न मारण (General method of incineration)



पिष्टि PREPARATION

Procedure





ताक्षर्य(emerald)



पुष्पराम(topaz)



वज्र(diamond)



प्रवाल(coral)



नीलम(sapphire)



मुक्ता(pearl)



गोमद(zircon)

नवरात्र

नवरत्न



माणिक्य(RUBY)



वैडुर्य(cat's eye)



माणिक्य(RUBY)

माणिक्य | RUBY |



INTRODUCTION-

- Ruby is the true king of gemstones
- Blood of the Vaalasura
- It is the stone of love, stone of royalty
- The brightest & the best 'red' ruby is known as the 'Pigeon blood red'
- Also called as माणीक्य, पद्मराग, रविरत्न, रविप्रेय, लोहित, कुरुविन्द
- Found in Burma (best quality), Sri Lanka, Africa and in India- Karnataka, Orissa .

Characteristics



- Pinkish red colour [रक्तकमलपत्रवत्]
- Transparent, lustrous, uniform, heavy
- Crystal of 6 sided prism
- If treated with heat, it cracks or becomes dull in lustre
- Hardness– 9
- Chemical composition- Al_2O_3
(traces of lithium, chromium & iron)

माणिक्य प्रभेद



They are of 4 types:-

1. पद्मराग माणिक्य – lotus coloured (whitish red), lustrous,
2. नीलगन्धि माणिक्य – obtained from the bed of the river नील गंगा. bluish lustre from inside.
3. कुरुविन्दज माणिक्य – grows from a stone named कुरुविन्दम, highly red and beautiful.
4. सौगन्धिक माणिक्य – grows out of सौगन्धिक (spinel), i.e. yellowish red

माणिक्य भस्म [गुण-कर्म]

- मधुर रस, शीतवीर्य, स्निग्धदीपक, वृष्य, कफ़वातनाशक
- मेध्य, रसायन, आयुष्य, क्षय रोगनाशक

भस्म or पिष्टि dosage ¼-½ गूँजा, or 30-60mg with anupana of honey



Astrological view and its धारण

Ruby represents the planet sun(सूर्य)
worn on Sunday, set in gold ring and put to ring finger

worn by the person of zodiac sign-leo(सिंहा) and
cancer(कर्काटक)

It brings the economic stability

It removes the ill effects of the sun

It cures the disease like paralysis, skin disorders, cardiac disorders, arthritis, hypertension and infections



मुक्ता PEARL

(PEARL)

- White silver like, round organic gem
 - Broken teeth of demon वालासरा
 - Also called as मक्का, मक्काफल, मौक्तिक, शक्तिज, शाशांप्रेय, शांशेरल
- artificially cultivated in japan and china



CHARACTERISTICS

- white silver colour, oily appearance, shiny, soft, globular, bright clear as water, and opaque.
- Hardness-2.5—3.5
- Chemical composition- CaCO_3

मुक्ता प्रभेद [classification]

1.] according to its origin, they are 8 types,

- | | | | |
|-----------|------------|------------|----------|
| 1. शक्तिज | 2. शंखज | 3. हस्तिज | 4. वराहज |
| 5. सर्पज | 6. मत्स्यज | 7. दर्दुरज | 8. वेणुज |

2.] according to formation,

- 1] natural
- 2] artificial



मुक्ता भस्म[गुण-कम]

मधुर रस, लघु, शीत वीर्य दीपन, कफपित्तनाशक दृष्टि अग्नि पुष्टिकरण,,

विशनाशक, अग्निमान्द्यनाशक वृष्य, आयुष्य, हुद्य, मेध्य, cures प्रमेह. ज्वर

Dosage ¼-1 रत्ति; 30-120mg taken with milk

Astrological view and its धारण

- It represents the चन्द्र ग्रह
- worn by cancer[वृश्चिक राशि] person, on Monday, to the ring finger
- by wearing-it subsides the ill effects of moon
- Brings mental peace, heals mental disorders, and assists good lactation



प्रवाल(coral)

प्रवाल(coral)



Introduction

- It is also an organic gem
- Intestine of the वालासुरा
- Made up of the skeletal remains of an marine animal called “ANTHEZOA POLYPUS”
These tiny creatures lie in colonies which form branching structures as they grow eventually forming coral reefs
- प्रवालक, भौम्रल विद्रुम, अंगारक लतामणि, रक्तकन्द
- Found in mediterranean & african coasts,
coasts of Westindies, australia and pacific islands

Characteristics

- Saffron red colour
- Oblong even smooth
- Opaque
- Unctous[स्निग्ध]
- Hardness-3
- Chemical composition-CaCO₃

प्रवाल भेद

[1]According to colour,

1]white 2]grey 3]red [best]

[2]according to body part,

1.प्रवाल शाख[porous tube like]

2.प्रवाल खण्ड[basal part]



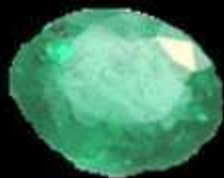
प्रवाल भस्म[गुण-कर्म]

मधुर रस, लघु, शीतवीर्य
दीपन, पाचन, त्रिदोषघ्न, कफवातनाशक
रक्तपित्तनाशक
Cures कास, श्वास, राजयक्ष्म

भस्म or पिष्टि dosage ½-2 गून्जा; 240-480mg with milk

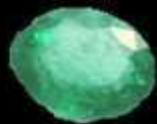
Astrological view and its धारण

- Coral is related with the planet mars
- worn by the person of zodiac sign aries and scorio
- Worn on Tuesday ,to the ring finger
- By wearing, it subsides all ill effects of the planet mars
- It enhances the professional activity
- It heals the blood related disorders like piles, hypertension etc



ताक्षर्य(emerald)

ताक्षर्य [Emerald]



Introduction

- it is mineral originated green coloured gem
- Bile of वालासुरा
- it is a rare variety of mineral beryl formed
- Found in granites, pegmatites, also in alluvial deposits
- मरकत, गारुडमणि, बुधरत्न, हरिद्रत्न, सौपर्ण, अश्मगर्भज
- Finest emerald found in columbia, also in Austria, Australia, india, brazil, S. africa, Egypt, Norway

Characteristics



green in colour, transparent

Has hexagonal crystal system

Possess dichroic optical property

It fades out when exposed to heat

Hardness-7.5

Chemical composition- $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$

(Traces of chromium & vanadium)

ताक्षर्य भेद

based on colour, 3 types

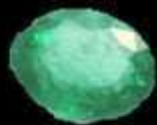
1] green

2] blue

3] white

भस्म or पिष्टि dosage ¼-1 रत्ति; 30-120mg with appropriate अनुपान

ताक्षर्य भस्म[गुण-कर्म]



मधुर रसु, शीतवीय

It cures ज्वर, छर्दि, विष, श्वास, अर्श, पाण्डुरोग, शोष

It increases औज, and also it is रुचिकारक, पुष्टिकारक

भस्म or पिष्टि dosage ¼-1 रत्ति; 30-120mg with appropriate अनुपान

Astrological view and its धारण

- Emerald is related with the planet mercury [बुध]
- Worn by the person of zodiac sign gemini [मिथुन] and virgo [कन्या]
- It should be worn on Wednesday, put to small finger
- Subsides all ill effects of the planet mercury
It heals the disease related to nervous system. bronchitis and tuberculosis
It brings prosperity in education and research



पुष्पराग(topaz)

पुष्पराग [Topaz or yellow sapphire]



Introduction

- It is most popular gemstone after diamond and ruby
- It is perceived to be one of the safest stone known to man,
 - for its neutral effects to those it might not suit
- पुष्पराग, पुष्पराज, गुरुरत्न, पीतमणि, गुरुवल्लभ, पीतश्म
- Occurs in Queensland and new south wales of Australia
found in Sri Lanka and east Africa



Characteristics

golden yellow colour, smooth, transparent, has vitreous lustre
crystal structure is trigonal

hardness-9

Chemical formula- Al_2O_3 (aluminium oxide)

पुष्पराग [गुण-कर्म]

लघु, शीत वीर्य

विषघ्न, दीपन, पाचन

cures छर्दि, कफ़वात, अग्निमांद्य, दाह, कुष्ठ

It does acts as मेध्य ब्रंहण आयुष्क

भस्म or पिष्टि dosage ¼-1रत्ति; 30-120mg with honey

Astrological view and its धारण



- Yellow sapphire is related with the planet jupiter[गुरु]
- Worn by the person of zodiac sign sagittarius[धनु] and pisces[मीन]
- worn on Thursday, put to index finger
- it subsides all ill effects of the planet jupiter
- It brings blessings from god, increases financial status
- Provides enormous wealth and health,
- brings harmonous relation with family members
- It heals mild mental disorders, it has good effects for stomach ailments
- It executes complex system and enlivens the activity of brain



वज्र(diamond)

वज्र[Diamond]



Introduction

- it is the hardest substance on earth
- popular as engagement gift
- Bones of वालासुरा
- most highly prized gem
- Diamond forms at high temperature and pressure
- 80km deep under the earth
- हीरक, कीर, अभेद्य, भिदुर, वज्रक, भृगुप्रिय
- Kimberly rock in south Africa I is the main producer.
Also produced by India, Brazil, australia, ghana
USA, namibia,

Characteristics



Hardest,pure, colourless,transparent,lustrous

They are cubic,crystals are well formed,8 surface,6angles

It resists heat & at high temperature it becomes black,
releases CO₂ when burnt

Hardness-10

Chemical formula-it is allotrophy of carbon

वज्र प्रभेद

1] they are of 3 kinds

1] नर वज्र(उत्तम)- very bright,6-8 angles

2]नारी वज्र(मध्यम)-spots &lines,6 angles

3]नपुंसक वज्र(अधम)-3 angles,thin,elongated

2]acc to class of people,- 1]ब्राह्मण 2]क्षत्रिय 3]वैश्य 4]शूद्र

गुण-कर्म

षड्रस्युक्त,स्निग्ध गुण,आयुष्प्रद,हृद्य,योगवाहि

It is well known for its rejuvenating property,promotes to build all tissues

It cures tuberculosis,anemia ,ascitis,cancer



भस्म dosage 1/32—1/16 रत्ति; 1.2-2mg with honey or milk

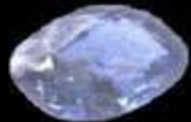
Astrological view and its धारण

- Diamond is related with the planet venus[शुक्र]
- Worn by the person of zodiac sign taurus[वृषभ] and libra [तुला]
- Worn on friday to ring finger
- It subsides all ill effects of the planet venus
- It brings favour such as timely marriage and enhancement of beauty
- Best in epilepsy, reproductive disorders

इन्द्रनील BLUE SAPPHIRE

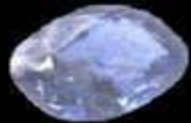


इन्द्रनील|blue sapphire|



Introduction:-

- It is blue coloured gemstone
- It is originated from eyes of वालासुरा
- It is also hardest stone after diamond
- नील, नीलोपल, नीलरत्न, सुनीलक, महानील, नीलश्म, शनिरत्न
- Good quality sapphire is found in Burma, Srilanka, india
- The best indian sapphire known as 'cornflower blue' found in kasmir it is also found in thailand, australia, and Nigeria



Characteristics

- It is hexagonal gem, globular
- Dark blue in colour, transparent, vitreous lustre
- Hardness-9
- Chemical formula- Al_2O_3

नील भेद

It is of two varieties,

- 1] जलनील – whitish blue, light in colour
- 2] इन्द्रनील – dark blue, heavy

गुण-कर्म:-

त्रिदोषघ्न, वृष्य, बल्य, उत्तम दीपक
अर्शनाशक, कुष्ठनाशक, त्वच्य
श्वास, कास नाशक



भस्म or पिष्टि dosage 1/8-1/2 रत्ति; 30-60mg with milk or honey

Astrological view and its धारण

- Blue sapphire is related with the planet saturn [बुध]
- Worn by the person of zodiac sign
Worn on saturday to middle finger capricorn [मकर] and aquarius [कुम्भ]
- It subsides all ill effects of the planet saturn
- It brings luck and prosperity
- It heals the rheumatis and lung diseases

गोमेद(hessonite)



Characteristics:-



- Yellow colour, translucent, (opaque variety also)
- Structure of hessonite is cubic crystals, heavy
- Hardness-7.25
- Chemical composition-1]Ca Al(SiO₂)
2]ZrSiO₄

भेदclassification

Based on colour,

1]whitish yellow

2]reddish yellow

3]yellow

4]blackish yellow

भस्म orपिष्टि dosage

¼-1रत्ति;

30-120mg with milk

गोमेद गुण-कर्म



अम्ल रस, उष्ण गुण
दीपन, पाचन, कफपित्तनाशक, पाण्डुरोगनाशक, त्वच्य

भस्म or पिष्टि dosage ¼-1रत्ति; 30-120mg with milk

Astrological view and its धारण

- Hessonite is related with the राहु
- It should be worn on saturday
- It is put to ring finger
- By wearing it, it subsides all ill effects by the राहु
It heals the diseases related intensive skin and veins

(cat's eye)



वैडूर्य | cat's eye |



Introduction:-

it appears to be like a cat's eye,

It is originated from the tears of वालासुरा

It is one of the variety of chrysoberyl

विदूररत्न, विदूरज, विडालाख्य, विडालाक्ष

It is found in Srilanka, Brazil, China, Russia, Norway
also found in Jammu Kasmir in India

Characteristics:-



It has a white line across yellowish gray stone, due to canal of feather like fluid inclusion

Hardness-8.5

Chemical formula- BeAl_2O_4

वैडूर्य भेद

1]based on colour

1]श्वेत

2]धूम्र

3]कृष्णाभ

4]मिश्रित

गुण-कर्म

मधुर रस, शीत वीर्य
मेध्य, आयुष्य, बलवर्धक, रक्तपित्तनाशक

भस्म dosage ¼-1रत्ति; 30-20mg with milk

Astrological view and its धारण

- Cat's eye is related with the planet [केतु]
- Its should be worn on Sunday
- Worn on ring finger
- It subsides the ill effect of ketu
- It heals the urinary disorders



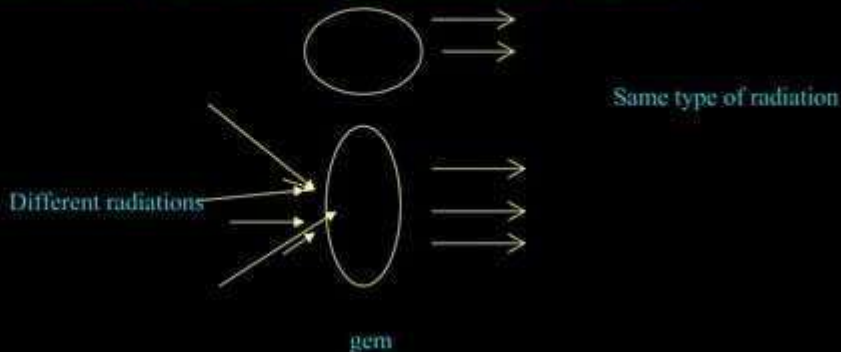
DISCUSSION

There are 7 primary colours i.e VIBGYOR & 2 secondary colours- ultra violet and infra red, these corresponds to the nine planets

These 9 radiations are understood to be the cosmic matrix & very essence of the planets and it is through these that planets radiate energy and influence

If the visible coloured lights are measured, infra red exhibits the longest wavelength & ultra violet the shortest.

The wavelength of coloured light emanating from the planets are found to match those radiating from each planet corresponding gemstones



DISCUSSION

WHY A PERSON OF SPECIFIC ZODIAC SIGNS SHOULD WEAR A SPECIFIC GEM?

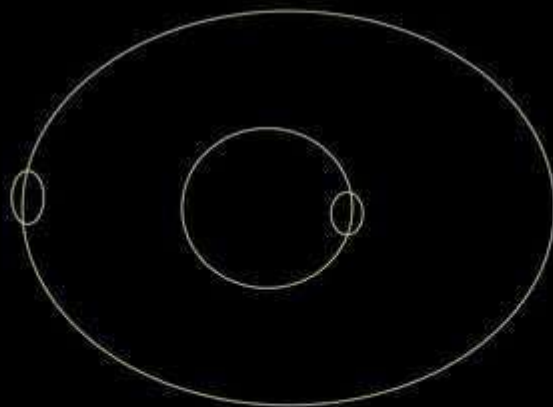
Both planets and earth move at different speeds in the orbit. resultantly ,during each particular month ,there are particular planets that getting farther from earth .

And each planet gives out a particular radiation that is engulfed by earth's surface time to time

With passing of each month it is quite possible that these planets getting farther & farther from earth.

The planet that is more far away from the earth, in a particular month would not allow its radiation to be reflected during that month, hence causing deficit throughout the month

Therefore any child being born during that month will possibly have the deficiency of that colour radiation, consequently the child by birth may not receive the colour released by that planet, hence this colour that decides the gemstone



CONCLUSION

GEMSTONE therapy is one of the alternative therapy
It heals up many chronic disorders.

There is no any procedure to be performed ,it acts only just
by its wearing

Since gemstones emit the powerul radiations,it brings the
persons ability ,good fortune

They protect from illness, misfortune and dangers

Formative Assessment

- ◇ Samanya Shodhana of all Ratnas?
- ◇ Ratnon ka Grahon se sambandh?
- ◇ Name Jangam Ratnas
- ◇ Name ratna/upratna having plant origin
- ◇ Grahya part of Pravala?
- ◇ Types of Vajra?