



GOVERNMENT OF GOA

DIRECTORATE OF TECHNICAL EDUCATION

DTE BUILDING, ALTO-PORVORIM, BARDEZ, GOA, 403521

COMMON PROSPECTUS

&

G2CET – 2009 INFORMATION
(WITH APPLICATION FORMS)

FOR ADMISSION

TO

DIRECT SECOND YEAR OF PROFESSIONAL

DEGREE COURSES

SESSION 2009-2010

IN

ENGINEERING (B.E.)
PHARMACY (B. PHARM. Sc.)

PRICE: - Rs. 300/-

SCHEDULE OF G2CET

1	Announcement of dates of G2CET	31-01-2009
2	Uploading on website	27-03-2009
3	Start of sale of prospectus	06-04-2009
4	Start of receiving applications forms for G2CET & Admissions	20-04-2009
5	Last date for sale of Forms	24-04-2009
6	Last date for receiving applications	
7	Last date for issuing Admit Card	
8	Dates of G2CET	15-05-2009
9	Expected date of result of G2CET	31-05-2009

ADMISSION COMMITTEE

(FOR ADMISSION TO PROFESSIONAL DEGREE COURSES IN GOA)

Admission Committee constituted for admissions to First Year of Professional Degree Courses shall also carry out admissions to the Second Year of Professional Degree Courses in Engineering & Pharmacy.

Address for communication:

Chairman, Admission Committee
Directorate of Technical Education
Alto-Porvorim, Bardez, Goa. 403 521
Phone (0832) 2416370
Website www.dtegoa.gov.in

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SCHEDULE OF ADMISSION PROCESS

WORKING DAYS: MONDAY TO FRIDAY (except public holidays)

WORKING TIME: 10:00 Hrs. TO 13:00 Hrs. and 14:00 TO 17:00 Hrs.

ALL DATES PERTAIN TO YEAR 2009

No.	EVENT	DATE & TIME
1.	Sale of Prospectus with G2CET-09 and Admission Forms	06-04-09(Mon) to 24-04-09(Fri)
2.	Start of receiving of application for G2CET-09 and Admission forms at DTE	20-04-09(Mon)
3.	Last date for receiving G2CET-09 and Admission forms	24-04-09(Fri)
4.	Last date to collect Admit Card from Admission Centre	24-04-09(Fri)
5.	Dates of G2CET-09	15-05-09 (Fri)
6.	Result of G2CET-09 (Expected) and Merit List at Admission Centre	31-05-09(Sun)
7.	Dates for submission of documents	15-07-09(Wed)
8.	First Round of Admission	20-07-09(Mon)
9.	Second Round of Admission	27-07-09(Mon)
10.	Extra Round of Admission due to unexpected circumstances (if required)	As notified in news papers

Note: -1. The Directorate of Technical Education reserves the right to modify the schedule of admission depending upon the exigency of the situations.

2. The lists shall be displayed at 5.00 pm on the designated dates.

3. The admission process will start at 10.00 a.m.

4. Admissions shall be done in the following order:

- a) B.Pharm.Sc. admissions for Diploma holders in Pharmacy.
- b) B.E. admissions for B.Sc. Graduates.
- c) B.E. admissions for eligible Diploma holders in Engineering in the following order of branches: Civil, Mechanical and Comp /Ele/ETC/ /InfoTech.

1. INTRODUCTION

1.1 PROLOGUE

The Directorate of Technical Education, Government of Goa, has prepared this prospectus for admissions to the Second Year of Professional Degree Courses in Engineering & Pharmacy in the State of Goa. The information given herein pertains to Common Entrance Test and admission procedure applicable to the Government, Government-aided and un-aided Colleges in Goa offering Bachelor's Degree in the fields of Engineering and Pharmacy.

The Directorate of Technical Education is also authorised to process admissions for following seats, for which separate prospectus are issued.

1. Admissions to First Year of Professional Degree courses.
2. Diploma Programmes in the Polytechnics in the State of Goa.
3. Nomination to Govt. of India seats in Engineering & Technology courses in other States.

1.2 DEFINITIONS

The terms used in this document shall be interpreted as follows unless specifically mentioned otherwise:

Admission Centre	Office/place designated for processing admission i.e. Directorate of Technical Education, Alto-Porvorim, Goa
Candidate	Applicant who desires to seek admission through this prospectus
Colleges/Institutions	Professional colleges listed in this prospectus
Competent Authority	Government of Goa, Secretary (Tech. Edn), and Director of Technical Education
Director	Director of Technical Education, Government of Goa
Free Seats	Seats in Government colleges
Government	Government of Goa
Govt. Colleges	GEC, GCP
Sanctioned Intake	Intake capacity sanctioned by AICTE and Govt.
SF Seat	Self financed seat in un-aided colleges
Un-aided Colleges	Colleges not receiving grants from the Government
University	Goa University

1.3 ABBREVIATIONS

AICTE	All India Council of Technical Education, New Delhi
APV	Agnel Polytechnic, Verna
B. Pharm.Sc.	Bachelor in Pharmaceutical Sciences
B.Sc	Bachelor in Science
CET	Common Entrance Test
COMP	Computer Engineering
CVL	Civil Engineering
DTE	Directorate of Technical Education
ELE	Electrical & Electronics
ETC	Electronics & Telecommunication Engineering
EWS	Economically Weaker Section, annual income less than Rs. 2,00,000/-
G2CET	Goa Common Entrance Test for Direct Second Year
GCP	Goa College of Pharmacy, Panaji
GEC	Goa Engineering College, Farmagudi
GEN	General Category
Govt.	Government (of Goa)
GPB	Government Polytechnic, Bicholim
GPC	Government Polytechnic, Curchorem
GPP	Government Polytechnic, Panaji
GU	Goa University
HSSC	Higher Secondary School Certificate
ISBT	Institute of Shipbuilding Technology
IT	Information Technology
MCL	Mechanical Engineering
OBC	Other Backward Class, Reserved Category for
PCC	Padre Conceicao College of Engineering, Verna
PES	P.E.S. College of Pharmacy Education and Research
RIT	Rayeshwar Institute of Engineering & Information Technology, Shiroda
SC	Schedule Castes, Reserved Category for
SCI	Supreme Court of India
SSC	Secondary School Certificate
ST	Scheduled Tribes, Reserved Category for

INSTITUTIONAL DETAILS

<u>S.N</u>	<u>College</u>	<u>Address</u>	<u>Name of the Dean/Principal</u>	<u>Phone No.</u>	<u>Fax No.</u>	<u>Website</u>	<u>E-mail ID</u>
1	Goa College of Engineering	Goa College of Engineering Farmagudi Ponda Goa 403401	Dr. K.M. Gupt	0832-2336301	2336401 2335021	www.gec.ac.in	ppl@gec.ac.in
2	Padre Conceicao College of Engineering	Agnel Technical Education Complex Verna, Goa 403722	Dr. Luis C. Mesquita	0832-2791266 /67	2791268	www.pccegoa.org	agnelgoa@sanchanet.in
3	Shree Rayeshwar Inst.of Engg. & Info. Tech.	Shiv-Shail Karai Shiroda Goa 403103	Dr. N. Somayaji	0832-2307001, 0832-2307032	2307001	www.ritgoa.com	principal@ritgoa.com
4	Goa College of Pharmacy	18 th June Road, Panaji Goa 403001	Shri M.G. Pai	0832-2226882/ 83	0832-2226883	www.goagovt.nic.in/ gcp	gocopharmacy@dataone.in
5	P.E. S.'s College of Pharmacy Education & Research	Post Box no. 73, Farmagudi Ponda Goa 403401	Dr. R.V. Gaitonde	0832-2980501/ 2335020	0832-2335020	www.pespharma.edu.in	principal@pespharma.edu.in

2. COURSES, INSTITUTIONS AND SEATS

2.1 COURSES OF STUDY AND INTAKE IN ENGINEERING

Sr. No.	Name of Discipline	College	No. of Seats
1	Civil Engineering	GEC	4
2	Mechanical Engineering	GEC	4
		PCC	5+1*
3	Electrical & Electronics Engineering	GEC	6
4	Electronics & Telecommunication	GEC	6
		PCC	4+2*
		RIT	4+2*
5	Computer Engineering	GEC	6
		PCC	4+2*
		RIT	4+2*
6	Information Technology	GEC	6
		PCC	5+1*
		RIT	5+1*
TOTAL			74

* Management Quota seats at PCC and RIT.

2.1.1 DISTRIBUTION OF SEATS IN ENGINEERING

As per guidelines of AICTE and Goa University, following table provides details on allotment of seats to various Degree Courses in Engineering to which Diploma & B.Sc Degree holders are eligible from 2009.

A. For Diploma holders in Engineering:

Eligibility to Degree in		From Diploma	Seat Allotment
Branch	Total Seats Available	Branch	
CIVIL ENGG.	4	Civil Engg (GPP, GPB), Construction Engineering, Civil Engg (CT)(APV), Structural Fabrication and Erection Engineering (GPP)	4
MECH. ENGG.	9+1**	Mechanical (GPB, GPC, ISBT, GPC, RAC, GPP), Automobile (APV), Production (APV), Shipbuilding (ISBT), Fabrication (GPP), Tool & Die Making (TR&TC)*	9 (4-GEC, 5- PCC)
ELECTRICAL & ELECTRONICS, COMPUTER, ELECTRONICS & TELECOMMUNICATION, INFORMATION TECHNOLOGY	40 + 10**	Computer Engg (APV), Electronics Engg/Industrial Electronics [#] (GPP), Electronics Engg (APV), Electronics & Comm (ISBT), Electronics & Comm (GPB), Electronics & Comm (APV), Instrumentation***, Instrumentation & Control (GPP), Medical Electronic (APV)***, Electronics & Telecommunication [#] , Electrical Engineering (GPP).	40

*Students passing Diploma in Tool & Die Making from year 2004 onwards are only eligible (subject to eligibility provisions of Goa University). **Management quota at PCC and RIT

[#] Eligible for Degree in Electronics & Telecommunications only.

***Not eligible for Degree in Electrical & Electronics.

B. For B. Sc. Degree holders:(Subject to eligibility provisions to be notified by Goa University).

Sr. No.	Name of Discipline	College	No. of Seats
1	Electrical & Electronics Engineering	GEC	1
2	Electronics & Telecommunication	GEC	1
		PCC	1
		RIT	1
3	Computer Engineering	GEC	1
		PCC	1
		RIT	1
4	Information Technology	GEC	1
		PCC	1
		RIT	1
		TOTAL	10

NOTE

1. 6 seats in B.E. Computer Engineering as they come in order of merit are reserved for students with Diploma in Computer Engineering.
2. All seats remaining vacant from previous years in B.E. Computer Engineering will be offered to candidates with Diploma in Computer Engineering first and then to other eligible Diploma candidates.
3. In case seats allotted to B.Sc Degree holders remain vacant, these shall be offered to eligible Diploma holders.

2.2 COURSES OF STUDY AND INTAKE IN PHARMACY

Sr. No.	Name of Discipline	College	No. of Seats
1	B. Pharm.Sc.	Goa College of Pharmacy	6
2	B. Pharm.Sc.	P.E.S. College of Pharmacy Education and Research	4+2*

* Management Quota at PES

In addition to the above seats, any vacant seats from the previous year's admission, within the sanctioned intake shall be available to eligible Diploma holders. Details regarding the same will be informed at the time of admission.

3. RULES FOR GOA COMMON ENTRANCE TEST (G2CET) - 2009

- 3.01 The Directorate of Technical Education, Government of Goa shall conduct Goa 2nd Year Common Entrance Test 2009 (G2CET-09) for admissions to Direct Second Year of Degree courses in Engineering & Pharmacy in the State of Goa, for the academic year 2009-10.
- 3.02 This prospectus shall be available at notified places, on payment of Rs. 300/- in cash.
- 3.03 Outstation candidates can obtain the prospectus containing application form by sending request to “Directorate of Technical Education, Panaji, Goa ”along with a DD for Rs. 350/- in favour of “Director of Technical Education, Panaji, Goa”
- 3.04 All candidates desirous of seeking admissions to Second Year Degree courses in Engineering and Pharmacy in the colleges within the State of Goa, during the academic session 2009-10., **must appear and have a valid score in G2CET-09**, and should fulfil other eligibility criteria for admission as given in this prospectus. Merit list for these courses shall be based only on G2CET-09 score.
- 3.05 Candidates who have already passed/have appeared, or are appearing at Diploma/Degree or equivalent examination, before the start of the academic session, are eligible to appear at G2CET-09.
- 3.06 This Prospectus includes following documents/information:
- a) Application Form for G2CET-09.
 - b) Admission to all the courses mentioned in this prospectus, & Syllabus for G2CET-09 in all subjects, (Annexure II)
- 3.07 The applicant should submit the Application Form for G2CET-09 & Admission in person at the Admission Centre, along with the test fee of Rs.300/- by demand draft payable to “Director of Technical Education”, at Panaji and four identical photographs as indicated, and obtain the Photo-Admit Card, from the Admission Committee on the same day.
- 3.08 Incomplete Application Forms shall not be accepted. The Application Form for G2CET-09 & Admission shall not be accepted by post or through messenger. Forms shall not be accepted after the last date mentioned in the prospectus for the purpose.
- 3.09 For important dates in the schedule of G2CET-09 & Admission refer inner side of front cover of this prospectus.
- 3.10 G2CET-09 shall be based on the syllabus given at Annexure II of this prospectus.
- 3.11 Candidates must produce ‘Photo Admit Cards’ for appearing in the test at the designated centre. Candidates shall be seated in the examination hall at least 15 minutes before the scheduled start of the paper.
-

3.12 The Goa 2nd Year. Common Entrance Test–2009 shall be held as per following schedule:

	Subject	Code	Date	Time	Duration
1	Engineering	EN	15.05.09	10.00 to 12.30 hrs	150 minutes
2	Pharmacy	PH	15.05.09	10.00 to 12.30 hrs	150 minutes

3.13 The Goa 2nd Year Common Entrance Test–2009 shall be held at following centres:

S.N.	Centre	Code	Address
1	Panaji	20	Don Bosco Higher Secondary School, Panaji
2	Margao	21	Shri Damodar College of Commerce, Margao

Candidates appearing in the subject “Pharmacy” shall appear at **Panaji** Centre only.

3.14 No candidate shall be allowed to enter the examination hall after 30 minutes from the start of the Test and no candidate shall be permitted to leave the examination hall until the scheduled duration of the Test is completed and all the answer sheets collected by the invigilators.

3.15 Mobile phones, pagers, calculators and other electronic gadgets are not allowed inside the Examination Hall.

3.16 Any use of unfair means and acts of indiscipline on part of the candidate shall be severely punished.

3.17 The paper will consist of 100 (One Hundred) questions to be answered in two & half hours. (One hundred & fifty minutes).

3.18 Each question shall have four choices for answers, out of which only one shall be correct

3.19 Correct answer shall carry one mark for each question. There will be no negative marking. Wrong/multiple answers shall be awarded zero marks.

3.20 An Objective Response Sheet (ORS), sample format of which is given at Annexure II of this prospectus, may be used as answer sheet. Candidates may go through the instructions printed on the sample ORS and get familiar with its usage.

3.21 Since candidates are permitted to retain copy of the ORS, and ORS are machine evaluated electronically with extreme care, and scrutinized, there is no provision for verification/revaluation. No correspondence in this regard will be entertained.

3.22 The expected date of declaration of results of G2CET-2009 is 31-05-2009 and any change shall be notified in designated newspapers. The results will also be available on website. No individual score card shall be issued.

3.23 In case there is any change in schedule of operations of G2CET-09, the same shall be notified in the designated newspapers. Telephone enquires should be avoided, as the

candidates themselves will be responsible if the information received by them on telephone proves to be incorrect.

4. RULES OF ADMISSION

All notifications related to admission shall be notified in five news papers of the State of Goa, viz Navhind Times, Herald (English), Gomantak, Tarun Bharat (Marathi) and Sunaparant (Konkani). Director of Technical Education is empowered to release notifications related to admissions in the newspapers.

A. For Candidates

4.01 **All applicants seeking admission must comply with provisions of this prospectus.**

4.02 The Application Form for admission is included in the Common Prospectus. This form shall be accepted at the Admission Centre, located in the premises of Directorate of Technical Education, Porvorim, Goa, as per schedule given.

4.03 Mere submission of Application Form according to this prospectus does not confer any right/claim to the applicant, for admission to any course in professional colleges.

4.04 The Application Form should be filled in accordance with the rules given in this chapter, by the applicant in his/her own handwriting and duly signed by him/her.

4.05 Name of the candidate shall be entered as it appears on the SSC Marksheet/Passing Certificate.

4.06 The applicant is advised to personally submit the Application Form complete in all respects, before the due date, at the Admission Centre and obtain the Acknowledgement Card, with registration number, duly signed as proof of submission of the form.

4.07 Incomplete applications shall not be accepted. Incomplete applications however may be accepted, only on the last date of submission of forms, for genuine reasons subject to condition that the Acknowledgement Card shall be issued only after complying with deficiencies within time limit specified by the Admission Committee. The decision of the Admission Committee shall be final, in this regard.

4.08 Applications received after expiry of the last date shall be summarily rejected. The Admission Committee shall not be responsible for loss in transit or postal delay in receiving the application. Any correspondence in this regard shall not be entertained. Any request for granting extension of time for submission of form or admission shall not be entertained.

4.09 The eligibility will be finalised as per the provisions of this prospectus irrespective of whether or not verification of marks has been completed by the examining authority.

4.10 Only those applicants who have applied in response to prospectus of 2009-2010 and submitted their applications, duly completed in all respects, at the Admission Centre, on

or before the prescribed date and time (refer to Schedule of Admission process), and have valid score in G2CET-2009 and satisfy the eligibility criteria laid down, will be considered for admission to professional courses.

4.11 Separate merit lists shall be prepared and displayed as under:

- Engineering courses for all eligible B.Sc. Degree holders.
- Engineering courses (Branch wise) for eligible Diploma holders in Engineering.
- Pharmacy for all eligible candidates.

4.12 All seats will be considered only as General seats. No seats shall be reserved for any category.

4.13 The Provisional merit lists of courses will be displayed on the Notice Board at the Admission Centre as per the time and date mentioned in the Schedule of Admission.

4.14 All applicants should verify the correctness of their marks & merit position in the provisional merit list. In case of any detected errors, they should immediately (within 24 hours) inform the Chairman, Admission Committee, in writing, failing which, the Admission Committee shall not be held responsible for the consequences of such errors.

4.15 The merit lists will be displayed at the Admission Centre as per the schedule given in the prospectus. Applicants shall ensure that they fulfil all the eligibility criteria specified in this prospectus, failing which they will not be granted Admission.

All applicants are advised to submit required documents and confirm/verify their eligibility as per the provisions of this prospectus, on or before prescribed date.

4.16 Every eligible candidate who is desirous of seeking admission shall remain present personally at the admission rounds as per specified schedule along with Acknowledgement Card, documents in original & fees. Candidates reporting for admission rounds without Acknowledgement Card shall not be entertained.

4.17 Applicants present/ reporting for admission will be given an opportunity to select a seat of choice from the seats available at the point of his/her order of merit (merit number). The admission shall be treated to have been completed only after deposit of original documents and payment of fees.

4.18 If the applicant fails to turn up for admission rounds as specified in the admission schedule, or does not accept admission offered, he/she shall forfeit the claim of seat as per his/her turn in merit position for that round, and the seat will be offered to the next candidate in the merit list.

4.19 In case the applicant reports late for admission (during any round of admission), his/her candidature shall be considered only for the seats available, at that point of time. The

- list of applicants already admitted shall remain unchanged, and under no circumstances, such candidate shall replace the candidates already admitted.
- 4.20 List of provisionally admitted candidates indicating the branch, institution and marks will be displayed at the Admission Centre, Porvorim, only at the end of second round.
- 4.21 Seats remaining vacant, for whatsoever reasons, shall be filled up in the subsequent round, by following the same procedure as in the first round, and as per the given schedule. Candidates shall not approach for admissions in between the rounds.
- 4.22 An applicant listed in the merit list shall be eligible for all rounds of admission, irrespective of whether he/she has attended / availed admission in the earlier rounds or not. **If the candidate has taken admission and cancelled the same for whatsoever reasons, he/she shall forfeit his/her claim for that allotted seat (i.e course and institution) in same/further rounds of admission.**
- 4.23 The fees for admission to specific institutions shall be accepted only in the form of Demand Draft, as mentioned in the Chapter on fees. Candidate must write his/her name, registration number, college and course to which admitted, on the back of demand draft, before submitting the same to the institution.
- 4.24 All the applicants selected for admission to Engineering and Pharmacy courses shall be given provisional admission, subject to being found medically fit. The admission of the applicant stands cancelled in case he/she is found medically unfit.
- 4.25 In case the candidate is admitted to any course, he/she will be required to submit the Leaving Certificate or Transfer Certificate, as the case may be, within 15 days from the date of admission, to the Head of the Institution, failing which the admission may be cancelled. Applicants, who have passed the qualifying examination from Universities/ Boards other than the Goa University/Goa Board of Technical Education shall be required to produce Eligibility Certificate from Registrar, Goa University, within 15 days of securing the admissions, to the Head of the institution, failing which the admission shall not be confirmed.
- 4.26 Change in the applicant's contact details should be intimated to the Admission Centre.
- 4.27 Applications sent by post should only be addressed to the '**Chairman**', Admission Committee, Directorate of Technical Education, Porvorim, Goa 403521". Admission Committee shall not be responsible for postal delay or for applications sent to the Director of Technical Education. Last date shall also be applicable to the applications received by post.
- 4.28 The decision of the Admission Committee & Director of Technical Education will be final in interpreting the rules of admission.

B. For Institutes

- 4.29 All the institutes shall depute at least one faculty member as a member of the Admission Committee, who shall also act as the link officer between DTE, Admission Committee, and the institute. This member shall be responsible for application forms, original documents of the applicants, and fees collected for that institute.
- 4.30 All Heads of the institutes covered under centralised admission are hereby empowered to admit candidates against the seats remaining vacant at their end, in any branch, after the last round of admission with prior approval of this Directorate. The admissions shall be given strictly in order of merit. The institutes shall follow the merit list prepared by the Admission Committee. However, if only up to five seats are vacant, and more than 5 candidates are available in the merit list, they shall be called by recorded communication in ratio of 1:3 (i.e. 3 candidates per vacant seat).
- 4.31 In case the Merit List of Centralised Admission is exhausted, fresh Merit list of new applicants shall be prepared on the same basis by the institute. All the admissions shall be done after public notification in the specified newspapers. The admission shall be granted in presence of all the candidates as done by Admission Committee.
- 4.32 The institutions shall not change any of the provisions of the prospectus including eligibility, fees or rules for refund, while granting above admissions.
- 4.33 The Head of the institution (and the Management in case of non Government institutes) shall be solely responsible for the settlement of any dispute, court case, etc. arising out of such admissions.
- 4.34 The institutes shall not admit Foreign Nationals and Persons of Indian Origin without permission of the Ministry of External Affairs, Govt. of India. Such candidates should as far as possible be admitted on nomination by ICCR (Indian Council for Cultural Relations) or GOI.
- 4.35 The institutions shall not encash/deposit the bank drafts of fees until end of last round of admission, to facilitate immediate refund of fee during change of course/institute.

5. ELIGIBILITY

5.1. ENGINEERING

For being eligible to seek admission to Engineering Degree programmes at Second Year/Third Semester Level included in this prospectus, an applicant must fulfil the following criteria:

1. The candidate must be an Indian National.
2. The candidate must have passed from Polytechnics or colleges in the State of Goa, or as a Goa State nominee, under GOI seats or reciprocal arrangement, if passed diploma from other States.
3. (i) The candidate must have passed the Diploma in Engineering in the relevant branch with minimum of **60%** (45%* in case of SC/ST/OBC) aggregate marks at the Diploma course examination conducted by the Goa Board of Technical Education or an equivalent examination, conducted by a recognised Board of Technical Education in India or abroad.

Note:- In case of candidates passing Diploma course examination conducted by recognized Boards of Technical Education, other than Goa Board of Technical Education(BTE), aggregate marks at Diploma course examination would be computed on the same basis as computed by BTE, Goa. Presently, in case of semester pattern, aggregate marks obtained at final two semesters are considered for computing aggregate Diploma marks by BTE, Goa.

OR

- (ii) Candidates must have passed Bachelor of Science Degree with Mathematics as a subject and with minimum of 60% marks in the aggregate (Final year) from Goa University.
4. Seats remaining vacant, if any, after admitting all the candidates from the merit list of students passing Diploma/Degree from the State of Goa shall be available to the candidates who have passed Diploma/Degree from other States, in order of merit, provided that they fulfil other eligibility criteria as given in this prospectus, including G2CET.

5.2. PHARMACY

1. The candidate must be an Indian National.
2. The candidate must have passed the Diploma in Pharmacy with minimum **60%** (45%* in case of SC/ST/OBC) aggregate marks from Board of Technical Education, Goa, including specified practical training.
3. The candidate must have passed the Diploma course from Goa College of Pharmacy, Panaji, Goa.
4. The D. Pharm. Students admitted under above provision to Second Year B. Pharm Science course will have to appear and pass in subjects, as specified by Goa University.
5. The candidate who has passed Diploma from other States shall be eligible only for the seats remaining vacant after admitting all the candidates from Goa, only if he/she fulfils other eligibility criteria, including G2CET.

Changes in Eligibility

In case AICTE, Pharmacy Council, any Court or any other Competent Authority changes the eligibility conditions and makes it specifically applicable to the proceedings of this year, the provisions of the prospectus may be modified accordingly, subject to approval of Government.

* Subject to clarification from Goa University. Refer Annexure I for SC/ST/OBC definition & proforma of certificates

6. CERTIFICATES AND TESTIMONIALS

Self attested photocopies of the following documents should be attached to the Application Form, failing which the application form shall not be accepted. The documents should be attached in the following order:

1. Certificate of date of Birth from Registrar of Births & Deaths, or in its absence, certificate of passing SSC or its equivalent examination from the Board.
2. Diploma/Degree certificate from the Institute/Board/University attended.
3. Mark sheet/s covering all the courses studied for the Diploma/Degree programme.
4. Leaving certificate from Institute attended last, signed by the Principal of the Institute.
5. SSC/HSSC certificate and mark sheets.
6. Four recent, identical passport size photographs, one of which should be affixed on the application form, the other one to be affixed on acknowledgement cum registration card duly filled, and third and fourth one to be affixed on the Admit card. (Attestation of photograph is not required).
7. Income certificate in prescribed proforma for all those claiming concession in tuition fees.
8. SC/ST/OBC certificate, wherever applicable.

Note: In case the above documents are not submitted together with the application form, the same must be produced on or before prescribed date.

Candidates must submit required documents in original, at the time of admission rounds.

7. GUIDELINES FOR MERIT LIST

Admission will be made based on Merit List of the eligible candidates (as per the provisions of the prospectus) prepared in the descending order of the qualifying G2CET-09 marks, as per following guidelines.

A) Engineering Courses (For Diploma holders):

- a) Merit list shall be based on aggregate of marks obtained at G2CET-09.
- b) In case above marks of two or more applicants are equal, applicant with higher aggregate percentage marks at Diploma level examination, as awarded by the Board of Technical Education, shall be placed higher in the merit list. Further provided, that when an applicant has taken more time than minimum prescribed period for passing particular diploma course, a deduction of 2% per additional term taken shall be made, from percentage aggregate of diploma marks, for purpose of determining merit, (For example, applicant with 60% aggregate marks at Diploma, taking additional 2 terms to pass his/her Diploma, shall qualify for admission, but for preparation of merit list, his/her percentage of marks shall be 56%).
- c) If two or more applicants secure equal marks in above, then applicant with higher aggregate percentage marks at SSC shall be placed higher in the merit list.
- d) If all the above are also equal, then applicant with earlier date of birth, will be placed higher in the merit list.

B) Engineering Courses (for B.Sc. graduates)

- a) Merit list shall be based on aggregate G2CET-09 marks.
- b) In case above marks of two or more applicants are equal, applicant with higher aggregate percentage marks at B.Sc shall be placed higher in the merit list
- c) In case B.Sc aggregate percentage marks of two or more applicants are equal, applicant with higher aggregate percentage marks at HSSC, shall be placed higher in the merit list.
- d) If all the above are also equal, then applicant with earlier date of birth, will be placed higher in the merit list.

C) For Pharmacy Courses

- a) Merit list shall be based on aggregate G2CET-09 marks.
- b) In case above marks of two or more applicants are equal, applicant with higher aggregate percentage marks at Diploma level (IInd Year) exam shall be placed higher in the merit list
- c) In case Diploma level (IInd Year) aggregate percentage marks of two or more applicants are equal, applicant with higher aggregate percentage of marks at HSSC examination shall be placed higher in the merit list.
- d) If all the above are also equal, then applicant with earlier date of birth, will be placed higher in the merit list.

8. DETAILS OF FEES & PAYMENT

(All fees are subject to revision, as approved by the Government)

8.1 FEES FOR COURSES

(Indian Rupees)

A. Government Institutions

Disciplines	Engineering	Pharmacy
1. Admission Fee (one time only)	600	600
2. Tuition Fee (Per Semester)	7000	7000
3. Institutional Fee	1,050	1,150
4. Development Fee (Per Semester)	1,000	1,000
Total	9,650	9,750

B. Self financed Institutions.

1. Padre Conceicao College of Engineering, Verna, Tuition & Development Fees(in Rupees)

Fees	Second Year	Third Year	Fourth Year
Tuition fees (Per semester)	25,000	27, 000	29,000
Development fees (Per semester)	5,000	5,000	5,000
Institutional fees	1050	1050	1050

2. Shree Rayeshwar Institute of Engineering and Information Technology, Shiroda – Goa

Tuition & Development Fees (in Rupees)

Fees	Second Year	Third Year	Fourth Year
Tuition fees (Per semester)	19,000	20,000	21,000
Development fees (Per semester)	5,000	5,000	5,000
Institutional fees	1050	1050	1050

3. Ponda Education Society's College of Pharmacy Education & Research, Ponda – Goa

Tuition & Development Fees (in Rupees)

Fees	Second Year	Third Year	Fourth Year
Tuition fees (Per semester)	22500	25000	27500
Development fees (Per semester)	5000	5000	5000
Institutional fees	1150	1150	1150

DETAILS OF INSTITUTIONAL FEES

Heads of Institutional Fees	Engineering	Pharmacy
1. Gymkhana Fees (Per Term)	100	100
2. Annual Social Gathering (Yearly)	100	100
3. Student Aid Fund (Yearly)	50	50
4. Magazine Fee (Yearly)	100	100
5. Dissection charges (One time)	---	----
6. Identity Card (One Time)	50	50
7. Microscope charges (One time)	---	100
8. Student Association (One time)	----	----
9. Library Deposit (Refundable)	250	250
10. Caution money (Refundable)	400	400
Total Institutional Fees	1050	1150

NOTE: All the seats in PCC, RIT and PES are self -financing seats for the purpose of fees.

HOSTEL FEES (Government institutions)

To be paid per term at the Institution towards hostel accommodation, if provided.

Heads of Hostel Fees (in Rs)	Engineering/ Pharmacy
1. Hostel Rent (Per Term)	600
2. Hostel Deposit (Refundable)	500
3. Hostel Maintenance Fee (Per Term)	400
Total Hostel Fees	1500

8.2 CONCESSIONS IN TUITION FEES**FOR SC, ST, OBC, & EWS IN GOVERNMENT COLLEGES ONLY**

Govt. of Goa offers concession in the **Tuition Fee** (only) to the students pursuing professional education, having continuous residence in Goa for 10 yrs. or more, preceding the date of application, and admitted in the Government Institutions as follows:

1. Candidates shall be eligible for concession of 50% in tuition fees for a minimum period of course of study, provided the income of both the parents from all the sources does not exceed Rs. 2,00,000/- per annum.
2. There shall be no concession in unaided colleges for any category, or for the students of States other than State of Goa.

MODE OF AVAILING CONCESSION

To avail concession as above, an applicant shall follow procedure as under:

1. All applicants shall have to produce an income certificate in original as per proforma in Annexure I.
2. Applicant who is unable to produce the required income certificate shall pay the full fee at the time of admission. He may submit the same within 60 days from the date of admission and claim refund/ adjustment from the institute.

8.3 MODES OF PAYMENT OF FEES

Following fees are payable through separate bank drafts of any Nationalised or Scheduled bank to the authority mentioned against the payment.

ADMISSION FEES

Common to all: Rs. 600/- In favour of "Director of Technical Education" payable at Panaji

A. FEES AT FULL RATE (Tuition, Institutional & Development)

Course	Institute	Amount	Bank draft payable to
1. B.E.	GEC	9,050	Principal, Goa Engineering College, at Ponda
2. B.E. Self Finance	PCC	31,050	Director, PCCE, Verna at Margao
	RIT	25,050	Principal, R. Institute of E. & I. T. at Ponda
3. Pharmacy	GCP	9,150	Principal, Goa College of Pharmacy, at Panaji
4. Pharmacy Self Finance	PES	28,650	P.E.S.'s College of Pharmacy Education & Research, Ponda

B. FEES AT CONCESSIONAL RATES (for Govt. Institutes only)

Course	Institute	@ 50%	Bank draft payable to
Engineering	GEC	5,550	Principal, Goa Engg College, Farmagudi
Pharmacy	GCP	5,650	Principal, Goa College of Pharmacy, Panaji

In addition to the above fees of Rs.50.00 per term, will be payable at the beginning of each term, for facilities of locker (where available).

8.4 CANCELLATION OF ADMISSION & REFUND OF FEES

All institutes and admissions covered in this prospectus are bound by these rules for the refund of fees. Institutions are not permitted to impose any other additional clause. Directorate shall not entertain any complaint by the students, for refund from any institution or course not included in this prospectus, when they cancel their admission from other institution to join courses included in the purview of this prospectus.

8.4.1 Cancellation of Admission by Admitting Authority or Heads of the Institute.

1. An applicant who has paid the admission fees at the Admission Centre but fails to report at the college as per the date given on the Admission card shall forfeit the claim for admission and his/her entire admission fee paid shall be forfeited.
2. Any information/certificate submitted by the applicant in connection with his/her admission, if found to be incorrect later on at any time, his/her admission shall be cancelled forthwith and the entire fees shall be forfeited.
3. Admission offered to the applicants shall be cancelled, if at a later stage, the Goa University declares that the applicant is not eligible for admission. In this case, the entire fees except admission fees (Rs. 600/-) will be refunded.
4. If the candidate expires or becomes invalid within 90 (Ninety) days of the date of final round of admission, the entire fee including admission fee shall be refunded.

8.4.2 Cancellation by Candidate

1. Vertical Mobility or transfer from one course/ institute to another; from one category to another or from one branch to another in the same institute for the courses included within this prospectus shall not be treated as cancellation of admission. There shall be no deduction on this account. In such cases, the bank draft submitted by the student shall be returned to him and a new bank draft shall be accepted.
2. Admission fee of Rs. 600/- shall not be refunded under any circumstances except clause 4 above.
3. An applicant desiring to cancel his/her admission for any reason whatsoever, during the centralised admission process, but before the start of the academic session (the date decided by Goa University), shall be allowed to do so. It shall be presumed that the admission is cancelled at that stage and he/she shall forfeit the admission fee. The other fees shall be returned to him/her.
4. If an applicant cancels the admission after the start of the academic session, he/she shall be entitled for refund of fees, provided the refund is sought within 10 days from the date of first admission /date of start of academic session, which ever is later, Rs.500/- shall be deducted towards cancellation charges by the institution from which the admission is cancelled.
5. If an applicant cancels the admission after the start of the academic session but within 15 days from the date of first Admission/Date of start of academic session, which ever is later, he/she shall be entitled for refund of fees, after deducting, Rs.1000/- towards cancellation charges by the institution, from which the admission is cancelled.
6. If an applicant cancels the admission beyond 15 days after the start of the academic session/date of first admission, which ever is later, he/she shall be entitled for refund of fees, after deducting, Rs.1000/- towards cancellation charges by the institution, from which the admission is cancelled, provided the vacancy created due to his/her cancellation is filled up in subsequent rounds of admission. Such applicants shall apply for refund from the Institution, within 10 days of his/her cancellation.

8.4.3 OTHER INSTRUCTIONS

1. The application forms, original documents, and the bank drafts of the fee paid shall remain in the custody of the Admission Committee through the representative of the respective institutions until the last Round of admission. The bank drafts shall not be encashed till this time to facilitate on the spot refund of the fee, during vertical mobility. Heads of Institutions shall be solely responsible for the refund of fees.

2. After the third round of admission the refund of fees shall be sought from the Principal of the Institutions. The Principals of the institute should ensure that the refund is made within 15 days from the date of cancellation and valid request for refund. Fee receipt shall be issued by respective institutions.
3. The Admission Committee shall be responsible for transfer of application form and original documents of the applicants from one institute to other, on account of vertical mobility, during the process of admission only.
4. All fees and deposits pertaining to hostel shall be paid to and refunded by the Heads of respective institutes only and no correspondence should be made to the DTE.
5. In case of any legal dispute on refund of fees, Directorate of Technical Education or Admission Committee shall not be the party to the dispute, except for the purpose of clarification of the rules.

ANNEXURE-I: PROFORMA FOR CERTIFICATE

NOTE: Diploma Candidates belonging to the following categories are eligible to apply for Degree admissions with minimum 45% aggregate marks at qualifying examination, provided they fulfil other conditions given in this prospectus:

a) SC:

Applicants belonging to any of the following five castes (included in the list of Scheduled Castes in the State of Goa) on production of caste certificate in prescribed proforma and provided he/she or his/her forefathers belong to Goa or migrated to Goa before 16th February 1968¹

(1) Bhangui, (2) Chambhar (Hadi), (3) Mahar, (4) Mahyavanshi (Vankar), (5) Mang.

b) ST :

Applicants belonging to any of the following eight castes included in the list of Scheduled Tribes in the State of Goa (Notification No. 13/14/90-SWD (Vol.II) dated 22-04-2003) on production of caste certificate in prescribed proforma and provided, he/she or his/her forefathers either belong to Goa or migrated to Goa before 16th February 1968¹, (1) Dhodia (Halpati), (2) Dubla (Talavia), (3) Naikda (Nayaka), (4) Siddi, (5) Varli, (6) Kunbi, (7) Gawada, (8) Velip

c) OBC:

Applicants belonging to any of the following castes (included in the list of Other Backward Communities in the State of Goa) on production of caste certificate in prescribed proforma, provided he/she belongs to non-creamy layer of OBC community as defined by the State/Central Government, and he/she or his/her forefathers belong to Goa or migrated to Goa before 16th February 1968¹.

- | | | |
|------------------------------|-------------------------------------|-----------------|
| 1. Bhandari Naik | 9. Kharvi (I/c Christian Kharvi) | 17. Nathjogi |
| 2. Christian Barber | 10. Kalaikar/Black Smith/Tin Smith | 18. Nhavi |
| 3. Christian Mahar | 11. Kumbhar (I/c Christian Kumbhar) | 19. Pagui/Gabit |
| 4. Vishwakarma /Chari/ Mesta | 12. Mahalo | 20. Rajak |
| 5. Dhangar | 13. Madval (I/c Christian Dhobi) | 21. Satarkar |
| 6. Dhobi | 14. Nabhik | 22. Shimpi |
| 7. Gosavi | 15. Nai | 23. Thakar |
| 8. Koli | 16. Napit | 24. Teli |

¹ By Presidential Order dated 19th February 1968, the area comprising the Union Territory of Goa was recognised as State of Goa under the Goa, Daman and Diu Re-Organisation Act, 1987. Any person or his forefathers, who have migrated to Goa after the issue of the Presidential Order dated 19th February 1968, shall not be entitled to any benefit of reservation as Schedule Caste/Schedule-Tribe or Other Backward class for admission to the Professional Colleges in Goa, even if their caste is specified as Schedule Caste/Schedule Tribe or Other Backward Class in relation to the State of Goa.

1. INCOME CERTIFICATE**CERTIFICATE**

This is to certify that total annual income from all sources (including agricultural income) of Shri/Smt _____ and his/her spouse Shri/Smt _____ resident of _____

and parents of Miss / Master _____
for the year _____ is Rs. _____ Rupees _____

This certificate is issued at the request of

Shri/Smt _____ for being produced to Directorate of Technical Education / Professional Colleges for the purpose of claiming concession for their ward in tuition fees available for persons with income less than Rs.2,00,000 /- per annum.

The undersigned is personally satisfied about the correctness of the certificate, which has been issued after making an inquiry through the Village Panchayat / Assistant Municipal Inspector of this council and on the basis of the report number _____ and dated _____.

Signed by Sarpanch / Secretary of Village Panchayat/AAO of Municipalities
Countersigned by Block Development Officer / Chief Officer of Municipalities

2. CASTE CERTIFICATE (SC / ST) PROFORMA

1. This is to certify that Shri/Kum. _____ Son/Daughter of _____ of village / town _____ of the state of Goa belongs to the _____ Caste / Tribe which is recognised as a Scheduled Caste under:

The Constitution (Goa, Daman and Diu) Scheduled Caste order, 1968

The Constitution (Goa, Daman and Diu) Scheduled Tribes order, 1968

2. Shri/Kum. _____ and or his/her family ordinarily resides in village/town _____ of Goa and is non-migrant / migrant (from the state of _____) as per the Presidential Order dated 19th February, 1968.

Signature: _____

Place: _____

Designation: Deputy Collector
(with seal of Office)

Date: _____

NOTE: The Term "Ordinarily reside" used here will have the same meaning as in section 20 of the Representation of the Peoples Act, 1950.

3. CASTE CERTIFICATE (OBC) PROFORMA
FORM OF BACKWARD CLASS CERTIFICATE
OFFICE OF DISTRICT MAGISTRATE /SUB-DIVISIONAL MAGISTRATE/
MAMLATDAR

This is to certify that Shri/Kum. _____ Son /Daughter of _____ of village / town _____ of the State of Goa belongs to the _____ caste/community, which is recognised as a backward class under the Government of India, Ministry of Welfare, resolution No. 12011/68/93-BCC (C) dated 10th September, 1993 and resolution No. 12011/44/96-BCC (C) dated 6th December, 1996, published in Gazette of India, Extraordinary, Part I, Section I, dated 13th Sept, 1993 and dated 11th December, 1996 respectively, as also mentioned under Govt. of Goa notification No. 13/3/84-LAWD/OBC dated 12.6.1987, No. 13 /25/ 92-SWD-Part dated 4.10.1995, No. 13/1/97-SWD dated 3.3.1997, No. dated 13.5.1997, No. dated 12.12.1997, No. dated 23.9.1998, No. dated 30.6.2000 as amended.

Shri/Kum. _____ and or his/her family ordinarily resides at House No. _____ in village / town _____ Taluka _____ of Goa.

It is certified that he/she as on the date of issue of this certificate belongs to persons/sections of non-creamy / creamy layer mentioned in column 3 of the schedule of the Government of India, Department of Personnel & Training O.M. No. 36012/22/93/Est)SCT) of 1993.

Shri/Kum. _____ and or his/her family ordinarily resides in village/town _____ of Goa and is non-migrant / migrant (from the state of _____) as per the presidential order dated 19th February, 1968.

Signature:

Place: _____

Designation:

Date: _____

(with seal of Office)

NOTE: The Term "Ordinarily reside" used here will have the same meaning as in section 20 of the Representation of the Peoples Act, 1950.

ANNEXURE-II: SYLLABUS FOR G2CET (ENGINEERING & PHARMACY)**ENGINEERING****MATHEMATICS (30 Marks)****1. Co-ordinate Geometry**

A) Introduction. Distance and Section Formula. Area of a triangle. B) Various forms of the equation of a straight line. C) Distance of a point from straight line. Angle between two straight lines-conditions for lines to be parallel and perpendicular. D) Various forms of the equation of a circle. E) Equations of tangent and normal to the circle at the point of contact.

2. Trigonometry

A) Definition of a radian-relation between degree and radian, length of an arc and area of a sector. Trigonometric ratio for any angle. Trigonometric Identities. B) Trigonometric Ratios of allied angles, compound angles and multiple angles (2A - Only). Sum or difference form (problems based on trigonometric ratios of numerical angles should be omitted, eg. Show that $\sin 20 \sin 40 \sin 60 \sin 80 = \frac{3}{16}$), Product formulae.

(Simple problems based on direct application of the formulae only to be asked).

3. Limits And Function

A) Concept of Limits, Limits of – Algebraic functions.

B) Limits of Trigonometric functions (Direct problem based on $\lim_{\theta \rightarrow 0} \frac{\sin \theta}{\theta}$, $\lim_{\theta \rightarrow 0} \frac{\tan \theta}{\theta}$,

C) Limits of Exponential functions of form $\lim_{x \rightarrow 0} \frac{a^x - 1}{x}$

4. Differential Calculus

A) Definition of derivative. Derivative of standard functions (no proof) (no questions to be asked on derivative from first principles). Derivative of Sum, difference product and quotient of a function. B) Derivatives of composite functions with reference to the following functions: Algebraic, C) Trigonometric, D) Exponential, E) Logarithmic.

5. Applications Of Derivatives

A) Geometrical meaning of the Derivative. Equations of tangent and normal to curves.

B) Derivative as a rate measure. Meaning of velocity, acceleration. Rates and Motion.

C) Maxima and Minima (direct problems given y as an explicit function of x)

6. Determinants

A) Determinants of Second and third order (no properties). B) Solution of Equations in two or three variables using Cramer's rule.

7. Binomial Theorem

A) Binomial theorem for a) rational index. B) General term, middle term. C) Term independent of x

8. Derivatives

Derivatives of: A.. Implicit function. B. Parametric function. C. Logarithmic differentiation. D. Inverse Trigonometric function, E. Second order derivative (definition only).

9. Integral Calculus

A. Definition and standard forms, Integration of algebraic sum and difference of functions. Integration by Method of substitution,

B. Integration using trigonometric transformations.

$\int \sin^n x \, dx$, $\int \cos^n x \, dx$, $\int \tan^n x \, dx$, $\int \cot^n x \, dx$

C. Integration by parts (Integrals of the form);

$\int x \sin x \, dx$, $\int x \cos x \, dx$, $\int x e^x \, dx$, $\int x^n \log x \, dx$

$\int \sin^{-1} x \, dx$, $\int \cos^{-1} x \, dx$, $\int \tan^{-1} x \, dx$, $\int \operatorname{cosec}^{-1} x \, dx$, $\int \sec^{-1} x \, dx$, $\int \cot^{-1} x \, dx$

Integration of the type $\int \frac{dx}{a + b \cos x}$, $\int \frac{dx}{a + b \sin x}$, $\int \frac{dx}{a \cos x + b \sin x}$ should not be asked.

10. Definite Integrals

A. Definition and simple direct problems on definite integral (No substitution method).

B. Properties of definite integral. $\left(\int_0^a f(x) \, dx = \int_a^0 f(a-x) \, dx, \int_0^a f(x) \, dx = \int_a^b f(a+b-x) \, dx \right)$

11. Differential Equations

A. Definition, Order and degree of a differential equation. Solution of a differential equation of the first degree by the variable separable type only.

B. Second order differential equation of the type $\frac{d^2y}{dx^2} = f(x)$.

12. Mensuration

A. Area and Volume by Simpson's-Rule.

B. Volume and surface area of: (1) Prism, (2) Sphere, (3) Cylinder, (4) Cone.

13. Matrices

A. Definition of a matrix. ; Addition, subtraction & multiplication of matrices.

Inverse of a matrix using the adjoint only. B. Application of matrices in solving simultaneous equations in two or three variables using Matrix method.

Reference books:

1. Mathematics for Polytechnic students, by S.P. Deshpande Vol. I.
2. Mathematics for Polytechnic students, by S.P. Deshpande Vol II.
3. Mathematics for Polytechnic students, T.T.T.I Vol. I, II (Bhopal).
4. Mathematics for Polytechnic students, by Manjit Singh.

PHYSICS (25 MARKS)

1. Units And Dimensions

Fundamental and Derived Units, S. I. Units, Dimensions, Dimensional Formula, Principle of Homogeneity, Use of dimensional analysis in checking the correctness of an equation. Errors in Measurements. Types of Error. Systematic Error, Constant Error, Random Error. Estimation of Errors. Absolute Error and Percentage Error.

2. Circular Motion

Uniform Circular Motion. Angular displacement, Angular Velocity. Tangential Velocity, Radial Acceleration. Relation between linear and Angular Velocity. 2. Centripetal Force and Centrifugal force - Concept and Definition. Expression for centripetal and centrifugal force (No derivation), 3. Super elevation of roads, Expression for banking angle, Application of Centrifugal force in Centrifuge Machine.

3. Gravitation & Artificial Satellites

Newton's Law of Gravitation. Acceleration due to gravity, expression for Acceleration due to gravity. Definition of Escape velocity. Expression for Escape velocity (no derivation), Principle involved in Launching of satellite. Critical Velocity, Expression for Critical Velocity. Time period of a satellite (no derivation). Brief idea of Geo- stationery satellites, Communication satellites as Remote Sensing satellites.

4. Concepts Of Properties Of Matter

Elasticity; Definition of Stress, Strain and Elastic limit. Statement of Hooke's Law. Elastic modulus, Definition of Young's Modulus, Bulk Modulus, Rigidity Modulus. Application of

elastic moduli in engineering. (Y , K , η values of some important Engg. Materials is to be discussed) Behaviour of a wire under continuously increasing stress, study of stress v/s strain graph. Determination of Young's Modulus by Searle's Method.

Viscosity. Definition and concept of viscosity. Statement of Newton's law of viscosity and coefficient of viscosity. Terminal velocity (no derivation), Stoke's law, Determination of viscosity of a liquid by Stoke's method. Applications of Viscosity. Streamline and Turbulent flow. Definition of critical velocity, Reynolds's Number and its uses

Surface Tension. Concept and Definition of Surface Tension. Definition of Angle of Contact. Capillary rise. Expression for surface Tension using capillary rise (no derivation). Application of concept of surface tension.

Atmospheric pressure. Measurement of atmospheric pressure (the mercury barometer). Variation of atmospheric pressure with altitude. Statement of (a) Boyle's law, (b) Charles's law and (c) Gay Lussac's law, (P v/s V graph, P v/s T and V v/s T graph to be explained) Derivation of General gas equation.

5. Heat And Conduction

Concept of heat and temperature. Unit of heat energy and temperature. Concept of Absolute zero. Kelvin scale of Temperature (pressure v/s temp degree centigrade graph and P-T Kelvin graph).

Concept and definition of Specific heat. Unit of specific heat. Principle of Calorimeter. Specific heats of Gas. Specific heat of gas at constant volume and specific heat of gas at constant pressure.

Change of state of a material with change in temperature. Definition and Units of Latent heat of fusion and Latent heat of Vaporization. Calculation of heat losses and heat gain.

Modes of heat Transfer, Conduction, Convection and Radiation and Examples, Conduction of heat along a metal rod, Variable and steady thermal state. Law of thermal Conductivity. Definition and unit of coefficient of Thermal Conductivity. Determination of Thermal Conductivity of a good conductor by Searle's Method. Determination of Thermal Conductivity of a bad conductor by Lee's disc method.

6. Sound

Sound waves. Propagation of sound as longitudinal waves. Velocity of sound (Laplace formula). Effect of temperature, pressure and humidity on velocity of sound (no derivation). Measurement of Sound. Frequency or Pitch. Intensity of sound or Loudness. Measurement of

intensity of sound wave. Definition of bel and decibel. (no calculation). Free, Forced oscillations. Resonance and its importance.

7. Static Electricity

Introduction to charge, Statement of Coulomb's Law, Definition of unit charge. Electric field, Intensity of Electric field. Electric flux, Electric flux density. Relation between flux density and Intensity of Electric field. Definition of Electric line of force, Properties of electric line of force. Electric Potential and its unit. Definition and expression absolute potential at a point and Potential difference between two points.(no derivation) Potential of a sphere, potential of the Earth. Definition and unit of capacitance, Principle of capacitor. Capacitors in series. Capacitors in parallel. Application of capacitors.

8. Current Electricity

Electric current: Ohm's law, Resistance, Factors affecting resistance. Specific resistance and unit. Effect of temperature on resistance; Definition of temp coefficient of resistance and unit. General equation of Ohm's law. Law of resistances in series. Law of resistances in parallel. Wheatstone's network. Principle of Wheat stone's network. Meter bridge. Internal resistance and EMF of the cell. Principle of Potentiometer. Uses. Comparison of EMF of 2 cells using a potentiometer by single cell method, Determination of internal resistance of a cell using potentiometer. Heating effect of Electric current. Joule's law of Electric heating, Determination of J by electric method. Definition of Electric power and energy in dc circuit. Concept of kilowatt-hour. Calculation of Energy bills See beck effect, Thermocouple. Thermo electric series. Variation of Thermo EMF with temperature. Neutral temperature and Inversion Temperature. Law of Intermediate metals. Construction and working of thermocouple Thermometer. Peltier effect (only concept).

9. Electromagnetism & Electromagnetic Induction

Magnet, Magnetic poles, pole strength. Coulomb's law of magnetism. Magnetic field, Intensity of magnetic field. Magnetic flux, flux density, relation between Magnetic Induction & intensity of Magnetic field. Magnetic effect of electric current (Oersted's Experiment). Right hand thumb rule. BiotSavart's Law (Laplace Law) Expression for magnetic induction at the centre of circular coil carrying current (no derivation). Magnetic field due to solenoid (qualitative discussion no expression) Electro magnets and uses. Force acting on a straight conductor carrying current placed in a uniform magnetic field (no derivation). Couple acting on a rectangular coil placed in uniform magnetic field. Principle and working of moving coil galvanometer (pivoted type). Faraday's laws of electromagnetic induction. Induced EMF in

the conductor. Lenz's law. Self Induction, Definition of self Inductance and it's unit. Mutual Induction, Definition of Mutual Inductance.

10. Optics

Refraction. Laws of Refraction. Refractive Index. Critical angle, Total Internal refraction. Use of the concept in Optical fibres. Photometry. Definition and units of Luminosity, Luminous flux and Intensity of Illumination. Inverse square law of Illumination Principle of Photometry.

11. Photo Electric Effect

Explanation of Planck's concept of quantum. Energy of quantum. Photoelectric effect. Characteristics of Photoelectric effect. Photoelectric cell, Photo emissive (Vacuum type) cell. Applications of photoelectric cells.

12. X – Rays & Ultrasonic

X- rays, productions of x-rays by Coolidge tube. Properties of x-rays engineering, Application of x-rays.

Ultrasonic wave, piezo electric effect, Engineering Applications of ultrasonic wave. Ultrasonic cleaning, soldering and depth sounding (SONAR), detection of flaw in metal casting.

Reference Books:

1. Applied Physics for Polytechnic by Prakash Manikpure (S Chand publication)
2. Applied Physics for Polytechnics by Bhandarkar Applied Physics for Polytechnic by B.G. Dhande
3. Engineering Physics by R.K.Gaur and S.L. Gupta.
4. Applied Physics for Polytechnic by Prakash Manikpure (S Chand publication)
5. Applied Physics for Polytechnic by B.G. Dhande Engineering Physics by R.K.Gaur and S.L. Gupta
6. Applied Physics for Polytechnics by Bhandarkar Physics for class XII (NCERT)

APPLIED MECHANICS (20 MARKS)

1. Fundamental Concepts

Classification of mechanics: - Static, dynamic (Kinematics & Kinetics). S.I. system of units: - Basic units LMT, inter-conversion between units, inter-conversion between prefixes of units. Concept of rigid body and de-formable body. Vectors and Scalar: - Definition, difference between vector quantity and scalar quantity, representation of vector quantity in magnitude &

direction (meaning of sense of a vector), types of vectors with examples: - Free, sliding and fixed. Addition of vectors: - Law of Parallelogram, law of triangles, Polygon law, subtraction of vectors.

2. Force And Force Systems

Definition and units. Specifications of force as a vector: - Magnitude, direction and point of application. Concept of mass and weight, units. Types of force with examples- Direct, remote action e.g. Gravity force, magnetic force, electric force. Effect of forces on a body- External, internal. Classification of forces- Concentrated, distributed over an area, distributed over a volume, uniformly distributed load, uniformly varying load, equivalent-force. Principle of transmissibility, system of forces: -Collinear and non-collinear, concurrent and non-concurrent, coplanar and non-coplanar, parallel and non-parallel.

3. Moments And Couples

Definition and unit of a moment. Sign conventions – Clockwise and anti-clockwise. Moment as a vector: - Magnitude, direction (Right hand thumb rule). Definition and units of a couple. Characteristics of a couple.

4. Resolution And Composition Of Forces

Resolution of a force. (Hint – Reverse of law of Parallelogram of forces and Polygon of forces) Rectangular components: -Resolution of a force into two rectangular components, independence of each rectangular component. Resolution of a force into force and couple. Resultant of a force - Definition, Parallelogram law, Triangle law, Resultant of two mutually perpendicular forces, Polygon law, resultant of non-concurrent coplanar force system by Varignon's theorem, resultant of parallel forces.

5. Equilibrium

Statement of Newton's third law. Concept of free body diagram - Reactions of simple, hinged and fixed supports. Drawing of F.B.D. Concept of equilibrium. Definition of equilibrium and its comparison with resultant. Conditions of equilibrium for co-planar force system. Lami's theorem. Reaction of beams subjected to u d l and concentrated loads only. (Simply supported, hinged and roller support overhangs).

6. Friction

Definition. Advantages and disadvantages. Types of friction – Static, dynamic - Sliding, rolling. Coulomb's law of static-friction: - Coefficient of friction, angle of friction (cone of friction), angle of repose. Equilibrium of bodies involving friction: - Blocks on horizontal & inclined plane, redder friction, screw friction.

7. Kinematics (Rectilinear Motion)

Kinematics variables –Definition & units - Displacement and distance, velocity and speed, uniform and average velocity, uniform acceleration and retardation. Problems based on kinematic equations for uniform acceleration: $V = u + at$; $S = ut + \frac{1}{2} at^2$; $V^2 = u^2 + 2as$; Velocity – time diagrams. Motion under gravity.

8. Centre Of Gravity

Centroid of simple regular areas. (No derivation), Centroid of built-up (composite) areas; C.G. of simple regular filled solids. (No derivation); C.G. of built-up (composite) filled solids.

Reference books:

1. Fundamentals of applied Mechanics by Dadhe, Jamdar, Walawalkar
2. Applied Mechanics by R. S. Khurmi.
3. Mechanics (S.I. Version) by J.D. John Willey

INFORMATION TECHNOLOGY (25 MARKS)

1. General Computer Science

Computer Fundamentals: Block diagram of a computer, functional components of a computer, interaction between the components, input-process-output model of a computer, starting a computer & switching off procedure, concept of computer virus. Computer Hardware: Output devices: Keyboard, Mouse, VDU, Printer, Modem, Processor – typical speeds, Memory – types, typical size, storage devices hard disk, floppy disk, compact disk typical size. Importance of operating system, functions of an OS, Typical OS used. Computer software: System Software, Utility software, and application software.

2. Operating Systems: Ms Dos

File system, definition of a file, types of file: exe, com, bat sys, txt, three important files: command com, Autoexec Bat, Config Sys, Booting Procedure: from HD, from FDD, pipes filters & Wilcards, types of DOS commands; internal & external, general commands: TYPE, DATE, TIME, PROMPT, file management command: COPY, DEL, RENAME, Disk Management commands: FORMAT, CHKDSK, LABEL, VOL, EDIT & COPY CON commands, redirecting command I/O

3. Operating Systems: Windows 95/98/Me/Xp

Basics of Windows: Graphical User Interface, Desk Top, Start menu Pull down menu, starting and quitting windows, taskbar, status bar, scroll bar, title bar menu bar, toolbar, mouse features – move, point, click – single, double, drag, drop opening and closing documents,

(Ellipses, Arrowhead, Dialog box, Cascade menu, text box, list box, combo box, dropdown list box, slider, spinner, command button). Control menu, minimize, maximise, restore, close, resizing and moving the window. My computer and window explorer: control panel, documents and folders create, move, copy, delete, rename, search, browse, recycle bin. General Windows's features: Help features, document-handling features, edit features, print features, switching between multiple application.

5. Common Application Software

Introduction to commonly used standard software included in office packages like Ms Office, Open office, etc. (at least one software on each operating system). Basics of word processing: - Text selection, opening documents and creating documents, saving documents/quitting documents, cursor control, printing documents, using the interface (menu toolbars), editing text (copy delete move etc), finding and replacing text, spell check feature/auto-correct feature, grammar facility, retrieving often used text: - auto-text, character formatting, page formatting. Document enhancement: - Adding borders and shading, adding headers and footers, setting up multiple columns, sorting blocks, adjusting margins and hyphenating documents, creating master document, creating data source merging documents, using mail-merge feature for labels and envelopes. Introduction to equation editor. Worksheet basics: - Data entry in cells, entry of numbers, text and formulae, moving data in a worksheet, moving around in a worksheet, selecting data range, using the interface (toolbars, menu), editing basics, working with workbooks, saving and quitting, cell referencing, Pivot charts, goal analysis. Formatting and calculations: - Calculations and worksheet – using auto-fill working with formulae, efficient data display with data formatting (number and date), formatting text data with auto-format, creating embedded chart using chart wizard sizing and moving parts, updating charts, changing chart types, creating separate chart sheets, adding titles, legends and gridlines, printing charts. Database management: - Finding records with data forms adding/deleting records, filling records in a work sheet, queries.

Presentation & Graphics: Introduction to PowerPoint of other presentation software, making presentation adding text effects, animation and sound to the presentation.

6. Network & Internet

Network of computers: concept and advantages of networking, local area and wide area networks, e-mail, Internet and World Wide Web. Opening e-mail account: sending and receiving e-mail: surfing on web, finding required information from web. Issues relating to security.

7. Operating Systems: Linux/Unix

Kernel and shell, the featureless file, pattern matching, portability, open systems, programming facility, multi-user, multi-tasking, the Tool kit, Windowing systems, Documentation. On line help facility – the **man** command. The file: ordinary file, directory file, device file, structure of the file system: checking your current directory – the **pwd** command, changing directories – the **cd** command, listing out directory contents – the **ls** command: the long listing the – **l** option, significance of the listing output, other options **ls**., Displaying and creating files – the **cat** command making a Directory – the **mkdir** command. Removing a Directory – the **rmdir** command, Relative pathnames file permissions – the **chmod** command: The octal notation copying a file the **cp** command deleting file – the **rm** command renaming file – the **mv** command. Command structure, Halted output – the **more** command, file types - the **file** command, line word and character counting – the **wc** command, displaying a file's contents in octal form – the **od** command, comparing two files – the **cmp** command further comparison with **comm**., file differences with **diff**, displaying a blown-up message – the **banner** command, the calendar – the **cal** command, displaying the system date with date, login details – the **who** command, knowing your terminal – the **tty** command, setting terminal characteristics – the **stty** command.

Reference Books:

1. Computer FundamentalsRAM
2. First course on Computer studies.....HUNT & SHELLY
3. PC Software..... ...R. K. TAXALI

SAMPLE QUESTIONS IN MATHEMATICS

Q1: Which of the following points lies on the line $2x - y = 3$?

- a) (1 , 2) b) (2 , 1) c) (0 , 0) d) (5 , 2)

Q2: The integral of $\int \underline{d}f(x)$ dx

- a) $\text{Log } f(x)$ b) $1 / f(x)$ c) $f(x)$ d) $| f(x) |$

Q3: $\text{Sin}(3x)\text{Cos}(x)$ can also be written as

- a) $[\text{Sin}(4x) + \text{Sin}(2x)] / 3$ b) $\text{Tan } 3x$ c) $\text{Cot } 3x$ d) $[\text{Sin}(4x) + \text{Sin}(2x)] / 2$

Q 4: Consider a triangle ABC with $AB = AC$, the altitude $AD = 3$ and $BC = 8$. what is the length of AC ?

- a) 5 b) 23 c) 16 d) 2

Q5: The minor of the element in the second row and second column of

$$\begin{pmatrix} 1 & 2 & 3 \\ 3 & 2 & 1 \\ 1 & 1 & 0 \end{pmatrix}$$

is a) -3 b) 3 c) 2 d) 0

ANSWERS TO THE ABOVE QUESTIONS

Ans 1 : b) (2 , 1)

Ans 2 : c) f(x)

Ans 3 : d) $[\sin(4x) + \sin(2x)] / 2$

Ans 4 : a) 5

Ans 5 : a) -3

SAMPLE QUESTIONS IN PHYSICS

- The boiling point of water
 - Is always 100°C
 - Depends on atmospheric pressure
 - Depend on the material of the container
 - Depends on relative humidity
- The S. I unit of electric potential difference is
 - Ohm
 - Volt
 - Ampere
 - Farad
- A capacitor is used in an electrical circuit to
 - step down voltage
 - step up voltage
 - store electric charge
 - produce electrical charge
- In an electrical circuit, a fuse is connected in the
 - In the live wire
 - In the neutral wire
 - In the earth wire
 - Anywhere, it makes no difference
- For total internal reflection to take place, the refractive index of
 - Cladding should be greater than the core
 - Core should be greater than the cladding
 - Core and cladding should be equal
 - Core and cladding does not affect in transmission

Answers

- b(Depends on atmospheric pressure)
- b(volt)
- c(store electric charge)
- a(In the live wire)
- b(core should be greater than the cladding)

SAMPLE QUESTIONS IN APPLIED MECHANICS

- Q.1. The resultant of the coplanar forces 100N, 0° and 200N, 90° is
 a) 228N $\theta_x = 50^\circ$ b) 220N $\theta_x = 60^\circ$
 c) 224N $\theta_x = 64^\circ$ d) 225N $\theta_x = 62^\circ$
- Q.2 If the sum of all the forces acting on a body is zero, then the body may be in equilibrium provided the forces are
 a) Concurrent b) Parallel
 c) Like Parallel. d) Unlike parallel.
- Q.3 In order to determine the effects of a force acting on a body, we must know
 a) Its magnitude b) Direction of line along which its acts.
 c) Its Nature (push & pull). d) Point through which it acts on the body.
 e) All of the above.
- Q.4 The relationship $s = ut + \frac{1}{2} at^2$ is applicable to bodies
 a) Moving with any type of motion b) Moving with uniform velocity
 c) Moving with uniform acceleration d) Both (b) & (c)
- Q.5 On turning a corner, a motorist rushing at 20m/sec finds a child on the road 50m ahead. He instantly stops the engine and applies brakes, so as to stop the car within 10m of the child, the retardation will be –
 a) -6m/sec^2 b) 5m/sec^2
 c) -5m/sec^2 d) -7m/sec^2 .

Answer to the questions

- Q.1. c) 224N $\theta_x = 64^\circ$ Q.2 a) Concurrent
- Q.3 e) All of the above. Q.4 c) Moving with Uniform acceleration
- Q.5 c) -5m/sec^2

SAMPLE QUESTIONS IN INFORMATION TECHNOLOGY

- 1) The process of visiting different websites on the internet is called -----
 a) Net surfing b) Internet browsing c) both a & b d) Programming
- 2) Which of the following is a spreadsheet?
 a) Ms-word b) Ms-Access c) Ms-Excel d) Ms-power Point
- 3)----- are individual pages used in Ms-power Point software package.
 a) Presentation files b) Handouts c) Slides d) Speakers notes
- 4)-----is an example of output device
 a) Printer b) Plotter c) Monitor d) All of the above

- 5) data in computer is represented in terms of -----
a) words b) strings c) bits d) all of the above

Answers :

- 1)-----c (both a & b) 2)-----c (Ms-Excel) 3)-----c (slides)
4)-----d (all of the above) 5)-----c (bits)

SYLLABUS FOR CET FOR DIRECT SECOND YEAR B.PHARM ADMISSIONS

1. PHARMACOLOGY & TOXICOLOGY (25 Marks)

1. Routes of administration of drugs.
2. Drug transport, absorption, metabolism & excretion.
3. Sedatives & hypnotics; Antianxiety drugs; Anti depressants; Narcotic analgesics; NSAIDS.
4. Pharmacology of acetylcholine, Atropine and Anticholinesterase drugs.
5. Pharmacology of Adrenergic drugs & Adrenergic receptor blockers.
6. Drugs used to treat CHF, Angina & Hypertension.
7. Diuretics and anti diuretics.
8. Purgatives; Antidiarrhoeals; Antiemetics drugs used to treat peptic ulcer.
9. Chemotherapy of TB, malaria, fungal and viral infections.

Reference books:-

1. Introductory Pharmacology & Toxicology by Dr. A.K.Srivastava & Dr. M.S.Bal.
2. Pharmacology by Buddhiraja.
3. Essentials of Medical Pharmacology by K.D.Tripathi.

PHARMACOLOGY

Sample Questions

1. In which of the following cases will a drug be absorbed the fastest ?
a) in aqueous solution* b) in oily solution c) in solid form d) in emulsified form
2. What are microsomal enzymes concerned with ?
a) drug absorption b) drug excretion c) drug metabolism* d) drug distribution

3. COX-inhibitors are used as:

- a) antidepressants b) sedatives c) NSAIDS* d) diuretics

4. Atenolol is a blocker of:

- a) cholinergic receptors b) β -adrenergic receptors* c) Cholinesterase d) GABA receptors

5. Digitalis is used to treat:

- a) CHF* b) angina c) diarrhea d) emesis

6. Which of the following can be used as diuretics and antidiuretic ?

- a) Furosemide b) Hydrochlorothiazide* c) Mannitol d) Amiloride

7. What sort of a drug is sucralfate ?

- a) Ulcer-causing drug b) proton-pump inhibitor c) ulcer protective drug*
d) antidiarrhoeal

8. Azoles are used in the chemotherapy of:

- a) Malaria b) TB c) Fungal infections* d) viral infections

*** Mark indicates the right answer to the questions.**

2. PHARMACEUTICAL CHEMISTRY II (25 Marks)

Antiseptics and Disinfectants –Proflavine, Benzalkoniumchloride, Cetrimide, Chlorocresol, Chloroxylylene, Formaldehyde solution, Hexachlorophene, Liquified phenol, Nitrofurantoin.

Sulfonamides-Sulfadiazine, Sulfaguanidine, Phthalysulfathiazole, Succinylsulfathiazole, Sulfadimethoxine, Sulfamethoxypridazine, Sulfamethoxazole, co-trimoxazole, Sulfacetamide.

Anti-tubercular Drugs –Isoniazid, PAS, Streptomycin, Rifampicin, Ethambutol, Thiacetazone, Ethionamide, Cycloserine, Pyrazinamide.

Antiamoebic and Anthelmintic Drugs- Emetine, Metronidazole, Halogenated hydroxyquinolines, diloxanidefuroate, Paramomycin Piperazine, Mebendazole, D.E.C.,

Antibiotics –Benzyl Penicillin, Phenoxy methyl Penicillin, Benzathine Penicillin Ampicillin, Cloxacillin, Carbenicillin, Gentamicin, Neomycin, Erythromycin, Tetracycline, Cephalexin, Cephaloridine, Cephalothin, Griseofulvin, Chloramphenicol.

Antimalarial Drugs –Chloroquine, Amodiaquine, Primaquine, Proguanil, Pyrimethamine, Quinine, Trimethoprim.

Tranquilizers –Chlorpromazine, Prochlorperazine, Trifluoperazine, Thiothixene, Haloperidol, Triperidol, Oxypertine, Chlordiazepoxide, Diazepam, Lorazepam, Meprobamate.

Hypnotics—Phenobarbitone, Butobarbitone, Cyclobarbitone, Nitrazepam, Glutethimide, Methyprylone, Paraldehyde, Triclofos sodium.

Antidepressant Drugs—Amitriptyline, Nortriptyline, Imipramine, Phenelzine, Tranylcypromine.

Analeptics –Theophylline, Caffeine, Coramine, Dextroamphetamine.

Adrenergic Drugs –Adrenaline, Noradrenaline, Isoprenaline, Phenylephrine Salbutamol, Terbutaline, Ephedrine, Pseudoephedrine.

Adrenergic Antagoins –Tolazoline, Propranolol, Practolol.

Cholinergic Drugs –Neostigmine, Pyridostigmine, Pralidoxime, Pilocarpine, Physostigmine.

Cholinergic Antagonists –Atropine, Hysocine, Homatropine, Propantheline, Benztropine, Tropicamide, Biperiden.

Diuretic Drugs –Furosemide, Chlorothiazide, Hydrochlorothiazide, Benzthiazide, Urea, Mannitol, Ethacrynic Acid.

Cardiovascular Drugs –Ethyl nitrite, Glyceryl trinitrate.

Hypoglycemic Agents –Insulin, Chlorpropamide, Tolbutamide, Glibenclamide, Phenformin, Metformin.

Local Anaesthetics –Lignocaine, Procaine, Benzocaine.

Histamine and Anti-histaminic Agents-Histamine, Diphenhydramine, Promethazine, Cyproheptadine, Mepyramine, Pheniramine, Chlorpheniramine.

Analgesics and Anti-pyretics–Morphin, Pethidine, Codeine, Methadone, Aspirin, Paracetamol, Analgin, Dextropropoxyphene, Pentazocine.

Non-steroidal anti-inflammatory Agents –Indomethacin, phenylbutazone, Oxyphenbutazone, Ibuprofen, Thyroxine and Antithyroids –Thyroxine, Methimazole, Methylthiouracil, Propylthiouracil.

Steroidal Drugs –Betamethazone, Cortisone, Hydrocortisone, prednisolone, Progesterone, Testosterone, Oestradiol, Nandrolone.

Anti- Neoplastic Drugs –Actinomycins, Azathioprine, Busulphan, Chlorambucil, Cisplatin cyclophosphamide, Daunorubicin hydrochloride, Fluorouracil, Mercaptopurine, Methotrexate, Mytomycin.

Reference books:

1. Pharmacopoeia of India.
2. British Pharmaceutical codex.
3. Martindale The Extra Pharmacopoeia.

PHARMACEUTICAL CHEMISTRY II

Sample questions:

1. What type of surfactant is Benzalkonium chloride?
a) anionic surfactant b) cationic surfactant.* c) non-anionic surfactant. d) amphoteric surfactant.
2. Which of the following agents is not a first line anti TB agent?
a) INH b) PAS* c) Rifampin d) Ethambutol

3. From where is the alkaloid Emetine obtained?
a) ipecacuanha* b) cinchona
c) atropine d) ephedra
4. What type of antibiotic is Amphotericin?
a) β -lactam b) aminoglycoside c) polyene* d) macrolide
5. Which Cinchona alkaloid is used as antimalarial?
a) emetine b) primaquine c) quinine * d) trimethoprim
6. In Benzodiazepins, benzene ring is fused with what ring?
a) furan b) 1,4 diazepam* c) benzene d) imidazoline
7. What is 5-ethyl-5-phenyl barbituric acid?
a) pentobarbitone b) barbituric acid c) butobarbitone d) phenobarbitone*
8. What type of inhibitor is Phenelzine?
a) polymerase inhibitor b) monoamine oxidase inhibitor* c) adenylyl cyclase inhibitor
d) catalase inhibitor
9. What is the 'parent compound' of Caffeine?
a) benzene b) phenanthrene c) xanthine* d) acridine
10. What is the use of Isoprenaline?
a) diuretic b) bronchodilator* c) local anesthetic d) vasodilator
11. What type of blocker is Propranolol?
a) α -blocker b) γ -blocker c) β -blocker* d) α, β blocker
12. Name the anticholinesterase obtained from plants.
a) physostigmine* b) pyridostigmine c) neostigmine d) monostigmine
13. What is the levorotatory isomer of atropine called?
a) homatropine b) L-atropine c) hyoscyamine * d) isotropine
14. Which is an osmotic diuretic?
a) ethacrynic acid b) frusemide c) mannitol * d) chlorthiazide
15. What type of tablets is Nitroglycerin mostly used as?
a) dispersible b) buccal c) chewable d) sublingual*
16. What is Metformin used as?
a) oral hypoglycemic * b) diuretic c) antihypertensive d) cardio vascular agent
17. What is paracetamol chemically?
a) crocin b) aspirin c) acetaminophen * d) acetyl salicylic acid
18. Name the hormone used to treat gynaecomastia in males.
a) progesterone b) oestrogen c) testosterone* d) hydrocortisone

19. Give the mechanism of action of Methotrexate, an anti-cancer drug.

- a) folic acid antagonist.* b) adrenergic antagonist. c) cholinergic antagonist. d) antibiotic

20. What is the combination of trimethoprim and sulphamethoxazole called?

- a) clotrimazole b) co-trimoxazole* c) sulphamethoprim d) methoprim oxazole

3. PHARMACEUTICS II (30 Marks)

1. Dispensing Pharmacy:

- (i) Prescriptions –Reading and understanding of prescription; Latin terms commonly used (Detailed study is not necessary), Modern methods of prescribing, adoption of metric system. Calculations involved in dispensing.
- (ii) Incompatibilities in Prescriptions –Study of various types of incompatibilities –physical, chemical and therapeutic.

2. Dispensed Medications:

(Note: A detailed study of the following dispensed medication is necessary. Methods of preparation with theoretical and practical aspects, use of appropriate containers and closures. Special labelling requirements and storage conditions should be high – lighted).

- (i) Powders –Types of powders –Advantages and disadvantages of powders, Granule, Cachets and Tablet triturates. Preparation of different types of powders encountered in prescriptions. Weighing methods, possible errors in weighing, minimum weighable amounts and weighing of material below the minimum weighable amount, geometric dilution and proper usage and care of dispensing balance.

(ii) Liquid Oral Dosage Forms:

- (a). Monophasic–Theoretical aspects including commonly used vehicles, essential adjuvant like stabilizers, colourants and flavours, with examples.

Review of the following monophasic liquids with details of formulation and practical methods.

Liquids for internal administration	Liquids for external administration or used on mucus membranes.
Mixtures and concentrates	Gargles

Syrups	Mouth washes Throat –paints Douches
Elixirs	Ear Drops Nasal drops & Sprays Liniments Lotions.

(b) Biphasic Liquid Dosage Forms:

(i) Suspension (elementary study)----Suspensions containing diffusible solids and liquids and their preparations. Study of the adjuvants used like thickening agents, wetting agents, their necessity and quantity to be incorporated. Suspensions of precipitate forming liquids like, tinctures, their preparations and stability. Suspensions produced by chemical reaction. An introduction to flocculated, non-flocculated suspension system.

(ii) Emulsions –Types of emulsions, identification of emulsion system, formulation of emulsions, selection of emulsifying agents. Instabilities in emulsions. Preservation of emulsions.

(iii) Semi –Solid Dosage Forms:

a) Ointments –Types of ointments, classification and selection of dermatological vehicles. Preparation and stability of ointments by the following processes:

(i) Trituration (ii) Fusion (iii) Chemical reaction (iv) Emulsification.

(a) Pastes--- Difference between ointments and pastes, bases of pastes. Preparation of pastes and their preservation.

(c) Jellies –An introduction to the different types of jellies and their preparation.

(d) An elementary study of poultice.

(e) Suppositories and pessaries –Their relative merits and demerits, types of suppositories, suppository bases, classification, properties, Preparation and packing of suppositories.

Use of suppositories for drug absorption.

(iv) Dental and Cosmetic Preparations:

Introduction to Dentrifices, Facial cosmetics, Deodorants, Antiperspirants, Shampoos, Hair dressing and Hair removers.

(v) Sterile Dosage Forms:

(a) Parenteral dosage forms—Definitions, General requirements for parenteral dosage

forms. Types of parenteral formulations, vehicles, adjuvants, processing, personnel, facilities and Quality control. Preparation of Intravenous fluids and admixtures –Total parenteral nutrition, Dialysis fluids.

(b) Sterility testing, Particulate matter monitoring –Faulty seal packaging.

(c) Ophthalmic Products –Study of essential characteristics of different ophthalmic preparations. Formulation additives, special precautions in handling and storage of ophthalmic products.

Books to be Referred (Latest editions)

1. Cooper and Gunn's Dispensing for Pharmaceutical students-XII edition edited by S.J.Carter.
2. Pharmaceutics-II by R.M.Mehta - Vallabh Prakashan-2nd edition
3. Remington's Pharmaceutical Sciences

PHARMACEUTICS II

Sample Questions

1. What is the English meaning of Latin term Nebula?
a) Eye wash b) Mouth wash c) Nasal drops d) Spray solution*
2. What type of incompatibility is Liquifaction?
a) Chemical b) Therapeutic c) Physical* d) None of the above
3. The crystalline powder on exposure to humid atmosphere, liberates wholly or partly, the water of crystallization. What are such powders called?.
a) Hygroscopic b) Efflorescent* c) Deliquescent d) Eutetic
4. Name the liquid / semi liquid preparations meant for application to skin with friction.
a) Throat paints b) Liniments* c) Lotion d) None of the above
5. Suspensions containing what type of solids require suspending agents?
a) Soluble b) Diffusible c) Indiffusible* d) None of the above
6. What is the ratio in parts of Oil:H₂O:Gum for primary emulsion containing fixed oil?
a) 4:2:1* b) 4:2:2 c) 4:4:1 d) 4:3:1
7. Name the semisolid preparations which are thick and stiff.
a) Gels b) Pastes* c) Ointments d) None of the above
8. What is the requirement for jellies which are used as lubricants for articles which are meant for insertion into sterile region of the body?
a) Non sterile b) Apyrogenic c) Sterile* d) None of the above
9. In formulation of Kaolin poultice BPC, what is used as carrier of heat?
a) Heavy kaolin* b) Talc c) Calcium carbonate d) Magnesium carbonate
10. Cocoa butter is a mixture of which type of esters of stearic, palmitic, oleic and other fatty acids ?

- a) Propyl esters b) Glyceryl esters* c) Sorbitan esters d) Acetyl esters

11. What is a black pigmented preparation for application to the eye lashes or eyebrows to beautify the eyes, called?

- a) Rouges b) Brilliantines c) Mascara* d) Eye shadow

12. Water for injection when injected may cause rise in body temperature if it is contaminated with which of the following?

- a) Bacteria b) Pyrogens* c) Fungi d) Particulate matter

13. What is the preferred method for sterility testing of an oil or oily preparation?

- a) Membrane filtration* b) Direct inoculation c) Both of the above d) None of the above

14. Which are the sterile aqueous solutions used for washing of the eyes?

- a) Eye lotions* b) Water for injection c) Eye drops d) None of the above

4.HOSPITAL AND CLINICAL PHARMACY (20 Marks)

Part –I : Hospital Pharmacy:

1. Hospital Pharmacy:

- (a) Definition
- (b) Functions and objectives of Hospital Pharmaceutical services.
- (c) Location, Layout, Flow chart of material and men.
- (d) Personnel and facilities requirements including equipments based on individual and basic needs.
- (e) Requirements and abilities required for Hospital pharmacists.

2. Drug Distribution system in Hospitals:

- (a) Out –patient services
- (b) In-patient services –(a) types of services (b) detailed discussion of unit Dose system, Floor ward stock system, Satellite pharmacy services, Central sterile services, Bed Side Pharmacy.

3. Nomenclature and uses of surgical instruments and Hospital Equipments and health accessories.

4. P.T.C (Pharmacy Therapeutic Committee), Hospital Formulary System and their organisation, functioning, composition.

5. Drug Information service and Drug Information Bulletin.

6. Surgical dressing like cotton, gauze, bandages and adhesive tapes including their pharmacopoeial tests for quality. Other hospital supply e.g I.V sets B.G sets, Ryals tubes, Catheters, Syringes etc.

7. Application of computer in maintenance of records, inventory control, medication monitoring, drug information and data storage and retrieval in hospital and retail pharmacy establishments.

PART –II : CLINICAL PHARMACY.

1. Introduction to Clinical Pharmacy Practice –Definition, scope.
2. Modern dispensing aspects –Pharmacists and Patient counselling and advice for the use of common drugs, medication history.
3. Common daily terminology used in the Practice of Medicine.
4. Disease, manifestation and pathophysiology including salient symptoms to understand the disease like: Tuberculosis, Hepatitis, Rheumatoid Arthritis, Cardiovascular diseases, Epilepsy, Diabetes, Peptic, Ulcer and Hypertension.
5. Physiological parameters with their significance .
6. Drug Interactions:
 - (a) Definition and introduction.
 - (b) Mechanism of Drug Interaction.
 - (c) Drug –drug interaction with reference to analgesics, diuretics, cardiovascular drugs, Gastro- intestinal agents, Vitamins and Hypoglycemic agents.
 - (d) Drug –food interaction.
7. Adverse Drug Reactions.:
 - (a) Definition and Significance.
 - (b) Drug –induced diseases and Teratogenicity.
8. Drugs in Clinical Toxicity –Introduction, general treatment of poisoning, systematic antidotes. Treatment of insecticide poisoning, heavy metal poison, Narcotic drugs, Barbiturate, Organophosphorous poisons.
9. Drug dependences, Drug abuse, addictive drugs and their treatment, complications.
10. Bio–availability of drugs, including factors affecting it.

Books recommended (Latest editions)

1. Remington’s Pharmaceutical Sciences.
2. Martindale The Extra Pharmacopoeia
3. Hospital Pharmacy, by Hassan
4. Remington’s Pharmaceutical Sciences
5. Clinical Pharmacy Practice by Roger Walker
6. Text Book of Clinical Pharmacy Practice Essential Concepts- by G. Parthasarathi
7. Pharmacy practice by Stone & Curtis (Pharmaceutical Press)
8. Good Pharmacy Practice Guidelines & Training Manual Indian Pharmaceutical Association.

Sample Questions

- Which of the following are roles of a Hospital Pharmacist?
 - Procurement of Drugs
 - CSSD Management
 - Manufacture of extemporaneous preparations in bulk
 - All of the above*
- Satellite Pharmacy services are more useful in :
 - 10 bedded hospital
 - 100 bedded hospital
 - 1000 bedded hospital*
 - None of the above
- What is the meter used for checking blood sugar called?
 - Thermometer
 - Peak flow meter
 - Glucometer *
 - None of the above.
- In a Pharmacy therapeutics Committee, it is ideal to have the Pharmacist as the :
 - Member
 - Chairman
 - Expert
 - Member Secretary*
- Which of the following drug information sources are considered as that representing the latest information available:
 - Primary resources *
 - Tertiary resources
 - secondary sources
 - All of the above
- Ryle's tube is introduced into the body through the :
 - Vein
 - Urinary tract
 - Mouth * I
 - Anus
- Computers in hospital and clinical pharmacy are used for :
 - Inventory control
 - Monitoring of therapy
 - providing drug information
 - All of the above.*

Clinical Pharmacy**Sample Questions**

- Which of the following is not exactly the role of a Clinical Pharmacist?
 - Patient Counselling
 - Admixture service
 - ADR Monitoring
 - Inventory control.*
- Ibuprofen should be used with caution in which of the following conditions?
 - fever
 - asthma *
 - Bone dislocation
 - None of the above
- Leucorrhoea is :
 - Painful menstruation
 - white discharge through the vagina *
 - Dryness of vagina
 - Delay in menstruation
- What are the ideal values of blood pressure in individuals above 18, and not taking any B.P. medication?
 - 120/80
 - less than 120 and less than 80*
 - less than 120 or less than 80
 - none of the above
- In which of the following location does normal body temperature show higher reading?
 - Axial
 - Mouth
 - Anal *
 - Same values in all the 3 locations.
- A drug interaction between Ciprofloxacin and Antacids will cause:
 - Reduction of absorption of antacids
 - Reduction of absorption of Ciprofloxacin *

- c) Alkalinisation of Ciprofloxacin molecules d) Increased absorption of Ciprofloxacin.
7. Which of the following is likely to be a teratogen:
a) Antacids b) Iron c) Calcium d) Losartan *
8. Penicillamine is used more specifically as an antidote in poisoning by:
a) Iron b) Mercury * c) Penicillins d) None of the above.
9. LSD is a common:
a) Antidote in poisoning b) Anti rheumatic drug c) Hallucinogen * d) Sedative
10. A drug given by which route has highest bioavailability:
a) I.M. b) S.C. c) Intradermal d) I.V.*

PLEASE FOLD AT PERFORATION AND THEN TEAR

OBJECTIVE RESPONSE SHEET

INSTRUCTIONS :

Don't tamper with the
BARCODE below. If
you do so, you will be
disqualified



Roll Number

1	1	1	1	1	1
2	2	2	2	2	2
3	3	3	3	3	3
4	4	4	4	4	4
5	5	5	5	5	5
6	6	6	6	6	6
7	7	7	7	7	7
8	8	8	8	8	8
9	9	9	9	9	9
0	0	0	0	0	0

Write your Roll Number in the boxes provided, and darken the appropriate bubble under each digit with Blue/Black Ball Point Pen only.



- This Objective Response Sheet (ORS) is provided with a thin detachable sheet. Visible and invisible impressions made on the ORS by applying sufficient pressure will automatically be transferred on to the sheet attached.
- The ORS will be processed by electronic means. Invalidation of any answer due to incomplete / incorrect filling of bubble will be sole responsibility of the candidate.
- As shown in the example below, darken/blacken the chosen bubble completely with blue or black ball point pen only.

Correct Marking : A B C D

Wrong Marking : A B C D
 A B C D
 A B C D
 A B C D

- Candidates should also note that IT WILL NOT BE POSSIBLE TO CHANGE THE ANSWERS ONCE DARKENED/BLACKENED WITH THE BALL POINT PEN. Hence sufficient care should be taken while marking/darkening the bubbles or answers.
- You must write the Subject Code and Question Booklet code in the boxes provided below, with ball point pen, and darken the corresponding bubbles.
- Do not write your Name or Roll Number or put any identification mark on the right side of the ORS. If you do so, you will be disqualified.
- All candidates should hand over only the ORS to the invigilator before leaving the examination hall. Candidates are allowed to retain the Question paper and sheet attached to the ORS with him or her.

Write the Code of the Question Booklet received by you in the box provided and also darken the appropriate bubble with Blue/Black Ball Point Pen only.

Question Booklet Code	<input type="checkbox"/>	A	<input type="checkbox"/>	B	<input type="checkbox"/>	C	<input type="checkbox"/>	D
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You must write the subject in the box provided with ball point pen and darken the corresponding bubble.

Subject	Physics	<input type="checkbox"/>	Computer Sc.	<input type="checkbox"/>
	Chemistry	<input type="checkbox"/>	Biology	<input type="checkbox"/>
	Mathematics	<input type="checkbox"/>		

Name of the Candidate (with ball point pen in Block Capitals)					

↑
BARCODE

Roll Number (with ball point pen)					

Name of the Test Centre (with ball point pen in Block Capitals)					

Signature of the Candidate (with ball point pen)					

Certified that the above entries are checked, found to be correct, and the Question Booklet Code & the Code filled on the right side of the ORS by the candidate are the same.

Signature of Invigilator (with ball point pen)					

1	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	26	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	51	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
2	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	27	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	52	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
3	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	28	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	53	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
4	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	29	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	54	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
5	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	30	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	55	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
6	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	31	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	56	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
7	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	32	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	57	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
8	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	33	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	58	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
9	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	34	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	59	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
10	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	35	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	60	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
11	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	36	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	61	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
12	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	37	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	62	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
13	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	38	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	63	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
14	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	39	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	64	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
15	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	40	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	65	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
16	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	41	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	66	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
17	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	42	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	67	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
18	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	43	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	68	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
19	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	44	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	69	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
20	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	45	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	70	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
21	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	46	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	71	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
22	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	47	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	72	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
23	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	48	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	73	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
24	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	49	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	74	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D
25	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	50	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D	75	<input type="radio"/> A <input type="radio"/> B <input type="radio"/> C <input type="radio"/> D

ANNEXURE III **No.**
APPLICATION FORM FOR G2CET & ADMISSION TO SECOND YEAR
OF DEGREE COURSES IN ENGG & PHARMACY 2009-10.

REGISTRATION NO.

INSTRUCTIONS TO CANDIDATE:

1. Applicant must fill the form in his/her own handwriting.
2. Read rules of G2CET admission & eligibility criterion as given in the prospectus before filling the form
3. B. Sc. Degree holders are eligible for B.E Degree admission, subject to eligibility provisions of Goa University.
4. Tick the appropriate box wherever provided

Affix photograph

1. Degree course Applied for ELE/ETC/INFOTECH/COMP Mechanical Civil Pharmacy

2. Name of the Candidate (In Block letters as recorded in the HSSC/SSC)

Surname	First Name	Middle name
---------	------------	-------------

3. Date of Birth - - 1 9

4. Sex Male Female

5. Address for Communication			
Pin code	Phone	Mobile	

6. G2CET SUBJECT CODE (Tick appropriately) **7. G2CET CENTRE CODE**

EN	PH	20- Panaji	21- Margao
----	----	------------	------------

8. Payment Details

DD No	Bank Name	Dated	Amount
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

9. Academic Performance (Details of examination passed in all respect)

Examination	Branch	Month & Year of admission	Month & year of passing	Examining body	Marks Obtained	Maximum Marks	% of qualifying marks
B. Sc.							
Diploma							
HSSC							
SSC	---						

10. G2CET- 09 Performance

Seat No.

Score

For office use only	
Form is complete and accepted	Form is incomplete/held up/ rejected on Remarks
Checked by	Checked by
Verified by	Verified by

Remarks:

Additional Remarks, if any:

11. PARTICULARS OF THE PARENT/GUARDIAN OF THE APPLICANT

Name: _____

Relationship: _____ Occupation _____

Total Annual Income: _____

12. CHECK LIST FOR THE DOCUMENTS TO BE ATTACHED

1. Please attach self- attested xerox copies of the certificates in following order and tick appropriately.
2. No original document should be attached, as the Admission Committee shall not be responsible for loss of original document

	Documents	Attached	Checked
1	Photograph on the form (with 2 additional, identical photographs)		
2	Certificate of date of birth		
3	Certificate/provisional certificate of passing SSC		
4	Statement of marks of HSSC		
5	Institution/college leaving certificate		
6	Diploma/Degree Certificate from the Institute/Board/University		
7	Mark sheet/Transcript for MPEECS		
8	Mark sheets of all semester/year for others		
9	Certificate of income of both parents		
10	Acknowledgement card with photograph		
11	SC/ST/OBC certificate wherever applicable		

13. DECLARATION OF APPLICANT

Certified that I, _____ have read and accepted the provisions of the Prospectus and have enclosed the self-attested copies of all the certificates in proper order as required and submitted the application complete in all respects. In the event of my application found to be deficient or incomplete, and rejected by Admitting Authority, I shall be held responsible for the same. I hereby further declare that the particulars furnished above are true, complete, and correct to the best of my knowledge and belief. I am fully aware that in the event of any information being found false or incorrect or ineligible being detected before or after the admission, appropriate action as deemed fit by the Competent Authority can be taken against me.

PLACE: _____

DATE: _____

(Signature and name of the Applicant)

14.. Declaration By Parent / Guardian Of The Applicant

I Shri/Smt. _____ aged _____ years,

Father/Mother/Guardian of Mr./Miss. _____, resident of Village/Town _____, District _____, in the State of _____

_____ hereby declare that I have read and accepted the provisions of the provisions of the Prospectus and the Particulars furnished in the application including total annual income of both parents, are correct to the best of my knowledge and belief. I declare that I shall be held responsible for timely payment of all fees, rent, and other charges in respect of my son/daughter/ward during the period of his/her studies in the College. I hereby declare that the Institute will not in any way be held responsible for accidents/injuries caused to my ward during the Classes, Practicals, Inplant Training in Industries, Educational Tours, Sports activity etc.

PLACE: _____

DATE: _____

(Signature and name of the Parent/Guardian)

GOVERNMENT OF GOA
DIRECTORATE OF TECHNICAL EDUCATION
ADMISSION CENTRE 2009-10.

ACKNOWLEDGEMENT CUM ADMISSION CARD

Photograph	Registration No					
	Name					
	Eligibility	B.Pharm.Sc	BE CIVIL	BE MECH	BE ELE/ETC/COMP/INFO TECH	
	Order of Merit					
	Concession					

DETAILS OF ADMISSION (ADMISSION CARD)

Admission Round	Date	Course	Institute	Sign. of Authority
FIRST				
SECOND				
EXTRA (if applicable)				

1. Acknowledgement card along with the Registration No. is the proof of acceptance of the Application Form by the Admission Committee.
2. Acknowledgement card shall not be issued unless the form is complete in all respects.
3. Acknowledgement card shall therefore be the identity of the applicant for any inquiry, complaint, or correspondence with the admission committee.
4. Admission card, to be submitted to the institute to register the admission with the institute, shall be given at the time of admission.
5. Admission card shall not be handed over to the applicant in case the original documents are not submitted or the total fees payable are not paid at the time of admission.

SCHEDULE OF ADMISSION PROCESS

WORKING DAYS: MONDAY TO FRIDAY (except public holidays)

WORKING TIME: 10:00 Hrs. TO 13:00 Hrs. and 14:00 TO 17:00 Hrs.

ALL DATES PERTAIN TO YEAR 2009

No.	EVENT	DATE & TIME
1.	Sale of Prospectus with G2CET-09 and Admission Forms	06-04-09(Mon) to 24-04-09(Fri)
2.	Start of receiving of application for G2CET-09 and Admission forms at DTE	20-04-09(Mon)
3.	Last date for receiving G2CET-09 and Admission forms	24-04-09(Fri)
4.	Last date to collect Admit Card from Admission Centre	24-04-09(Fri)
5.	Dates of G2CET-09	15-05-09 (Fri)
6.	Result of G2CET-09 (Expected) and Merit List at Admission Centre	31-05-09(Sun)
7.	Dates for submission of documents	15-07-09(Wed)
8.	First Round of Admission	20-07-09(Mon)
9.	Second Round of Admission	27-07-09(Mon)
10.	Extra Round of Admission due to unexpected circumstances (if required)	As notified in news papers

Note: -1. The Directorate of Technical Education reserves the right to modify the schedule of admission depending upon the exigency of the situations.

2. The lists shall be displayed at 5.00 pm on the designated dates.

3. The admission process will start at 10.00 a.m.

4. Admissions shall be done in the following order:

- a) B.Pharm.Sc. admissions for Diploma holders in Pharmacy.
- b) B.E. admissions for B.Sc. Graduates.
- c) B.E. admissions for eligible Diploma holders in Engineering in the following order of branches: Civil, Mechanical, COMP /ELE/ETC/ /INFOTECH.