
PDF
PHARMACY INDIA
PHARMACY INDIA
GET IT ON Google Play
Download
PHARMACY INDIA
App from play store

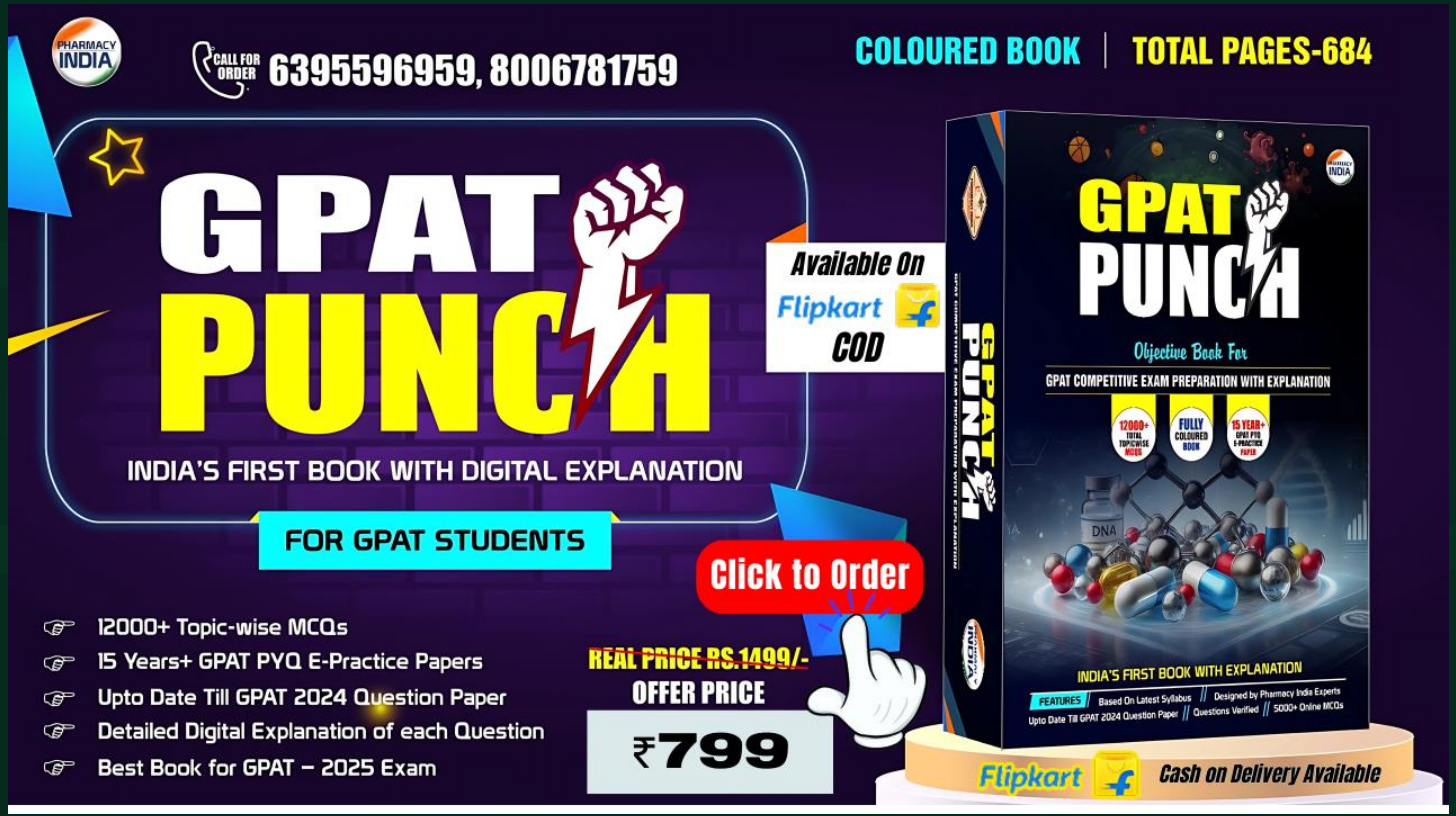
# DAILY UPDATES

## जुड़िए PHARMACY INDIA

## के साथ.....

**WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE**


# “GPAT Punch – Objective Book for GPAT 2025”

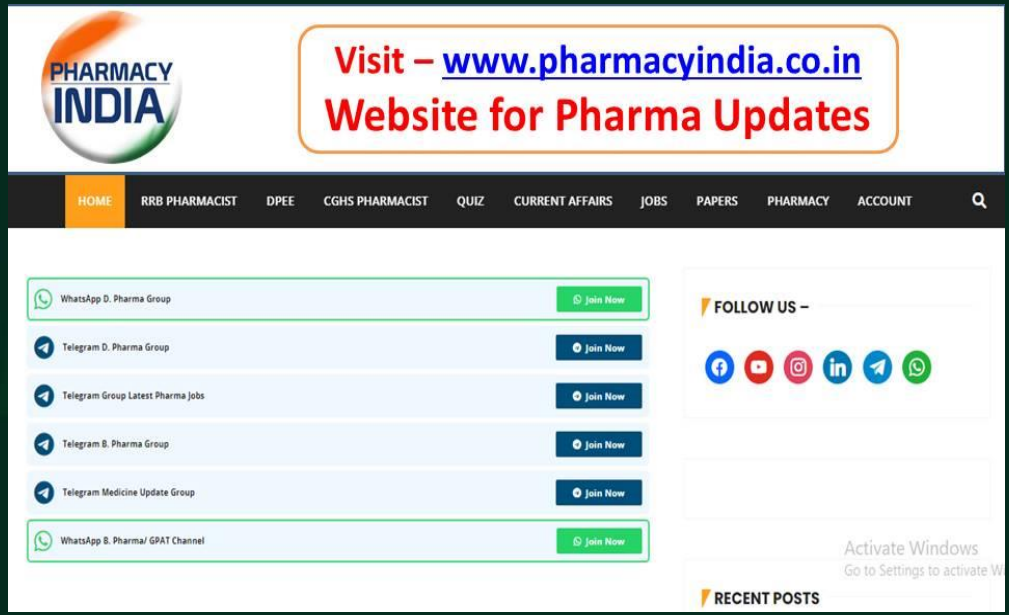



[Click Here to Download Book Sample PDF]

[Cash on Delivery Available | Click to Order Now]

# Visit – pharmacyindia.co.in

- GPAT Preparation Materials
- Free GPAT Practice Quiz
- Daily Job Updates
- Previous Year GPAT Papers
- Exam Notifications & Updates
- Subject-Wise Study Notes
- College Rankings & Admissions



1. **Rancidity of oil is detected by: [GPAT-2024]**

(a) Peroxide value
(b) Iodine value
(c) Acid value
(d) Saponification value

1. **Rancidity of oil is detected by: [GPAT-2024]**

**(a) Peroxide value**

**(b) Iodine value**

**(c) Acid value**

**(d) Saponification value**

**Explanation:**

## Peroxide value

- One of the most widely used tests for oxidative or rancidity; peroxide value is a measure of the concentration of peroxides and hydroperoxides formed in the initial stages of lipid oxidation.
- Milliequivalents of peroxide per kg of fat are measured by titration with iodide ion. Peroxide values are not static and care must be taken in handling and testing samples.

- It is difficult to provide a specific guideline relating peroxide value to rancidity. High peroxide values are a definite indication of a rancid fat, but moderate values may be the result of depletion of peroxides after reaching high concentrations.

**2.** **Rancidity in the fixed oils generally show [GPAT-2022]**

(a) Higher Iodine value as compared to the standards

(b) Higher Acid value as compared to the standards

(c) Higher Peroxide value as compared to the standards

(d) Higher level of unsaponifiable matter

**2.** **Rancidity in the fixed oils generally show [GPAT-2022]**

(a) Higher Iodine value as compared to the standards

(b) Higher Acid value as compared to the standards

(c) Higher Peroxide value as compared to the standards

(d) Higher level of unsaponifiable matter

**Explanation:**

**Acid value:** It is the amount of free acid present in fat as measured by the milligrams of potassium hydroxide needed to neutralize it. This happens because the triglycerides in the oil break down into free fatty acids, which increase the acid value. As the glycerides in fat slowly acid value increases.

**3.** A fixed oil when added to an equal volume of ethanol, clear liquid is obtained; on cooling at 0°C and on storage for three hours, the liquid remains clear such fixed oil is identified as [GPAT-2020]

(a) Castor Oil

(b) Soyabean oil

(c) Neem oil

(d) Evening Primrose oil

**3.** A fixed oil when added to an equal volume of ethanol, clear liquid is obtained; on cooling at 0°C and on storage for three hours, the liquid remains clear such fixed oil is identified as [GPAT-2020]

(a) Castor Oil

(b) Soyabean oil

(c) Neem oil

(d) Evening Primrose oil

# Explanation: IDENTIFICATION TEST FOR CASTER OIL

| TEST | OBSERVATION | INFERENCE |
|---|---|---|
| **Castor oil + petroleum ether** | Completely soluble in petroleum ether | Castor oil is present |
| **Castor oil + equal volume of alcohol** | Clear liquid at cool at 0°c for (3 hours) | Castor oil is present |

4. Antiviral action of Neem in due to [GPAT-2019]

(a) Kaempferol

(b) Melanin

(c) Nimbin

(d) Azadirachtin

4. Antiviral action of Neem in due to [GPAT-2019]

(a) Kaempferol

(b) Melanin

(c) Nimbin

(d) Azadirachtin

- **Explanation:**

**NEEM**

**Chemical constituents**

- It contains glycerides of saturated and unsaturated fatty acids.
- The main fatty acids are **oleic (50%)** and **stearic (20%)** acids.
- The oil contains 2.0 per cent of bitters, which are sulphur containing compounds, nimbidin, nimbin, nimbinin and nimbidol.
- The unsaponifiable part contains nimbosterol (0.03 per cent).

## Uses

- Nimbin, nimbidin and related compounds possess anti-viral activity.
- As non-edible oil, it is used for soap making and for manufacture of oleic and stearic acids.
- It is indicated in the rheumatism and pesticide and in medicated soaps for skin diseases.
- It is also spermicidal.

**5.** Determine the correctness or otherwise of the following Assertion [a] and the Reason [r] [GPAT-2011]

Assertion (A): Castor oil is soluble in alcohol and is used as purgative

Reason (R): The oil contains ricinoleic acid having a hydroxyl group at C-12 position which is responsible for its solubility in alcohol and its purgative action

5.

(a) Both (a) and (r) are true but (r) is NOT the correct reason for (a)

(b) (a) is true but (r) is NOT the correct reason for (a)

(c) Both (a) and (r) are true and (r) is the correct reason for (a)

(d) Both (a) and (r) are false

5.

(a) Both (a) and (r) are true but (r) is NOT the correct reason for (a)

(b) (a) is true but (r) is NOT the correct reason for (a)

(c) Both (a) and (r) are true and (r) is the correct reason for (a)

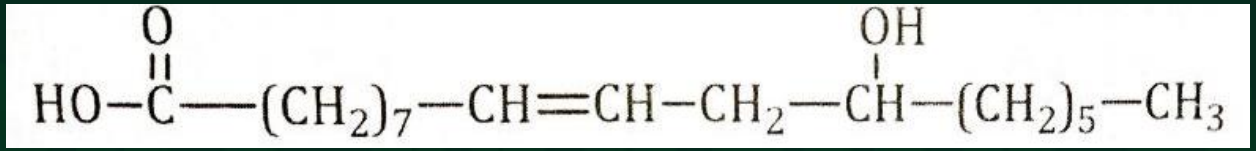
(d) Both (a) and (r) are false

- **Explanation:**

## CASTOR OIL

- Castor oil is soluble in alcohol; miscible in chloroform, solvent ether, glacial acetic acid and petroleum ether.
- However, it is insoluble in mineral oil and immiscible in water.
- Castor oil chiefly consist of triglyceride of ricinoleic acid (80%) and other fatty acids such as iso-ricinoleic, linoleic, stearic and iso-stearic acid.

- The structure of ricinoleic acid is given below:




- The laxative and purgative activity of castor is due to irritant action of ricinoleic acid.
- The hydroxyl group at C-12 position which is responsible its solubility in alcohol.

6. **Chemically fixed oils and fats are esters of**

(a) Glycerol

(b) Ketone

(c) Sugars

(d) (d) None of the above

6. Chemically fixed oils and fats are esters of

(a) Glycerol

(b) Ketone

(c) Sugars

(d) (d) None of the above

- **Explanation:**
- Fats and oils are esters of glycerol (three carbon trihydric alcohol) and various straight chained monocarboxylic acids, known as fatty acids. The fatty acids of natural fats have 4 - 24 carbon atoms (and any even number).
- These fatty acids may be saturated, monounsaturated, polyunsaturated or cyclic unsaturated. The cyclic unsaturated fatty acids are hydnocarpic, chaulmoogric and prostanoic.

**7.** **Trace the wrong statement regarding fixed oils and fats**

(a) Fixed oils and fats are viscous and generally yellow-coloured liquids

(b) They cannot be distilled

(c) They are volatile and do not produce a permanent spot-on paper

(d) They can be saponified by alkalis

**7.** **Trace the wrong statement regarding fixed oils and fats**

(a) Fixed oils and fats are viscous and generally yellow-coloured liquids

(b) They cannot be distilled

(c) They are volatile and do not produce a permanent spot-on paper

(d) They can be saponified by alkalis

- **Explanation:**

**Properties of Fixed oil**

1. Fixed oils are thick, viscous, yellow-coloured liquids with characteristic odour.
2. They are non-volatile and cannot be distilled.
3. They do have food value and can be saponified.
4. They turn rancid on storage due to free acidity.
5. Fixed oils and fats are insoluble in water and ethyl alcohol, but soluble in organic solvents like chloroform; ether; petroleum-ether and benzene.

**8.** **Which of the following statement about fixed oils is INCORRECT**

(a) Turn rancid on storage due to presence of free acid

(b) They are volatile and can be distilled

(c) Have food value and can be saponified

(d) None of the above

**8.** **Which of the following statement about fixed oils is INCORRECT**

(a) Turn rancid on storage due to presence of free acid

(b) They are volatile and can be distilled

(c) Have food value and can be saponified

(d) None of the above

- **Explanation:**

**Properties of Fixed oil**

1. Fixed oils are thick, viscous, yellow-coloured liquids with characteristic odour.
2. They are non-volatile and cannot be distilled.
3. They do have food value and can be saponified.
4. They turn rancid on storage due to free acidity.
5. Fixed oils and fats are insoluble in water and ethyl alcohol, but soluble in organic solvents like chloroform; ether; petroleum-ether and benzene.

**9.** **Give an example of cyclic unsaturated fatty acid**

(a) Hydnocarpic

(b) Chaulmoogric

(c) Prostanoic

(d) All of the above

9. Give an example of cyclic unsaturated fatty acid

(a) Hydnocarpic

(b) Chaulmoogric

(c) Prostanoic

(d) All of the above

- **Explanation:**

**1. Hydnocarpic Acid:**

- **Hydnocarpic acid** is a **cyclic unsaturated fatty acid** found in *Hydnocarpus* species, such as *Hydnocarpus wightiana* and *Hydnocarpus anthelmintica*.
- It has a **cyclopentenyl ring** with an **unsaturated hydrocarbon chain**, making it **both cyclic and unsaturated**.
- It is **used in the treatment of leprosy** due to its antimicrobial properties.

## 2. Chaulmoogric Acid:

- **Chaulmoogric acid** is another **cyclic unsaturated fatty acid** present in *Chaulmoogra oil* from *Hydnocarpus* species.
- It contains a **cyclopentenyl ring** with **unsaturation**, similar to hydnocarpic acid.
- This acid has been historically used in **leprosy treatment** due to its antibacterial effects against *Mycobacterium leprae*.

## 3. Prostanoic Acid:

- **Prostanoic acid** is the parent structure of **prostaglandins** and is **cyclic in nature**.
- It contains a **cyclopentane ring** with a **carboxylic acid** and **unsaturated alkyl chains**.
- It serves as a precursor to **prostaglandins**, which play roles in inflammation, blood clotting, and vasodilation.

An unsaturated fatty acid is a type of fatty acid that contains one or more double bonds between the carbon atoms in its carbon chain.

**10. Biological source of castor oil is**

(a) Obtained from the seeds of Ricinus Communis, Family: -Euphorbiaceae

(b) Obtained from the seeds of Linum Usitatissimum, Family: -Euphorbiaceae

(c) Obtained from the seeds of Ricinus Communis, Family: - Linaceae

(d) Obtained from the seeds of Arachis hypogea, Family: - Linaceae

10. **Biological source of castor oil is**

**(a) Obtained from the seeds of Ricinus Communis, Family: -Euphorbiaceae**

**(b) Obtained from the seeds of Linum Usitatissimum, Family: -Euphorbiaceae**

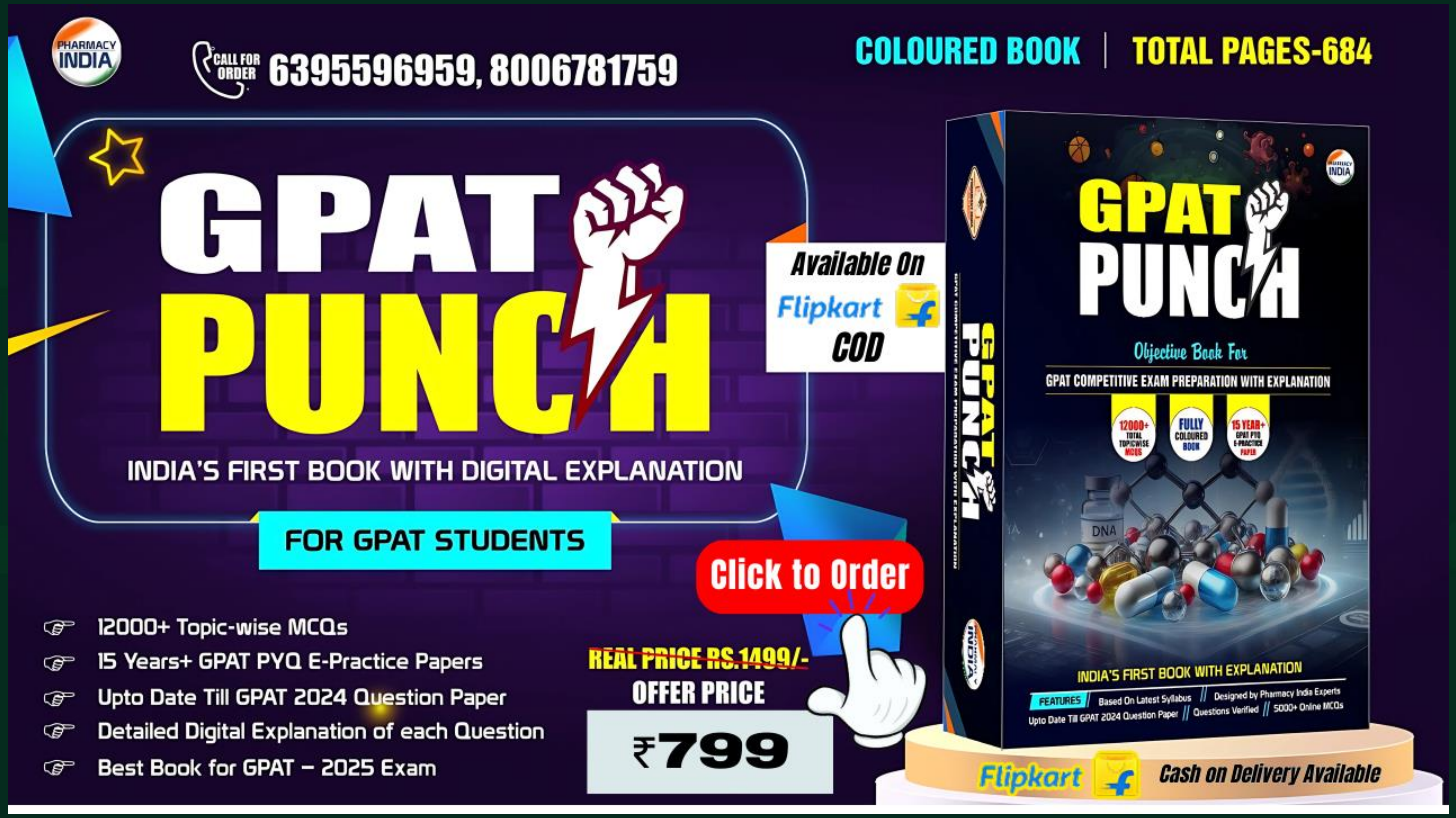
**(c) Obtained from the seeds of Ricinus Communis, Family: - Linaceae**

**(d) Obtained from the seeds of Arachis hypogea, Family: - Linaceae**

- **Explanation:**

| Plants | Sources | Chemical Constituents | Uses |
|---|---|---|---|
| **Castor oil** | Obtained from the seeds of Ricinus communis Family:- Euphorbiaceae | Ricinoleic acid | Cathartic, lubricant, Purgative |

# “GPAT Punch – Objective Book for GPAT 2025”

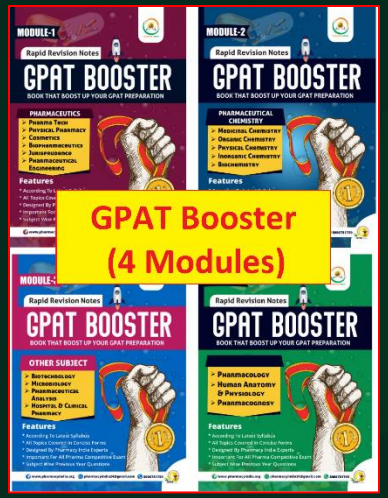



[Click Here to Download Book Sample PDF]

[Cash on Delivery Available | Click to Order Now]

# Best Books For GPAT Preparation

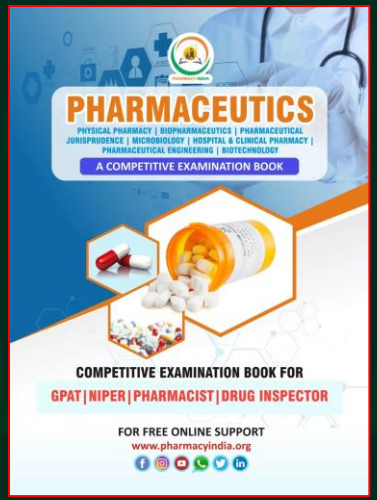
ORDER NOW




Complete GPAT Preparation
Includes All Core Subjects
COD Available

Flipkart

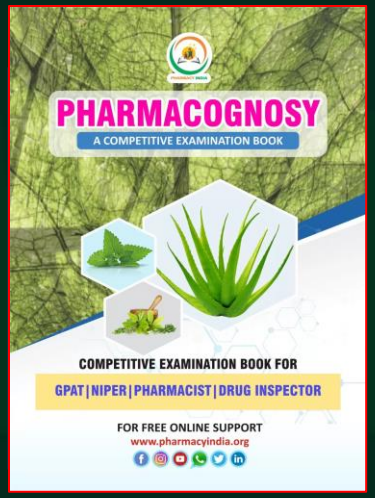
amazon




Pharmaceutics Book for
GPAT 2025 Exam
COD Available

Flipkart

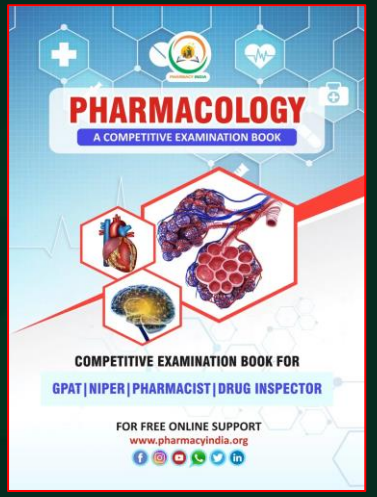
BUY NOW




Pharmacognosy Book
for GPAT 2025 Exam
COD Available

Flipkart

BUY NOW




Pharmacology Book for
GPAT 2025 Exam
COD Available

Flipkart

BUY NOW

PHARMACY INDIA

LIVE CLASSES STARTING FROM
05th FEBRUARY 2025

# अभिMAAN

PREPARE TILL YOUR LAST DESTINATION

## MISSION
# GPAT 2025
## 120 DAY'S CRASH COURSE

- LIVE CLASSES
- ONLINE TEST SERIES
- E-NOTES

PHARMACY INDIA

**11.** **Castor oil is soluble in alcohol due to**

(a) Presence of fatty acids

(b) Presence of sulphadryl group

(c) Presence of hydroxyl group in Ricinoleic acid

(d) None of the above

**11.** **Castor oil is soluble in alcohol due to**

(a) Presence of fatty acids

(b) Presence of sulphadryl group

(c) Presence of hydroxyl group in Ricinoleic acid

(d) None of the above

- **Explanation:**

**Characteristics**

- Medicinal or the first grade or Pale pressed castor oil is colourless or slightly yellow coloured. It is a viscid liquid which has slight odour with slightly acrid taste.
- Castor oil is soluble in absolute alcohol in all proportions; Specific gravity is 0.958 to 0.969, refractive index at 40°C is 1.4695 to 1.4730, acid value not more than 2, saponification value 177 to 187, and acetyl value is about 150.

12. Cathartic property of castor oil is due to

(a) Ricinoleic acid

(b)Linoleic acid

(c) Stearic acid

(d) Sebacic acid

**12.** **Cathartic property of castor oil is due to**

**(a) Ricinoleic acid**

**(b)Linoleic acid**

**(c) Stearic acid**

**(d) Sebacic acid**

- **Explanation:**

| Plants | Sources | Chemical Constituents | Uses |
|---|---|---|---|
| **Castor oil** | Obtained from the seeds of Ricinus communis Family:- Euphorbiaceae | Ricinoleic acid | Cathartic, lubricant Purgative |

13. **Chaulmoogra oil is generally employed in**

(a) Hypertension

(b)Epilepsy

(c) Leprosy

(d) Diabetes

13. **Chaulmoogra oil is generally employed in**

(a) Hypertension

(b)Epilepsy

(c) Leprosy

(d) Diabetes

- **Explanation:**

| Plants | Sources | Chemical Constituents | Uses |
|---|---|---|---|
| **Chaulmoogra oil (Hydnocarpus oil)** | Obtained from fresh ripe seeds of Hydnocar puskerziiand, H. anthelmintica Family: Flacourtiaceae | hydnocarpic acid, chaulmoogric acid. | Tuberculosis, Leprosy |

**14.** **Neem oil which is a non-edible fixed oil possess anti-viral activity due to presence of**

(a) Nimbin

(b)Nimbidin

(c) Azadirectine

(d) Both (a) and (b)

**14.** **Neem oil which is a non-edible fixed oil possess anti-viral activity due to presence of**

(a) Nimbin

(b)Nimbidin

(c) Azadirectine

(d) Both (a) and (b)

- **Explanation:**

| | | | |
|---|---|---|---|
| Neem oil (Margosa oil) | Obtained from fixed oil obtained from Azadiracta indica Family:- Meliaceae | Oleic acid, stearic acid Nimbin, nibidin | Cosmetic preparation, insect repellant, anti-viral activity |

**15.** **Which of the following fixed oil is an example of drying oil**

(a) Linseed oil

(b) Olive oil

(c) Croton oil

(d) Kokum butter

15. **Which of the following fixed oil is an example of drying oil**

(a) Linseed oil (flaxseed)

(b) Olive oil

(c) Croton oil

(d) Kokum butter

- **Explanation:**

| Category | Examples |
|---|---|
| **Fats** | Cocoa butter, Kokum butter, Nutmeg butter, Coconut oil, Palm oil, Mango kernel oil |
| **Non-drying oils** | Olive oil, Peanut oil, Almond oil, Croton oil, Rice-bran oil |
| **Semi-drying oils** | Castor oil, Mustard oil, Sesame oil, Rapeseed oil, Cottonseed oil, Safflower oil |
| **Drying oils** | Linseed oil, Poppy seed oil, Hemp oil, Walnut oil |

16. **Baudouin's test is for**

(a) Strophanthus

(b) Shatavari

(c) Senna

(d) Sesame oil

16. **Baudouin's test is for**

(a) Strophanthus

(b) Shatavari

(c) Senna

(d) Sesame oil

- **Explanation:**

| | | | |
|---|---|---|---|
| Sesame oil | Obtained from seeds of<br>Sesamum indicum<br>Family:-<br>Pedaliaceae | Sesamin,<br>sesamolin, oleic and linoleic acid | Nutritive laxative demulcent and emollient |

**Identification: Badouin's test**

Shake 2 ml sesame oil with 1 ml 1 per cent solution of sucrose in hydrochloric acid; a pink or red colour is produced due to sesamol.

**17.** **As per IP 1gm of shark liver oil should contain not less than**

(a) 1000 I.U of vitamin A

(b) 3000 I.U of vitamin A

(c) 4000 I.U of vitamin A

(d) 6000 I.U of vitamin A

**17.** **As per IP 1gm of shark liver oil should contain not less than**

(a) 1000 I.U of vitamin A

(b) 3000 I.U of vitamin A

(c) 4000 I.U of vitamin A

(d) 6000 I.U of vitamin A

## Explanation:

| | | | |
|---|---|---|---|
| Shark liver oil | Obtained from Fresh or carefully preserved livers s of the shark Hypoprion brevirostris | Vitamin A, saturated and unsaturated fatty acids | Treatment of xerophthalmia, sunburn ointments |

The active principle of Shark liver oil is vitamin A which varies from 15,000 to 30,000 I.U. per g of the oil. It contains glycerides of saturated and unsaturated fatty acids.

18. **Cod liver oil is nutritive due to presence of**

(a) Vitamin A

(b) Vitamin A and D

(c) Vitamin A and E

(d) Vitamin E

18. Cod liver oil is nutritive due to presence of

(a) Vitamin A

(b) Vitamin A and D

(c) Vitamin A and E

(d) Vitamin E

- **Explanation:**

| | | | |
|---|---|---|---|
| Cod liver oil | Obtained from Fresh liver of cod fish Gadus morrhua Family:- Gadidae | Vitamin A and D | Treatment of rickets |

**19.** **Which of the following is a non-drying oil?**

A. Castor oil

B. Linseed oil

C. Chaulmoogra oil

D. Neem oil

19. **Which of the following is a non-drying oil?**

A. Castor oil

B. Linseed oil

C. Chaulmoogra oil

D. Neem oil

- **Explanation:**

| Category | Examples |
|---|---|
| **Fats** | Cocoa butter, Kokum butter, Nutmeg butter, Coconut oil, Palm oil, Mango kernel oil |
| **Non-drying oils** | Olive oil, Peanut oil, Almond oil, Croton oil, Rice-bran oil, castor oil |
| **Semi-drying oils** | Castor oil, Mustard oil, Sesame oil, Rapeseed oil, Cottonseed oil, Safflower oil |
| **Drying oils** | Linseed oil, Poppy seed oil, Hemp oil, Walnut oil |

20. **The active constituent of Chaulmoogra oil is:**

A. Ricinoleic acid

B. Hydnocarpic acid

C. Oleic acid

D. Linoleic acid

20. **The active constituent of Chaulmoogra oil is:**

A. Ricinoleic acid

B. Hydnocarpic acid

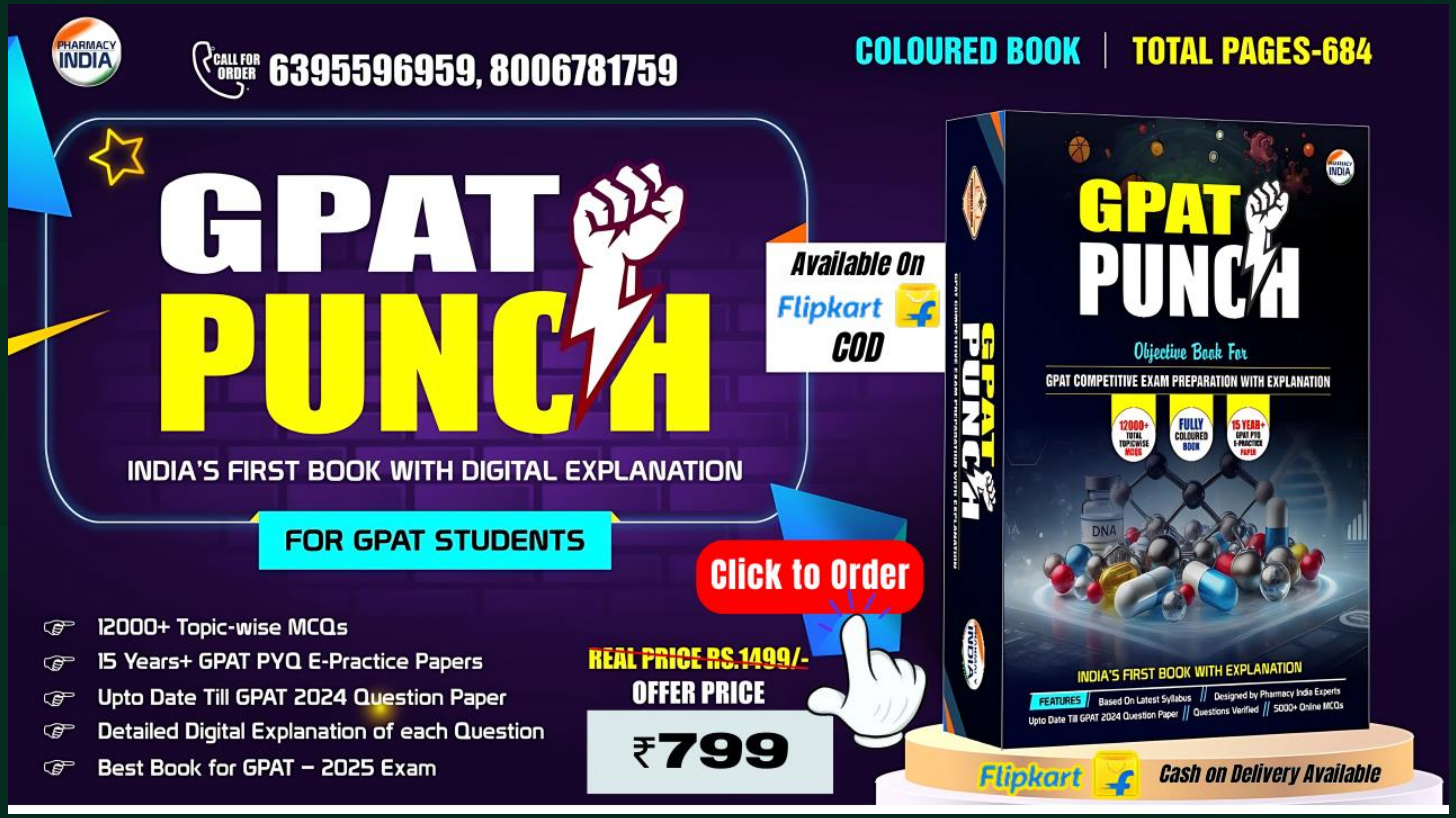
C. Oleic acid

D. Linoleic acid

- **Explanation:**

| Plants | Sources | Chemical Constituents | Uses |
|---|---|---|---|
| **Chaulmoogra oil (Hydnocarpus oil)** | Obtained from fresh ripe seeds of Hydnocar puskerziiand, H. anthelmintica Family: Flacourtiaceae | hydnocarpic acid, chaulmoogric acid. | Tuberculosis, Leprosy |

# “GPAT Punch – Objective Book for GPAT 2025”

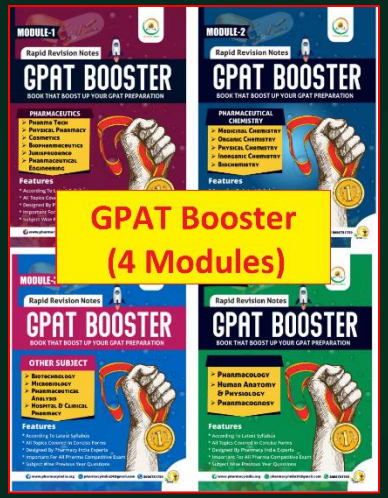



[Click Here to Download Book Sample PDF]

[Cash on Delivery Available | Click to Order Now]

# Best Books For GPAT Preparation

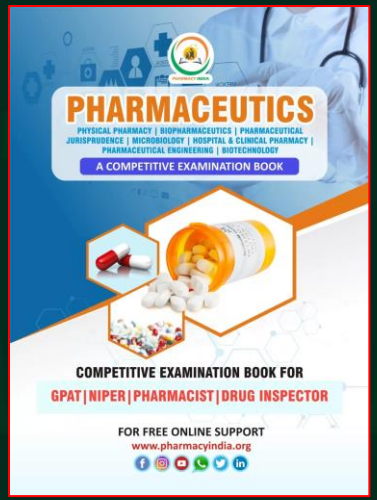
ORDER NOW




Complete GPAT Preparation
Includes All Core Subjects
COD Available

Flipkart

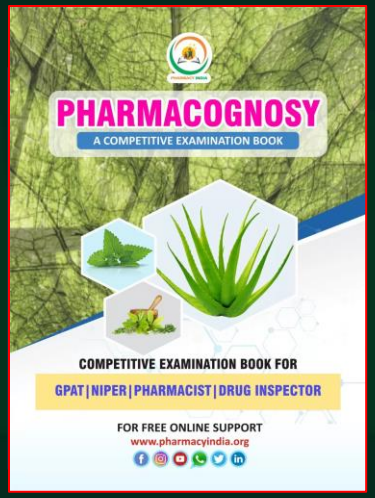
amazon




Pharmaceutics Book for
GPAT 2025 Exam
COD Available

Flipkart

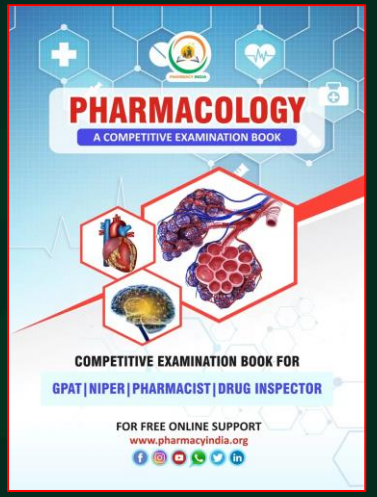
BUY NOW




Pharmacognosy Book
for GPAT 2025 Exam
COD Available

Flipkart

BUY NOW




Pharmacology Book for
GPAT 2025 Exam
COD Available

Flipkart

BUY NOW

PHARMACY INDIA

LIVE CLASSES STARTING FROM
05th FEBRUARY 2025

# अभिMAAN

PREPARE TILL YOUR LAST DESTINATION

## MISSION
# GPAT 2025
## 120 DAY'S CRASH COURSE

- LIVE CLASSES
- ONLINE TEST SERIES
- E-NOTES

PHARMACY INDIA

**21.** **Cottonseed oil is classified as:**

A. Drying oil

B. Non-drying oil

C. Semi-drying oil

D. Essential oil

21. **Cottonseed oil is classified as:**

A. Drying oil

B. Non-drying oil

C. Semi-drying oil

D. Essential oil

- **Explanation:**

| Category | Examples |
|---|---|
| **Fats** | Cocoa butter, Kokum butter, Nutmeg butter, Coconut oil, Palm oil, Mango kernel oil |
| **Non-drying oils** | Olive oil, Peanut oil, Almond oil, Croton oil, Rice-bran oil |
| **Semi-drying oils** | Castor oil, Mustard oil, Sesame oil, Rapeseed oil, Cottonseed oil, Safflower oil, Soybean oil |
| **Drying oils** | Linseed oil, Poppy seed oil, Hemp oil, Walnut oil |

**22.** **Evening primrose oil is rich in which active constituent?**

A. Linoleic acid

B. Ricinoleic acid

C. γ-Linolenic acid

D. Palmitic acid

**22.** **Evening primrose oil is rich in which active constituent?**

A. Linoleic acid

B. Ricinoleic acid

C. γ-Linolenic acid

D. Palmitic acid

- **Explanation:**

| Plants | Sources | Chemical Constituents | Uses |
|---|---|---|---|
| **Evening primerose oil** | Oenothera biennis Family: Onagraceae | Gamma linoleic acid and linoleic acid | Nutritive and cosmetics |

23. **Kokum butter is derived from which plant?**

A. Garcinia indica

B. Theobroma cacao

C. Sesamum indicum

D. Gossypium herbaceum

23. Kokum butter is derived from which plant?

A. Garcinia indica

B. Theobroma cacao

C. Sesamum indicum

D. Gossypium herbaceum

- **Explanation:**

| | | | |
|---|---|---|---|
| Kokum butter | Obtained from seeds of Garcinia indica Family:- Guttiferae | Stearic and oleic acids stearic acid oleic acid | Pharmaceutical aid<br>Nutritive laxative demulcent and emollient |

**24.** **Linseed oil is a:**

A. Drying oil

B. Semi-drying oil

C. Non-drying oil

D. Essential oil

**24.** **Linseed oil is a:**

A. Drying oil

B. Semi-drying oil

C. Non-drying oil

D. Essential oil

- **Explanation:**

| Category | Examples |
|---|---|
| **Fats** | Cocoa butter, Kokum butter, Nutmeg butter, Coconut oil, Palm oil, Mango kernel oil |
| **Non-drying oils** | Olive oil, Peanut oil, Almond oil, Croton oil, Rice-bran oil |
| **Semi-drying oils** | Castor oil, Mustard oil, Sesame oil, Rapeseed oil, Cottonseed oil, Safflower oil |
| **Drying oils** | Linseed oil, Poppy seed oil, Hemp oil, Walnut oil |

**25.** **Which fatty acid is predominantly found in Sesame oil?**

A. Oleic acid

B. Linoleic acid

C. Palmitic acid

D. Ricinoleic acid

**25. Which fatty acid is predominantly found in Sesame oil?**

A. Oleic acid

B. Linoleic acid

C. Palmitic acid

D. Ricinoleic acid

- **Explanation:**

| | | | |
|---|---|---|---|
| Sesame oil | Obtained from seeds of<br>Sesamum indicum<br>Family:- Pedaliaceae | Sesamin, sesamolin, oleic and linoleic acid | Nutritive laxative demulcent and emollient |

**26.** **Alfa Alfa belongs to which of the following families: [GPAT-2024]**

(a) Acanthaceae

(b) Convolvulaceae

(c) Leguminosae

(d) Liliaceae

**26.** **Alfa Alfa belongs to which of the following families: [GPAT-2024]**

(a) Acanthaceae

(b) Convolvulaceae

(c) Leguminosae

(d) Liliaceae

- **Explanation:**

**Alfa Alfa (Medicago sativa)** is a **leguminous plant** belonging to the **Leguminosae (Fabaceae) family**. It is widely cultivated for its high protein content and is used as a forage crop (feed crop) for livestock. Its ability to fix atmospheric nitrogen through root nodules makes it an essential crop in agriculture.

27. **Hemp and jute are**

(a) Animal fibres

(b) Mineral fibres

(c) Synthetic fibre

(d) Plant fibres

27. Hemp and jute are

(a) Animal fibres

(b) Mineral fibres

(c) Synthetic fibre

(d) Plant fibres

## . Explanation:

Based on the extracted text, here is the structured table:

| Category | Examples |
|---|---|
| **Plant fibres** | Jute, flax, banana, cotton, hemp |
| **Animal fibres** | Silk, wool |
| **Regenerated and Synthetic fibres** | Rayon (Viscose): Made from wood pulp or cotton linters. Acetate: Made from cellulose acetate. Lyocell: from wood pulp. Nylon, Polyester, Acrylic, Spandex (synthetic) |
| **- Fibres regenerated from carbohydrate materials** | Alginate yarn, artificial silk or rayon, regenerated cellulose |
| **- Fibres regenerated from protein materials** | Aridil (from groundnut protein), Fibrolin (from milk casein) |
| **- Synthetic** | Nylon, terylene, orlon |
| **Mineral fibres** | Glass, asbestos |

**28.** **Raw cotton consists of**

(a) 62% of cellulose

(b) 54% of cellulose

(c) 25% of cellulose

(d) 91% of cellulose

**28.** **Raw cotton consists of**

(a) 62% of cellulose

(b) 54% of cellulose

(c) 25% of cellulose

(d) 91% of cellulose

## Explanation:

| Drugs | Important Characters |
|---|---|
| **Cotton** | ➢ Synonyms: - Raw cotton, purified cotton, absorbent cotton.<br>➢ Biological Source: - Epidermal trichomes of the seeds of cultivated species of the Gossypium herbaceum and other species of Gossypium (G. hirsutum, G. barbadense)<br>➢ Family: - Malvaceae<br>➢ Chemical Constituents: - 90% of cellulose |

29. Purified absorbent cotton is almost a pure

(a) Cellulose

(b) Sodium alginate

(c) Chitin

(d) Talc

29. Purified absorbent cotton is almost a pure

(a) Cellulose

(b) Sodium alginate

(c) Chitin

(d) Talc

## Explanation:

| Drugs | Important Characters |
|---|---|
| **Cotton** | ➢ Synonyms: - Raw cotton, purified cotton, absorbent cotton.<br>➢ Biological Source: - Epidermal trichomes of the seeds of cultivated species of the Gossypium herbaceum and other species of Gossypium (G. hirsutum, G. barbadense)<br>➢ Family: - Malvaceae<br>➢ Chemical Constituents: - 90% of cellulose |

**30.** **Cotton is soluble in**

(a) HCl

(b) Cold 80% sulphuric acid

(c) KOH

(d) Acetone

**30.** Cotton is soluble in

(a) HCl

(b) Cold 80% sulphuric acid

(c) KOH

(d) Acetone

- **Explanation:**

**Chemical Tests**

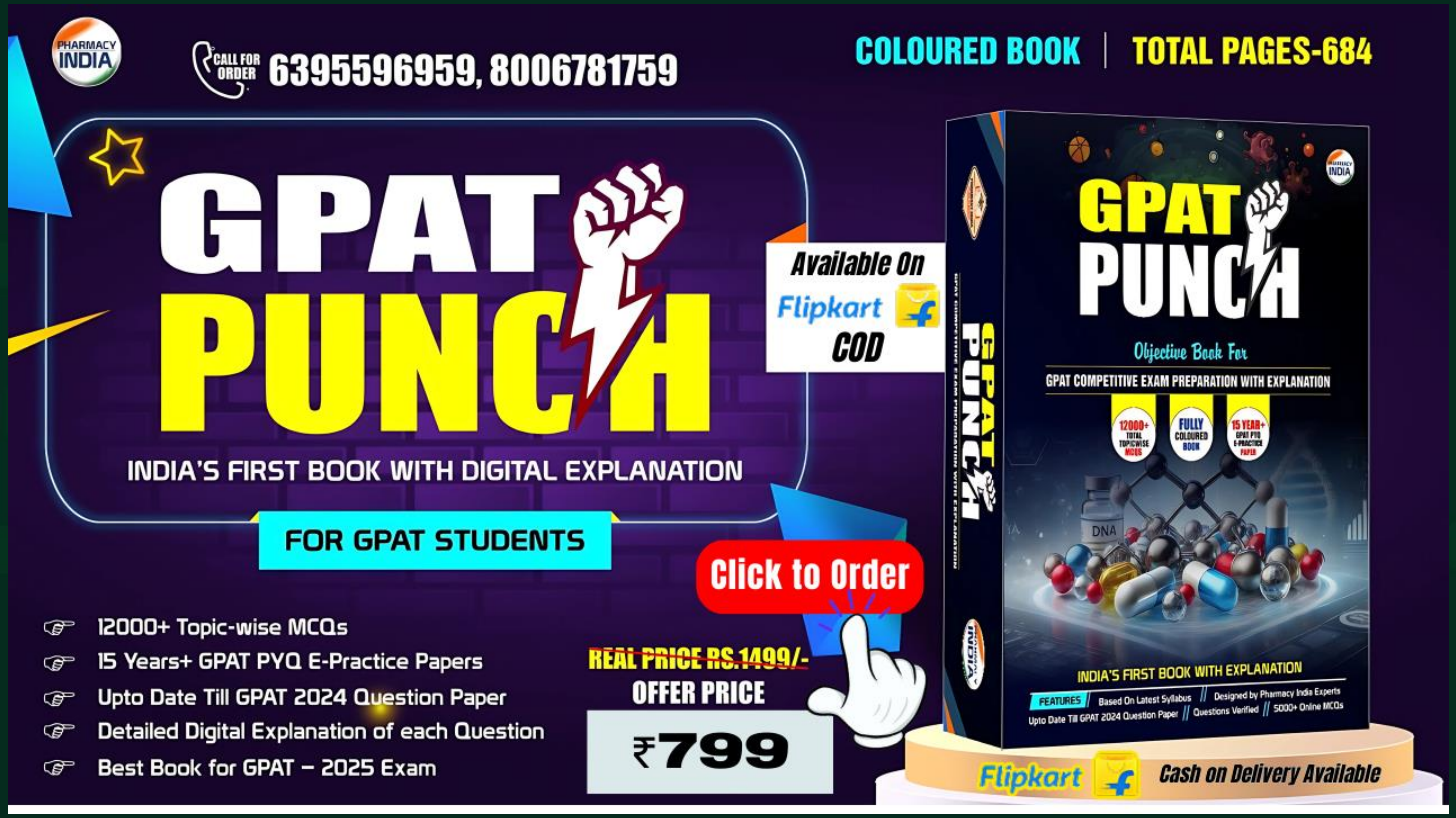
1. On ignition, cotton burns with a flame, gives very little odour or fumes, does not produce a bead, and leaves a small white ash; distinction from acetate rayon, alginate yarn, wool, silk, and nylon.
2. Dried cotton is moistened with N/50 iodine and 80% w/w sulphuric acid is added. A blue colour is produced; distinction from acetate rayon, alginate yarn, jute, hemp, wool, silk, and nylon.

3. With ammoniacal copper oxide solution, raw cotton dissolves with ballooning, leaving a few fragments of cuticle. Absorbent cotton dissolves completely with uniform swelling, distinction from acetate rayon, jute, wool, and nylon.

4. In cold sulphuric acid (80% w/w) cotton dissolves; distinction from oxidized cellulose, jute, hemp, and wool.

5. In cold sulphuric acid (60% w/w) cotton, is insoluble; distinction from cellulose wadding and rayons.

# “GPAT Punch – Objective Book for GPAT 2025”

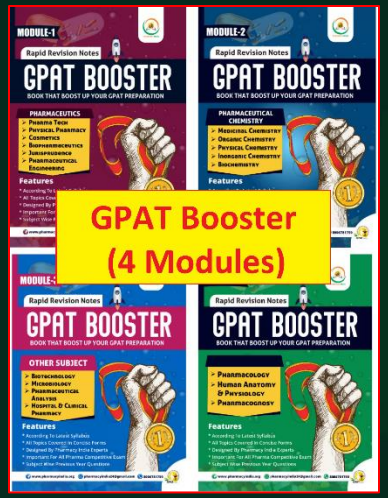



[Click Here to Download Book Sample PDF]

[Cash on Delivery Available | Click to Order Now]

# Best Books For GPAT Preparation

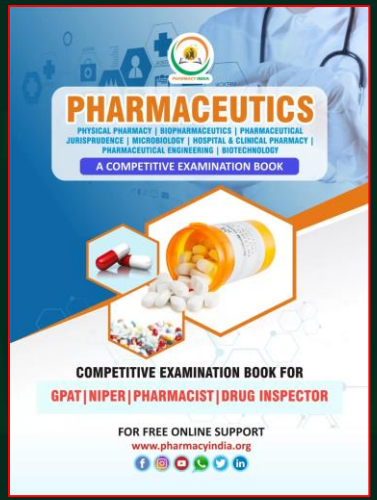
ORDER NOW




Complete GPAT Preparation
Includes All Core Subjects
COD Available

Flipkart

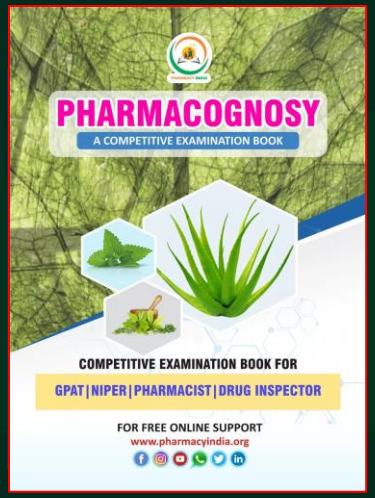
amazon




Pharmaceutics Book for
GPAT 2025 Exam
COD Available

Flipkart

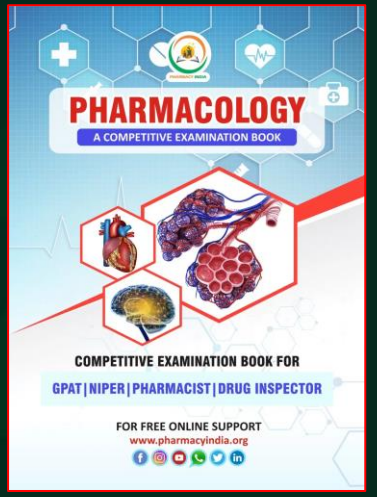
BUY NOW




Pharmacognosy Book
for GPAT 2025 Exam
COD Available

Flipkart

BUY NOW




Pharmacology Book for
GPAT 2025 Exam
COD Available

Flipkart

BUY NOW

PHARMACY INDIA

LIVE CLASSES STARTING FROM
05th FEBRUARY 2025

# अभिMAAN

PREPARE TILL YOUR LAST DESTINATION

## MISSION
# GPAT 2025
## 120 DAY'S CRASH COURSE

- LIVE CLASSES
- ONLINE TEST SERIES
- E-NOTES

PHARMACY INDIA

31. Flax consists of the pericyclic fibres of the stem of

(a) Dioscorea Deltoidea

(b) Coccoloba Uvifera

(c) Ferula Foetida

(d) Linum Usitatissimum

31. Flax consists of the pericyclic fibres of the stem of

(a) Dioscorea Deltoidea

(b) Coccoloba Uvifera

(c) Ferula Foetida

(d) Linum Usitatissimum

- **Explanation:**

| Drugs | Important Characters |
|---|---|
| **Flax** | ➢ Biological Source: - It is the pericyclic fibres which are removed from, the stem of Linum usitatissimum<br>➢ Family: - Linaceae<br>➢ Chemical Composition: - chiefly consists of pecto-cellulose. |

**32.** **Wool is soluble in**

(a) 5% aq. caustic alkali

(b) Conc. hydrochloric acid

(c) 66% Sulphuric acid

(d) Cuoxam solution

**32.** **Wool is soluble in**

(a) 5% aq. caustic alkali

(b) Conc. hydrochloric acid

(c) 66% Sulphuric acid

(d) Cuoxam solution

- **Explanation:**

**Chemical Tests**

1. Solubility test: It is easily soluble in warm alkali.

2. Wool when treated with Con. Hydrochloric acid, it does not produce any effect but dissolves silk.

3. When treated with cuoxam solution, it does not dissolve but swells the wool and produces blue colour.

4. Solution of wool treated with lead acetate produces black precipitate due to high sulphur content.

- Wool is soluble in a dilute solution of caustic alkali (such as sodium hydroxide), which breaks down the protein structure of wool, causing it to dissolve.
- Conc. hydrochloric acid: Wool is not soluble in concentrated hydrochloric acid.
- 66% Sulphuric acid: Sulphuric acid can damage wool but does not completely dissolve it.
- Cuoxam solution: This is a solution used for cellulose fibers, like cotton, not for wool.

**33.** To the wool add Million's reagent. It colors the wool to brick red due to presence of

(a) Moisture

(b)Starch

(c) Keratin

(d) None of the above

**33.** To the wool add Million's reagent. It colors the wool to brick red due to presence of

(a) Moisture

(b)Starch

(c) Keratin

(d) None of the above

- **Explanation:**

- **Millon's reagent** is a chemical reagent that tests for the presence of **tyrosine**, an amino acid found in proteins.
- When **Millon's reagent** reacts with substances containing tyrosine, it produces a **brick red color**.
- **Wool** is primarily composed of **keratin**, which is a protein. Keratin contains **tyrosine residues**, which react with Millon's reagent to give the characteristic brick red coloration.

34. To the boiling mixture of solution of lead acetate and caustic soda, wool is added. A black precipitate is formed due to the presence of

(a) Cobalt

(b)Iron

(c) Carbon

(d) Sulphur

**34.** To the boiling mixture of solution of lead acetate and caustic soda, wool is added. A black precipitate is formed due to the presence of

(a) Cobalt

(b)Iron

(c) Carbon

(d) Sulphur

- **Explanation:**
- Wool is primarily composed of **keratin**, a protein that contains **sulphur** in the form of **disulfide bonds** (cysteine residues).
- When wool is added to a boiling mixture of **lead acetate** and **caustic soda**, a chemical reaction occurs:
  - The sulphur in wool reacts with **lead ions ($Pb^{2+}$)** from lead acetate to form **lead sulfide (PbS)**, which is **black in color**.
- This reaction indicates the presence of sulphur in the wool.

35. **Nylon is insoluble in**

(a) 5M Hydrochloric acid

(b) Acetone

(c) 90% Formic acid

(d) 90% w/w phenol

35. **Nylon is insoluble in**

(a) 5M Hydrochloric acid

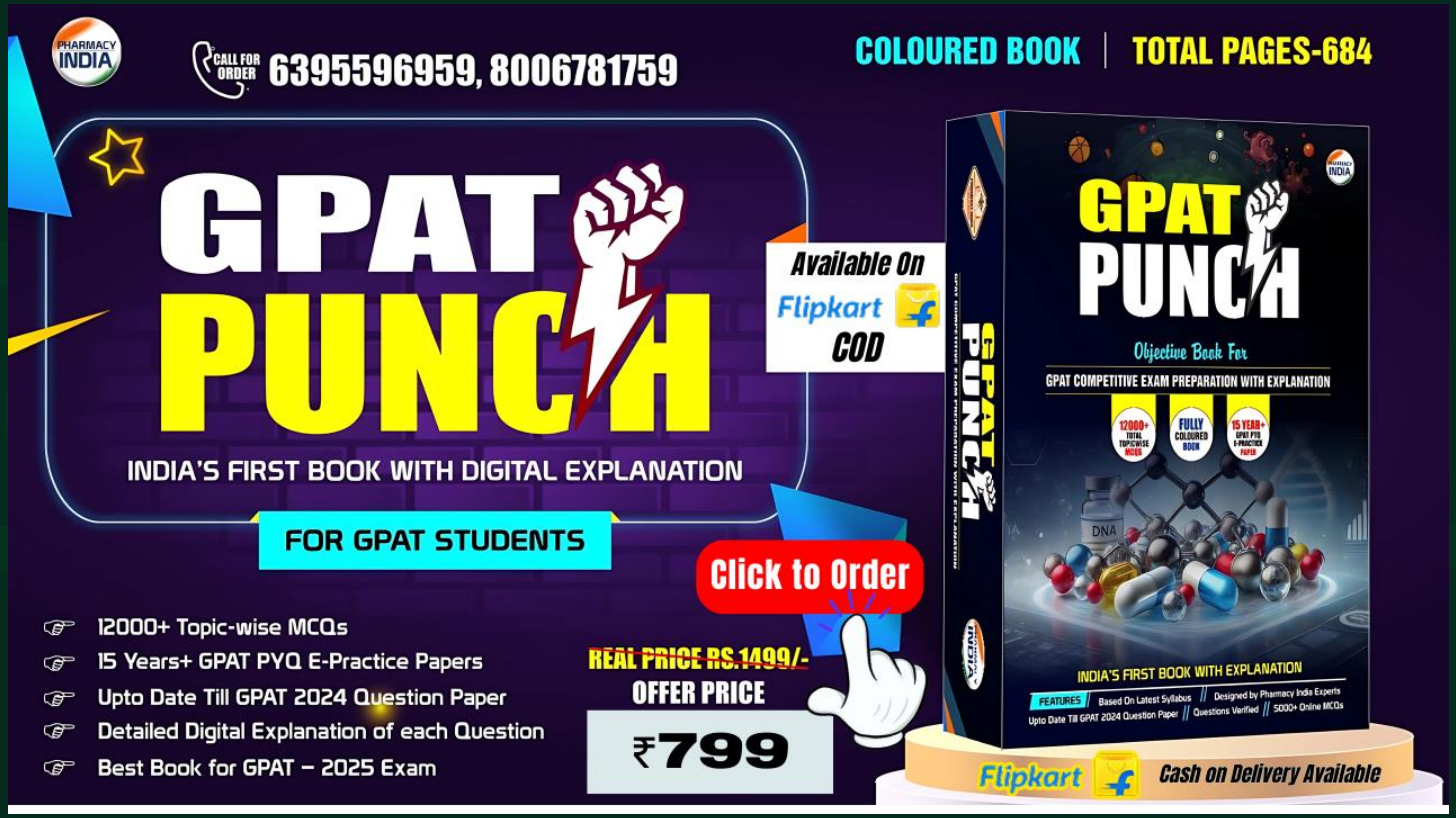
(b) Acetone

(c) 90% Formic acid

(d) 90% w/w phenol

- **Explanation:**
- **Nylon** is a synthetic polymer known for its high strength and resistance to many chemicals. Its solubility depends on the solvent's ability to disrupt the hydrogen bonding between polymer chains.
- **Acetone:**
  - Nylon is **insoluble in acetone**, as acetone lacks the necessary polar properties to break the strong hydrogen bonds between nylon's polymer chains.
  - Acetone is an organic solvent but is not effective for dissolving polyamides like nylon.

# “GPAT Punch – Objective Book for GPAT 2025”

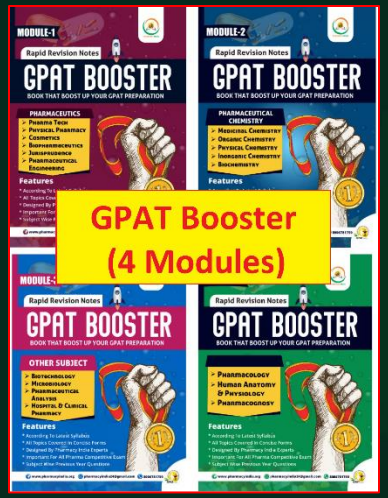



[Click Here to Download Book Sample PDF]

[Cash on Delivery Available | Click to Order Now]

# Best Books For GPAT Preparation

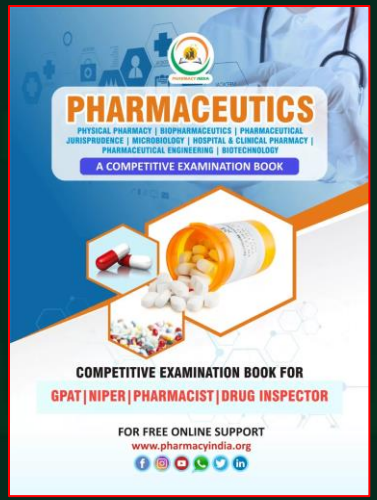
ORDER NOW




Complete GPAT Preparation
Includes All Core Subjects
COD Available

Flipkart

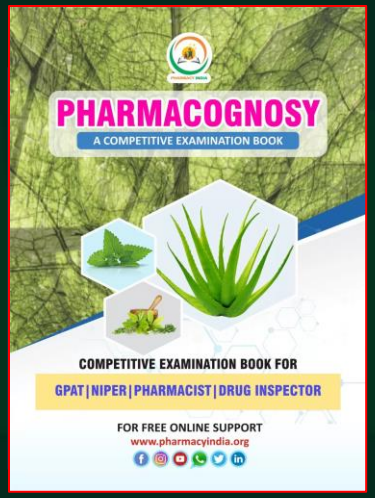
amazon




Pharmaceutics Book for
GPAT 2025 Exam
COD Available

Flipkart

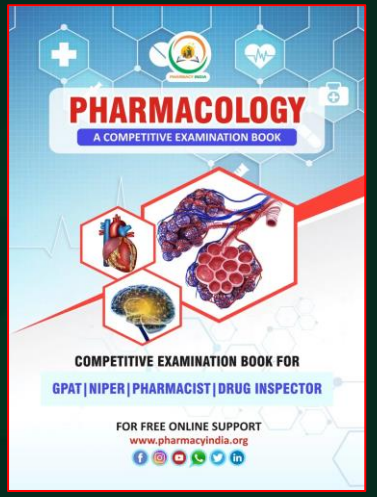
BUY NOW




Pharmacognosy Book
for GPAT 2025 Exam
COD Available

Flipkart

BUY NOW




Pharmacology Book for
GPAT 2025 Exam
COD Available

Flipkart

BUY NOW

PHARMACY INDIA

LIVE CLASSES STARTING FROM
05th FEBRUARY 2025

# अभिMAAN

PREPARE TILL YOUR LAST DESTINATION

## MISSION
# GPAT 2025
## 120 DAY'S CRASH COURSE

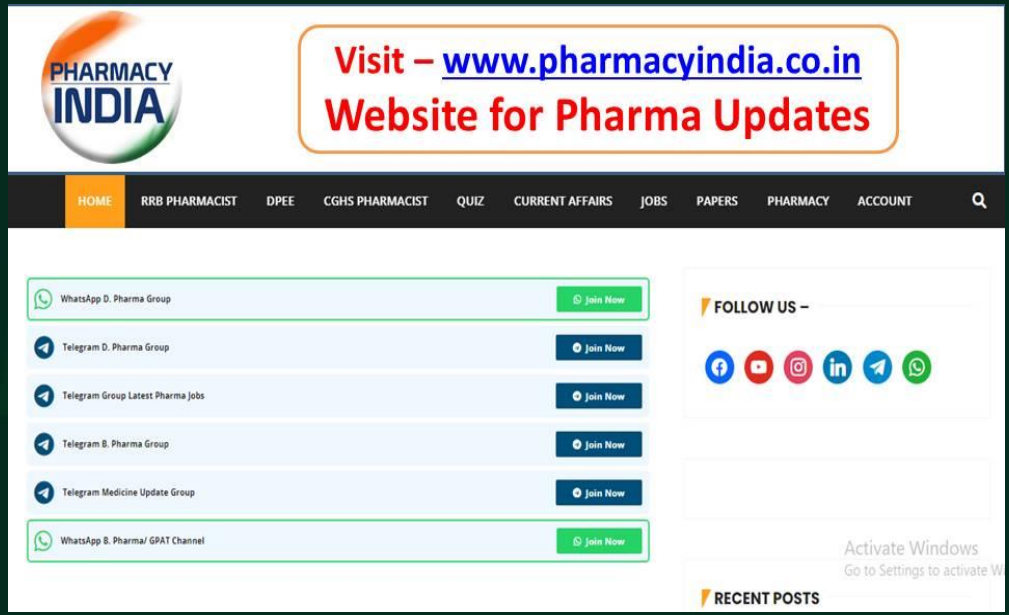
- LIVE CLASSES
- ONLINE TEST SERIES
- E-NOTES

PHARMACY INDIA


PDF
PHARMACY INDIA
PHARMACY INDIA
GET IT ON Google Play
Download
PHARMACY INDIA
App from play store

# Visit – pharmacyindia.co.in

- GPAT Preparation Materials
- Free GPAT Practice Quiz
- Daily Job Updates
- Previous Year GPAT Papers
- Exam Notifications & Updates
- Subject-Wise Study Notes
- College Rankings & Admissions



# DOWNLOAD "PHARMACY INDIA" MOBILE APP


**Mobile Phone Par Click karein**

# 6395596959

Contact for admission related queries

# DAILY UPDATES

## जुड़िए PHARMACY INDIA

## के साथ.....

**WHATSAPP & TELEGRAM SE JUDNE KE LIYE ICONS PAR CLICK KARE**


# THANK YOU