

I.T.S. Dental College, Hospital and Research Centre

47, Knowledge Park-III, Greater Noida-201308, U.P (India)

2.5.4 The Institution provides opportunities to students for midcourse improvement of performance through specific interventions:

CIE ADMINISTRATION:

Initiatives are taken by the institution deals for proper functioning and administration of CIE. The institute prepares the academic calendar which is framed in accordance with the University calendar in order to ensure periodicity , smooth functioning & conductance of Internal assessment examinations. Components of the CIE include attendance, participation in regular class room activities, record maintenance and periodical completion of assignments in addition to the scores in the academic events.

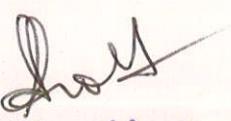
Frequency of Internal Examination and their conductance:

S. No.	Name of the Exam	Frequency of Exam	Conductance
1.	Internal Exam (Theory)	Biannual	After every 3 Months
2.	Internal Exam (Practical)	Biannual	After every 3 Months
3.	Sent-up Exam	Yearly	Prior University Exams

The notifications for the examinations are displayed well in advance on the E - notice board as well as they are uploaded on iCloud. The scheduling of internal examinations is intimated to all concerned students by the registrar with Cc to APO, Principal office, academic coordinators & Heads of the departments.

CIE Criteria for Under-graduate Students:

Under-graduate students are made familiar with all the Medical as well as Dental subjects followed by internal exams which occurs twice in an academic year (including theory and practical exams) followed by sent-up exam which is conducted after the conclusion of courses.



Dr. Sachit Anand Arora
Principal
I.T.S. Dental College,
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CIE Criteria for Post-graduate Students:

PG Students are exposed to periodical seminars, journal clubs, group discussion, case presentations followed by internal assessment exams. The frequency of the assessment is common for all the departments. Uniformity is maintained in the mode of evaluation of the presentation of seminars and journal clubs. Sent up exams are also conducted after the culmination of courses and before the commencement of the University Exam.

Timely & periodic assessment and feedback

Theory

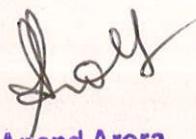
The results of the internal assessment tests is displayed within a period of 10 days after the conductance of the exam. The evaluation of the answer note books is done at the individual departments, by all the concerned faculties. The marks obtained by the students in the internal exams and the details of the attendance percentage are communicated to the students & the parents. In the preclinical departments, the comments on strengths and areas of improvement are mentioned in the answer note books at the end of each internal assessment. In the Clinical departments, an Evaluation sheet is distributed to the faculty, for entering the details of student roll numbers, names, marks obtained and feedback on strengths and areas of improvement. This serves as a record of the student performance and is used during the feedback sessions. Periodical feedback sessions are arranged in some departments to highlight on the performance of the students and give suggestions for improvement.

Viva – Voce:

Viva-voce is conducted along with the theory internal assessment based on which the feedback of the student's performance of evaluated.

Case Presentations in Clinical Postings

Daily case presentations by the students in the clinical postings also serve as a platform for assessment of the student and providing immediate feedback.

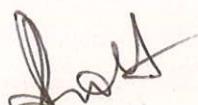


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List of Opportunities Provided for the Midcourse improvement of Slow Learners:

S. No.	Improvement Programs	Period
1.	Make-Up Assignments	After the internal assessment and prior to University Exams
2.	Remedial Classes	After the internal assessment and prior to University Exams
3.	Revision Classes	After the internal assessment and prior to University Exams

- **Personal Attention by faculties for Slow Learners:** A faculty In-charge is assigned to handle the slow learners for training in each internal assessment exam.
- **Make-Up Assignments:** The week prior to the internal assessment, make-up assignments are allotted to the slow learners in the topics related to the concerned internal assessment. A last date is assigned for the submission of the assignments. This is not publicized and the information are personally communicated to the students.
- **Remedial Classes** are conducted for the improvement of slow learners and takes immense measures in providing opportunities for mid-course improvement of the same. Remedial classes are one among the opportunities provided to the students in supporting their academic improvement.
- **Revision Classes** In addition to the remedial classes, revision classes are being regularly conducted by all the departments prior to the University examinations, after the completion of syllabus, with the purpose of reinforcement of concepts and with the intention of providing a supporting hand to the slow learners. Periodical revision exams are also conducted to improve the writing and presentation skills of the students.



Dr.Sachit Anand Arora

(Principal) **Dr. Sachit Anand Arora**
Principal
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Mentorship Programme

In addition to the above mentioned activities, regular mentor-mentee interaction also help in periodical assessment of the student and creates an opportunity to provide feedback to the students.

Postgraduates –

The Postgraduates are encouraged to present periodical Seminars/Journal Clubs which is later evaluated and a written feedback is given to them after each presentation in all the departments. To maintain uniformity, a common protocol is being followed in order to assess and maintain the quality of the presentations by all the departments.

Make-up assignments

Make-up assignments are one among the opportunities provided to the slow learner students in supporting their academic improvement.

Identification of Slow Learners (UG & PG):

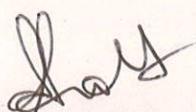
Identification of such strata of students is based on the aggregate of first three internal assessment scores (Students scoring less than 50% - are considered as slow learners)

In the Pre-clinical Departments (UG & PG):

Identification based on the aggregate of internal assessment scores in 3rd Semester (Students scoring less than 50% - considered as slow learners)

In the Clinical Departments (UG & PG):

Identification based on the aggregate of first three internal assessment scores (Students scoring less than 35% - considered as slow learners)



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B

Name Namisha Mehta Date 19-2-20 .
 Roll No. 31 Year 2019
 Subject Pharmacology Invigilator Signature

Q1. Classify ~~the~~ NSAIDs. Discuss the mechanism of action, uses & adverse effect in detail. 10m

Q2.

5N:

- (i) 2nd generation anti-histaminic drugs.
- (ii) Treatment for migraine.
- (iii) Techniques for local anaesthetics.
- (iv) combination of local anaesthetics & adrenaline.
- (v) classify local anaesthetics.

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✓ 4/11/20

19/2/20

CY

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A

Name ISHATRINK HAZARIKA Date 19/2/18
 Roll No. 26 Year 2018
 Subject PHARMA Invigilator Signature

(1)

Clarify NSAID ? discuss mechanism of action, uses , adverse effects in details!

10

(2)

- SN any four :-
- (a) 2nd generation anti histamine drugs
 - (b) treatment for migraine
 - (c) techniques after LA
 - (d) comment on combination of LA + adrenergic
 - (e) clarify local anaesthesia (Clarify + drug name)

18 1/2
30

19/2/20

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Name Namisha Mahato Date 23-1-20

Roll No. 39 Year 2018

Subject pharmacology Invigilator Signature

Q. 1. Describe the factors modifying drug action.

Q. 2. Short notes :

1) Sublingual Route

2) Kinetic of elimination

3) Bioavailability

4) Essential drug

5) Factors influencing drug absorption

5x4m

10 m

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Kiran Kapoor

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A

Name	ISHKARINA HAZARIKA	Date	23/1/2020
Roll No.	21	Year	2018
Subject	PHARMACOLOGY	Invigilator Signature	

Q1. describe factors modifying drug action?

Q2] Factors

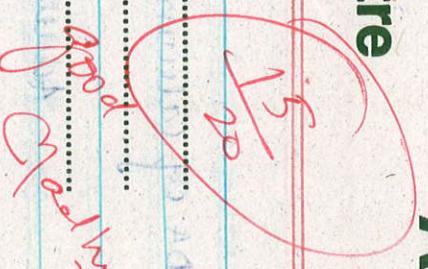
- (1) site limited result
- (2) kinetics of elimination
- (3) bioavailability
- (4) essential drugs
- (5) factors influencing drug absorption

14/1/20
3rd

28/1/20

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Name Swati Kanawala Date 24/02/2020
 Roll No. 85 Year 1st year (2019)
 Subject Biochemistry [Sem. Test] Invigilator Signature


(a)

- Calcium is the most abundant mineral in our body
- It is $1.2 - 1.5\text{kg}$ in our body.

RDA of calcium is $\sim 0.8 \text{ to } 1.0\text{g/dl}$.

Sources of calcium are →

- ① milk
- ② cheese
- ③ eggs
- ④ green vegetables
- ⑤ beans
- ⑥ cabbage

A

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Name Smiti Kanayia..... Date 8/02/2020

Roll No. 85..... Year 1st (2019)

Subject Biochemistry..... Invigilator Signature

11
20
Year
B. Tech
R. Better

(a)

(a) Describe sources, RDA, Biochemical functions and deficiency manifestations of Folic Acid.

Ans(a) Vitamin B₉ also known as folic acid is one of the important vitamins needed in our body.

Sources = Fish, meat, eggs, and milk, leafy vegetables, beans.

These are few such sources of vitamin B₉.

RDA = Adults = 100ug/day

Pregnancy = 400ug/day

A

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A

Name Sonal Chauhan Date 24/2/2020
 Roll No. 80 Year 2020 (1st year) *1. Good*
 Subject Biochemistry Invigilator Signature *V. Singh*

J

Biochemistry

Ans1.

CALCIUM

- a) RDA : - 300 - 500 mg / day for adult
1300 mg / day for pregnant & lactating females.
- b) Sources : - milk, cheese, curd and all other dairy products, beans, nuts
- c) Normal Serum : - 9-10 11 mg % or 9-11 mg/dL

Factors affecting calcium absorption are : -

- a) Calcitriol
- b) Parathyroid Hormones
- c) Acidic pH
- d) Vit D₃

*14/2
Key Madhu*

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Name SONAL CHAUHAN Date 8/2/2020

Roll No. 80 Year 2020

Subject Biochemistry Invigilator Signature

Signature *Sonali Chauhan*

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20
Excellence
Keed
Makki

Aust.

Folic Acid
 \rightarrow Pt. us a Vitamin B9 complex

\rightarrow Folic acid is water soluble vitamin
 \rightarrow Folic acid is composed of 3 components —
 a) Pteridine ring

b) PABA (p-amino butyric acid)

c) Glutamyl residue (1 to 7 residues)

Recommended daily allowance is 100 $\mu\text{g}/\text{day}$ in adult

sources: — good meat, fish, liver oil, egg yolk, milk
 (poor source —)

A

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Name KAJAL BHATIA Date 9-4-2020
Roll No. 74 Year 2020
Subject Biochemistry

Invigilator Signature

Sonal Chawla

132
14
120

Q.1
What is the RDA sources and Normal Serum calcium level ? what are the factors which Affects Absorption.

- ⇒ Calcium is most abundant molecule in body.
- RDA ⇒ Adult men and women - 800 mg / DAY
- ⇒ Pregnancy and Lactation - 1200 mg / day

⇒ Sources - milk, cheese, eggs, meat, cereals.

⇒ Food rich in calcium also rich in phosphorous.

calcium and phosphorous have reciprocal relationship.

Milk is rich source of calcium and phosphorous.

Blood plasma level - 9-12 mg/dL

⇒ Calcium and phosphorous help in formation of bones and teeth. Ca : P ratio is 1:1 ratio.

A

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A

Name K.A.JAL BHATTE

Date 8 - Feb - 20

Roll No. 74

Year 2020

Subject Biochemistry

Invigilator Signature

Carma Madhu

Rehman

(P) (Q) (R)

(Q) What is Avidin. How it works?

⇒ Avidin Act as Antagonist to It is boiling raw egg injury factor.

⇒ It binds with biotin and makes it unavailable for absorption.

⇒ Avidin is inactivated form ~~metabolite~~ with biotin on

Boiling eggs It destroy biotin and acts antagonist

(III) Which vitamin is required in Blood clotting?

⇒ Vit K Act as blood clotting factor.

Activate prothrombin into thrombin.

2 Prothrombin → Thrombin
(Active)

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Name Sheene Shariq Date 25/02/2020 145 = 15 / 20

Roll No. 61 Year BDS 1st year

Subject Biochemistry Invigilator Signature

Q1.

Trace elements:

- (1) copper
- (2) cobalt
- (3) chromium
- (4) iron.

(At the end)

Q2.

Ans

Biochemical functions:

Copper =

Cobalt =

Chromium =

Iron =

for the formation of haemoglobin, myoglobin, cytochromes.

Q2: Thyroid hormone synthesis.

- * Iodine helps in the synthesis of T_3 & T_4 hormones.
- * 80% Iodine is stored in thyroid gland in the form of iodo thyroglobulin.
- * Iodothyroglobulin contains thyroxine, triiodothyroxine, diiodotyrosine.

Name

Sherine Shariq

Roll No.

61

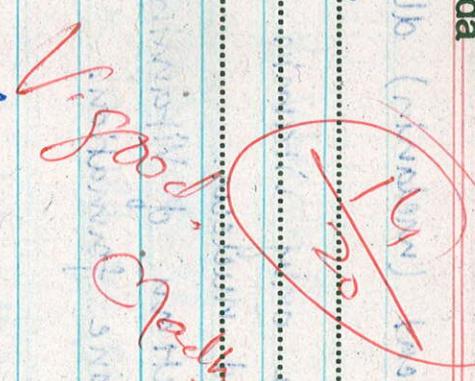
Year

10/02/2020

Subject

Biochemistry

Invigilator Signature



Q(6) Vitamin -D

Sources of Vitamin D: Liver, kidney, eggs, fatty fish, fish liver oil.

Milk is a poor source of Vitamin D.

RDA of Vitamin D: Adults: 200 IU/day

Old age

Children: 600 IU/day

Old age:

600 IU/day.

Normal requirement is 400 IU/day.

Pregnancy and lactation: 400 IU/day.

Requirement is 600 IU/day.

Synthesis of Vit-D.

During Vitamin D exists in two forms:
Cholecalciferol.

Ergocalciferol.

Cholecalciferol and ergocalciferol are structurally similar except for the fact that Cholecalciferol has an additional methyl group and double bond.

Synthesis:

During photosynthesis, 7-dehydrocholesterol is formed as an intermediate. In presence of light it is converted to cholecalciferol in skin (dennis and epidemis).

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Name Hemanth Singh Date 25/02/

Roll No. 2020 Year 2020

Subject Biochemistry Invigilator Signature *15 Good*

15 Good

Ans 1) Sources of iron - Milk products, meat, fish, eggs & cheese.

RDA of iron - Adults - 10mg/day

Females below 60 years and during lactation - 15mg/day.

Females during pregnancy - 30mg/day.

Biochemical functions - Iron helps in the synthesis of haemoglobin, myoglobin, cytochrome and peroxidases.

→ Cytochrome is involved in ETC and oxidative phosphorylation.

→ Peroxidase is a lysosomal enzyme involved in phago/phago-cytosis of bacteria.

→ Involved in formation of non-heme iron components like succinate dehydrogenase, iron-sulphur protein of flavoprotein.

Name Himanshu Singh Date 8/02/20
 Roll No. 30 Year 2020
 Subject Biochemistry Invigilator Signature 112
 Topic - Vitamins

~~Questions~~

Ans.) Vitamins are classified into two categories

↓

Fat soluble.

→ V^dA, D, E, K.

↓

Water soluble:

V^d. B complexes

→ B₁, Thiamine.

→ B₂ (Riboflavin)

→ B₃ (Niacin)

→ B₅ (Panthene acid)

→ B₆

→ Folic acid.

→ B₁₂.

Functions of vitamins-
 i) Maintain cellular growth.

ii) Maintain immunity of body.

iii) Maintains blood levels of minerals in our

blood.

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A

Name Dixita Kashyap

Roll No. 27

Date 25/02/2020
Year 2020

Subject Biochemistry

Invigilator Signature 17½

(18) P
(20)

Q1. Describe the sources, RDA, absorption, deficiency, functions
1 mark - 8

Q2. Q1 Homeostasis of blood calcium

- 1 Iodine deficiency
- 2 Copper deficiency disease
- 3 Fluoride deficiency
- 4 Zinc deficiency

Q2. Iodine RDA

⇒ RDA

- For adults : 10 mg / dl
- For females because 50 and during pregnancy : 15 mg / dl
- For females lactating 30 mg / dl

Sources

→ Animalia • Milk, cheese, meat, eggs

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Name Dixita Kashyap Date 8/02/2020
 Roll No. 8.2 Year 2020

Subject Biotechnology Invigilator Signature 14½ (15) 8.00
20

Q. 2. Vitamins are organic compound that required in small amounts in our body maintaining growth in our body.

Vitamins are divided into two types depending on their solubility in water

Water soluble vitamins are -
 → Vitamin A (Fat soluble)
 → Vitamin D (Calciferol)
 → Vitamin E (α - Tocopherol)
 → Vitamin K

water ~~s~~ soluble
 → Vit C
 → vitamin B

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A

Name ... Dakshita Gupta..... Date ... 35/2/2023

Roll No. 25 Year

Subject Biochemistry..... Invigilator Signature

15/2/2023

Good

Q 1 Describe the causes, RDA, absorption, biochemical function, deficiency and Manifestation of iron [8]

Q 2 Short Note

[Ans = 12)

- a Homeostasis of blood calcium
- b Iron Toxicity
- c Copper deficiency disease
- d Fluoride deficiency

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Name Dakshita Gupta Date 8/2/20
 Roll No. 25 Year
 Subject Biochemistry Invigilator Signature 121
 26

13
26
Pm

Answer

Ans. a) Sources -:

- meat
- papaya
- mango
- pepper
- Broccoli
- fish

RDA -:

Pregnancy and Lactation ⇒ 950 mg/day mg
 Men and women ⇒ 600 mg
 Children ⇒ 600 mg
 Infants ⇒ 350 mg

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A

Name Anushka Date 25/02/2020
Roll No. 14 Year 2020

Subject Biochemistry Invigilator Signature 16/02/2020

Abs. Iron

Sources:

Spinach, Pumpkin Animals: liver, spleen, meat

Plants: vegetables, dates, molasses

RDA

20 Good

- Adults → 10 mg/day
- In women below the age of 50 years, & in lactation → increases upto 15 mg/day
- In Pregnancy → up to 30 mg/day

Absorption

- Absorption of iron is in the form of ~~oxy~~ reduced form i.e. Fe^{2+}
- But in the food products, it is present in the form of

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A

Name ... Anushka..... Date .. 08/02/2020.....
Roll No. 14..... Year .. 2020.....
Subject ... Biochemistry try..... Invigilator Signature ..

14 (P) 20

Q1- Vitamins are generally classified on the basis of their solubility:

Fat

Soluble

- These type of vitamins aren't eliminated from our body.

Vitamin D

Vitamin E

Vitamin K

Non-B complex

B complex

↓

Vitamin C

- ★ B complex vitamins are further divided into:

Hæmopoietic

energy-generating

 ↓
 B₁₂ (Holic acid)

- leaving

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A

Name Anjali Date 25/2/2020
 Roll No. 9 Year 2019-2023
 Subject Biochemistry Invigilator Signature
 18 *P.M.*
 20 *J. G. O. D.*

(1) RDA :- (Non) Adult = 10 mg/day

Women below 50 years and Lactating = 15 mg/day
 Pregnant Woman = 30 mg/day

Sources - Animal sources - Liver, Spleen, Meat.

Plant sources - Dates, Molasses, Cereals, Vegetables, Spinach etc.

Absorption :- Iron is known as one way metabolism because it is absorbed and excreted from the upper small intestine.

⇒ I^t is better absorbed in Fe²⁺ (Ferrous form)

⇒ Found in sources in Fe³⁺ (Ferric form)

⇒ Iron is reduced to Fe²⁺ form by Vitamin C and Gastric Juice.

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Name Anjali Date 8/2/2020
 Roll No. 9 Year 2019 - 2023
 Subject Biochemistry Invigilator Signature 15/2/2020 *V. Hood*

Q1

Definition :- Vitamins are nutritional organic compounds that are required in diet in small amount for normal growth & development of the body.

Vitamins

fat soluble

water soluble

→ Vitamin - A
→ Vitamin - D
→ Vitamin - E
→ Vitamin - K

Non B complex

B complex

Energy Releasing

↓

Haemopoetic

↓

Cyanocobalamin
(B₁₂)

→ B₁ (Thymine)

→ B₂ (Riboflavin)

→ B₃ (Niacin)

→ B₅ (Pantothenic acid)

→ B₆ (Pe)

→ B₇ (PABA)

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Gurukul Sanskriti Public School

Name AMRITA KUMARI Date 25/02/2020
Roll No. D8 Year 2019 - 2023 (1st year)
Subject BIOCHEMISTRY Invigilator Signature *M.P. 009*

① RDA of IRON

Adults → 600 - 800 mg/day.

Pregnancy & Lactation → up to 1200 mg/day.

200 *Par*

Sources

Animals - Liver, spleen, kidney, etc.

Plants - Beetroot, cereals, Dates

Absorption

Iron is absorbed from the mucosal cells of small intestine.

- It is stored in ferritin form in liver.
- In food it is present in ferrous form (Fe^{2+})
- It is absorbed in oxidised form i.e. ferric form (Fe^{3+})

A

Name AMRITA KUMARI

Roll No. 08

Date 08/02/2020

Subject BIOCHEMISTRY

Year 2019 - 2023 (1st year)

Invigilator Signature 135 = $\frac{14+15}{20} = \frac{16}{20}$

(1)

Vitamins are classified on the basis of solubility in two parts

VITAMINS

fat soluble

- Vitamin A

Energy releasing

- Vit. D

E

- Vit. K

Non B-complex

B-complex

water soluble.

- Vit. B₁

Hematopoietic

- Folic acid

Vit. B₁₂

(Cyanocobalamin)

vit. B₂

vit. B₃

• Vit. B₅

• Vit. B₆

• Vit. B₇

• Biotin (B₇)