



**HYDERABAD INSTITUTE OF ARTS SCIENCE & TECHNOLOGY (HIAS<sup>T</sup>), HYDERABAD**

**PROSPECTUS  
FOR THE ACADEMIC SESSION 2024-25**



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## VISION STATEMENT

HiAST will maintain its tradition and surface as a still higher symbol of quality education with relevance to national needs to be provided to young men and women in the areas it will serve, imbibing in its ambit all the ingredients, tangibles and intangibles, which are pre-requisites for it in order to promote social growth and knowledge-based economic prosperity with special emphasis on proper harnessing and management of available resources.

## MISSION STATEMENT

To equip students with the state-of-the-art knowledge, skills and exposure required to succeed in today's global market place. As a private non- denominational Institution, HiAST will prepare and equip fully the students for holding the reign of the future of the region and the country / internationally.

## POLICY STATEMENT

HiAST is committed for equal opportunity for all students and staff in providing an environment where all people are respected and treated equally and fairly in all respects.



## ABOUT PRESIDENT

Late Dr. S.M. Qureshi, graduated in Civil Engineering from NED University of Engineering & Technology, Karachi holds Master's Degree in Structural Engineering from SEATO Graduate School, Bangkok, Thailand and PhD in Civil and Structural Engineering from University of Sheffield, United Kingdom in 1970. For his contributions to teaching, research and professional practice, he was appointed as Founder Member (Science), Pakistan Science Foundation, an important organization of Ministry of Science & Technology in 1974.

He was later appointed as the Founder Vice Chancellor of Mehran University of Engineering & Technology, Jamshoro. He served in this position for next more than 11 years and established it in two campuses at Jamshoro and Nawabshah. He also had the distinction of holding the office of Secretary to Government of Pakistan for over a decade. To develop highly qualified Scientific and Technological Manpower, he brought to fruition and the laying of the foundation of the Institute of Science and Technology of Pakistan, ISATOP renamed as SZABIST. He also got established National Science Research Fund (NCRF) to promote the scientific research in the Universities and R&D organizations. Besides, he got a number of other prestigious institutions and universities established in the country. He has, therefore, the experience of planning, founding, establishing and managing a number of Educational Institutions.

As Secretary, Ministry of Science and Technology, Government of Pakistan, appointed by end of 1994, he saw the establishment of COMSATS, which established later the renowned and leading COMSATS Institute of Information Technology (CIIT). He got a high-level Committee appointed by the Prime Minister to look into the reforming of the Science and Technology system to meet the contemporary needs of rapid economic development and security. He was elected as Vice Chairman, UN Commission on Science and Technology for Development (UNCSTD) and brought home to the developing countries the themes of developing their potential in the fields of Information Technology, Science and Technology. He, however, retired soon early in 1996. Dr. Qureshi has remained the Chairman and member of Governing bodies of a number of Government and Non-government prestigious organizations and learned bodies. He has also enjoyed a distinction of participating in a number of meetings, workshops, seminars and conferences at national and international forums including those of United Nations like UNESCO, UNCTAD, UNCSTD and ISESCO and COMSTECH of OIC etc. He has also published a number of research papers, reports etc. and has very widely travelled around the globe.



## PRESIDENT'S MESSAGE



**Late Dr. S. M. Qureshi**

Pakistan like many other developing countries needs to develop its education system to achieve multiple goals of training people in emerging fields and at different levels, both quantitatively as well as qualitatively to run a contemporary modern society and meet the requirements of the new century concerning the economic development, national security as well as the value system.

It is well recognized that science and technology provide most effective means of achieving rapid economic development, enhancing self-reliance improving the living standards of the society and ensuring the national security. The developed countries using science and technology as the engine of fast economic growth have increased their per capita income manifolds in short span of time. However, Pakistan with a low per capita income, high rate of population growth and illiteracy, poor health care and lack of other social services ranks very low in term of human development index. In order to bridge the gap, Pakistan has to strive hard through leap-frogging to build indigenous capability in the field of resource management and emerging sciences and development of new technologies.

To address the overall situation, the National Commission for Science and Technology (NCST) has recommended marching fast and keeping up with the developed and other developing countries in promoting Science and Technology, including Information Technology (IT), for Economic Development in the country. The IT is known to be a strong tool and an effective cross cutting technology for the development of different sectors of economy and strengthening of the national security. Presently it is also considered as an effective means to raise the employment scale as it provides extensive job opportunities inside and outside the country. Besides this, it helps to develop and export software to earn much-needed foreign exchange.

The Government of Pakistan has therefore; allocated huge funds to launch extensive programs for the promotion of Information Technology, especially in the fields of Human Resources Development and the Software export. To achieve this, the Government has newly created Information Technology Division in the Ministry of Science and Technology at the federal level and the Punjab and Sind Boards of Information Technology and other programs in the provinces. Hence, there is required an extensive institutional structure to assist the achievement of these objects.

Equally important is the field of Management Sciences to be developed and required manpower Produced to manage development enterprise, locally. The two field of learning viz. Management Sciences and Information Technology have become rather complimentary to each other and their promotion in terms of human resource development both qualitatively and quantitatively, is urgently required. Likewise, there are other number of fields of Science and Technology and so in fields like Humanities and Fine Arts in which a critical mass of quality manpower is required. With limited funds available, the private sector has to come forward to assist the public sector, but only to produce quality manpower. While, the Government must encourage, the public sector institutions should sincerely collaborate.

Hyderabad is a place of ever increasing Business and Industrial enterprise. Its catchment area extends to not only interior of Sind but is also influenced with the requirement of Karachi and rest of Pakistan. Lahore has been considered to be developed as Software Export Hub in the north and it is considered that Hyderabad may become another such a center in the southern part of the country. There are some centers of Information Technology already established in the private sector in Hyderabad, whereby a beginning towards this end has been made. But only a few can be counted among those with popular programs of quality. There is, therefore, great need to establish more centers in Hyderabad of high level and quality in the private sector. There has been also a long-standing desire in the people of the city of Hyderabad to establish a City /Hyderabad University in the town. It is in the backdrop that Hyderabad Institute of Arts, Science and Technology is established.

The Institute, in due course of time, is envisaged to expand its facilities to encompass the Intended University of Hyderabad. It will be a university of its own kind combining the Liberal Arts, Emerging Sciences and New Technologies. This is now much advocated by the recent international education conference organized by UNESCO and World Bank in Geneva, for modern universities. These are to be established by the developing countries, in the present time, to help the development of a balanced mind of the graduates when they have to center the arena of work and contribute directly to the development of a balanced mind of the graduates when they have to enter arena of work and contribute directly to the directly to the development of society. They are required not only to build sound economy and security, but also the value systems.

The success of this voluntary initiative in launching the HiAST, which is call for realization, will depend on how much support and appreciation is extended by the public sector established and more so by the people, who are to be the immediate beneficiaries. Their participation through all possible moral and other support will only prove their desire and need for such an effort. The HiAST will, however, endeavor through a humble limited beginning and shall expand while it consolidates the earlier programs in light of the real national requirements.

## EXECUTIVE DIRECTOR'S MESSAGE



**Lt. Col. Muhammad Khalid Khan, Retd.**

**HiAST** is the brain-child of a handful diehard people whose stature, radiating glowing self-confidence and casting iron conviction, is time tested. At the twilight of their journey, they are still burning their mid night oil in pursuit of excellence, undaunted and unruffled. They have yet preserved their values and never had these molested. These dynamic, progressive and innovative people, with clear vision and renewed vigor, have embarked upon the difficult path to prepare the youth to face the challenges of the future and take the nation to those heights which only house the greatest. HiAST has been conceived to be a way of life. It makes a pyramid on a much broader base. The road to success is a difficult one and the one emerging from HiAST is more difficult.

Here the going is tough and only the tough gets going. HiAST's approach is futuristic and the goals well defined. What all our students have to go through to their graduation day have been well conceived and adequately attended to. HiAST also takes into account the rigorous of practical life and these are addressed accordingly. The graduating HiASTIANS, should they bear with us, will figure out prominently and make their way, with relative ease, to the higher offices in public as well as private sectors. It is in this back drop that there is much beyond text book sand therefore, HiAST's day starts early and end rather late. If one is looking for ease, comfort and happy-go-lucky life, this is certainly not the place. HiAST is only for those who set their aims high. Time alone would testify and speak about its quality factor and its flag bearer, the students, will be its true reflection.

## INTRODUCTION TO HiAST



The 'MSK (Majeed, Shams & Khalid)' Society for Advancement of Learning is a non-profit social service non-governmental organization registered under the Societies Registration Act, XXI of 1860. It had a defined aim to establish a high-quality educational institution, imbuing in its ambit wide ranging area commensurate with job market and other national developmental needs of the country. The institution was envisaged to have the potential of progressively developing it into a fully-fledged University. Accordingly, it has taken an initiative to establish and manage the Hyderabad Institute of Arts, Science and Technology (**HiAST**) to vigorously pursue its immediate objects which are:

- To develop into a Centre of Excellence for advanced education.
- To go beyond the traditional education into the realm of cutting-edge technologies for the promotion of qualitative leap in our capability, correlating our national socio-economic development needs.

To emerge as a leader in higher education and applied research in multifarious fields, tailored to our needs.

Hyderabad, which symbolizes a coherent merger of the ancient and contemporary civilizations and cultures, is a place of ever increasing business and Industrial enterprise. Its catchment area extends to not only interior of Sindh but is also influenced with the requirements of Karachi and rest of Pakistan. There has been, therefore, a long-standing desire of the people of Hyderabad to establish a Hyderabad University in the city as the academic facilities presently available do not fulfill the educational requirements of this biggest city in the interior of Sindh, adequately.

It is in this backdrop that Hyderabad Institute of Arts, Science and Technology (HiAST) is being established. The Institute, in due course of time, is envisaged to have its own Charter and expand its facilities to encompass the Intended University of Hyderabad. It will be a university of its own kind combining the liberal Arts, Emerging Sciences and New Technologies. It is being envisaged through the new vision developed recently to have all these fields of learning rather in one place for the balanced growth of minds of those, who seek and those, who impart education.



To equip our students with the state-of-the-art knowledge, skills and exposure required to succeed in today's global market place. As a private non-denominational Institution, HiAST will prepare and equip fully the students for holding the reign of the future of the region and the country/internationally.

HiAST will surface as a symbol of highest quality education imbining in its ambit all the ingredients, tangibles and intangibles, which are pre-requisites for social growth and economic prosperity with special emphasis on resource management.

HiAST is committed for equal opportunity for all students and staff in providing an environment where all people are respected and treated equally and fairly in all respects



It was established in 2013 in pursuance of Sindh Assembly Act No. VI of 2013, which provided Charter for the establishment of an Institute, called as the Hyderabad Institute of Arts, Science & Technology (HiAST) Act 2013. However, it will come in to effect after grant of NOC by HEC; till such time the Institute will continue its affiliated programs.

### **Authorities of the HiAST:**

Following shall be the Authorities of the Institute:

- i. The Board of Governors;
- ii. The Academic Council;
- iii. The Boards of Faculties;
- iv. The Boards of Studies;
- v. The Selection Board;
- vi. The Board of Advance Studies and Research;
- vii. The Finance and Planning Committee;
- viii. The Discipline Committee;
- ix. The Affiliation Committee;
- x. Such other Authorities as may be prescribed by the statutes.

### **Officers of the Institute:**

- i. The Chairperson;
- ii. The President;
- iii. The Vice President;
- iv. The Deans;
- v. The Head of the Teaching Departments;
- vi. The Registrar;
- vii. The Director Finance;
- viii. The Controller of Exams of the University;
- ix. The Resident Auditor;
- x. The Librarian; and
- xi. Such Other persons as may be prescribed by the regulations to be the officers

### **Chairperson:**

- i. The Chairman shall be appointed by the Patron from a panel recommended by the society on such terms and conditions as the patron may determine.
- ii. The Chairman shall, in the absence of the Patron, preside at the convocation of the Institute.
- iii. The Chairman may remove any person from the membership of any Authority if such person;
- iv. Has become unsound mind; or
- v. Has been incapacitated or is unable to function as member; or
- vi. Has been convicted by a court of law in Pakistan of an offence involving moral turpitude or has been found in an activity against the interest of the Institute.

If the Chairman is satisfied that the proceedings of any Authority are not in accordance with provisions of this Act, the statutes, the regulations or the rules, he may, after calling upon such Authority to show cause why such proceedings should not be annulled, by order in writing, annul the proceedings.

**President:**

- i. The President shall be an eminent scholar and administrator of national or international repute and an educationist of distinction who shall be appointed by the Chairperson on the recommendations of the Board, for a period of four years on such terms and conditions as the Board may determine.
- ii. The President shall be the Chief Academic and administrative officer of the institute and shall be responsible for implementation of the provisions of this Act, the statutes, the regulations, the rules and the decisions of the Board and for the execution of the programs of the institute in accordance with the guidelines and policies formulated by the Board.
- iii. In particular, and without prejudice to the generality of the foregoing powers, the President shall also have the powers;
  - a. To submit plans of work and budget estimates of the Institute for consideration of the Board;
  - b. To direct the activities connected with the execution of programs for instruction, training, research, services to the community;
  - c. To authorize expenditure provided for in the approved budget and re- appropriate funds within the same major head of expenditure and report it to the Board in the next meeting;
  - d. To sanction and re-appropriate an amount not exceeding an amount fixed and revised by the Board from time to time for an unforeseen item not provided for in the budget, and report it to the Board at the next meeting.
  - e. To appoint, on the recommendations of the Selection Board and with the approval of the Board, teachers, officers and members of the staff of the institute and such other persons as may be necessary in accordance with policies and procedures approved by the Board so as to ensure the highest intellectual and moral qualities in the persons appointed.
  - f. To submit to the Board, in accordance with the rules of procedure, reports on the activities of the Institute and the execution of the plans of work;
  - g. To create and fill temporary post for the period not exceeding six months;
  - h. To undertake work assigned by the Board;
  - i. To delegate, subject to such conditions, if any, as may be prescribed, any of his powers under this Act, to an officer or other employee of the institute; and
  - j. To exercise and perform such other powers and functions as may be prescribed.
- iv. At any time when the office of the President is vacant, or the President is absent or is unable to perform the functions of his office due to illness or other cause, the Chairman shall make such arrangements for the performance of the duties of the President as he may deem fit.

**Vice-President:**

- i. The Chairman may, in consultation with the President appoint a Vice-President for the main campus the additional campus, if any, or for both the campuses jointly or separately, on such term and conditions as may be determined by the Chairman.
- ii. Where a Vice-President is appointed under sub-section (I) he shall, notwithstanding anything contained in this Act exercise Such powers and perform such functions of the President or such other powers and functions, as the President with the approval of the Chairman may delegate to him;

**Registrar:**

The Registrar shall be a whole-time officer of the Institute and shall be appointed by the Board on such terms and conditions as the Board may determine.

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE (BSCS) PROGRAM

The HiAST, Hyderabad offers BSCS Degree Program to the interested candidates with effect from the academic year 2023. The affiliation has been granted to start this this program by Mehran University of Engineering and Technology, Jamshoro. The details of the program are asunder:

Sr. No.	Discipline	Degree	No. of Seats
1.	Bachelor of Science in Computer Science	BS (CS)	50



## FACULTY MEMBERS OF THE HIAST, HYDERABAD

PERMANENT FACULTY		
Sr. No.	Faculty	Qualification
1	Prof. Tehseen Hafiz (HOD)	M.E (SWE)
2	Mr. Sajid Ahmed	M. Phil, MSc. Computer Science
3	Mr. Syed Faisal Ali Qadri	MS (CT)
4	Dr. Jawad Awan	PhD in IT
5	Mr. Muhammad Kamran	MS (IT)
6	Mr. Irfan Ali Nizamani	ME (IT)
7	Mr. Muhammad Kaleem	M.Sc. (Mathematics)
8	Mr. Muhammad Shakeeb	M.Sc. (Mathematics)
9	Ms. Sundas Islam	MBA (MIS), BE(Telecom)
10	Ms. Nida Shakeeb	MS (Statistics)
11	Mr. Owais Talal	MS (IT)
12	Mr. Muhammad Hasnain	MA English (Linguistic)

VISITING FACULTY		
Sr. No.	Faculty	Qualification
1.	Dr. Sammer Zai	PhD
2.	Dr. Ahsan Ansari	PhD
3.	Ms. Saba Shaikh	M.Phill
4.	Mr. Farid-U-Din Ghouri	MS (MIS)
5.	Mr. Wajid	PhD Scholar
6.	Ms. Afroz Siyal	MS (HRM)
7.	Ms. Shafia Qadeer	ME (SWE)
8.	Ms. Shazia Raza	ME (SWE)
9.	Ms. Noorul-Ain Qureshi	MBA
10.	Mr. Salman Qutbi	M.Com, MBA (Finance)
11.	Mr. Mirza Izhar Baig	M.A Islamiyat
12.	Dr. Shahram Shah	PhD (SWE)
13.	Mr. Umair Abbas	MS (IT)
14.	Mr. Tallat Mehmood	MA (Islamic Study)

ADJUNCT FACULTY		
Sr. No.	Faculty	Qualification
1	Prof. Dr. B.S. Chaudhary	PhD
2	Dr. Arjumand Bano	PhD
3	Dr. Ayaz Keerio	PhD
4	Dr. Yasir Arafat	PhD
5	Dr. Anwar Ali G. Shah	PhD
6	Mr. Shoaib Karim Memon	M.Phil., MSc (CS)
7	Mr. Muhammad Furqan	MSIT
8	Mr. Adnan Farooque	MSc. (Statistics)
9	Mr. Muhammad Shamim Murtaza	M.A (International Relation)
10	Mr. Asif Moiuddin	MBA
11	Mr. Ali Ahmed Pandhiani	MBA, MA (International, Business)
12	Ms. Sana Rafique	MS (HRM)
13	Mr. Fawad Mangi	M.E (SWE)
14	Ms. Hira Noman	M.E (SWE)
15	Mr. Vijdan Khalique	M.E (SWE)
16	Mr. Salman Adil	M.A (Pakistan Studies)
17	Prof. Aslam Rajput	M.A (English)
18	Mr. Dilawar Qureshi	M.A (English)
19	Mr. Mansoor Rajput	M.A (English)
20	Mr. Anwar Hussain Memon	CA



# RULES AND PROCEDURES FOR ADMISSION

## Admission:

(i) Admissions to the First Year for Bachelor of Science in Computer Science (BCSC) Degree Program are made according to the policies and rules, framed by the authorities of Mehran University of Engineering and Technology, Jamshoro from time to time. The rules mentioned in this prospectus are subject to revision by the competent authority of the University as and when deemed necessary and without any notice. The admission will be made against 40 seats available for the program on open merit basis for the candidates holding the domicile of Sindh Province only and the admission process will be conducted by Mehran University of Engineering and Technology, Jamshoro.

(ii) The candidates who apply for admission on the basis of fake certificates/documents (detected before or after their admission) shall be prosecuted under criminal law and their admission shall be cancelled. Additionally, they may also be debarred for a period of three years for future admission and all payments made to the MUET, Jamshoro/HiAST, Hyderabad shall be forfeited in favor of the HiAST.

## Eligibility for Admission:

(i) The candidates who have passed their **HSC Part-I** in Annual Examination of 2023 or **HSC Part-II** earlier up to 2021 with 60% marks (**excluding Grace Marks**) under **Pre-Engineering Group or equivalent** with Physics, Chemistry and Mathematics from any recognized Board of Intermediate and Secondary Education in Pakistan or from foreign countries, are eligible to apply for admission;

(ii) The candidates who have passed their **HSC Part-I** in Annual Examination of 2023 or **HSC Part-II** earlier up to 2021 with 60% marks (**excluding Grace Marks**) under **Pre-Medical Group or equivalent** from any recognized Board of Intermediate and Secondary Education in Pakistan or from foreign countries, are eligible to apply for admission;

(iii) The candidates who have passed their **HSC Part-I** in Annual Examination of 2023 or **HSC Part-II** earlier up to 2021 with 60% marks (**excluding Grace Marks**) under **General Science Group or equivalent** from any recognized Board of Intermediate and Secondary Education in Pakistan or from foreign countries, are eligible to apply for admission;

(iv) The candidates who have passed their Diploma of Associate Engineer (**DAE\***) in Annual Examination of 2023 or earlier up to 2021 with 60% marks (**excluding Grace Marks**) in any of the approved disciplines including Information Technology, Software, Computer, Electronics **or equivalent** from any recognized Board of Technical Education in Pakistan are also eligible to apply for admission only in the relevant discipline under the Regular Scheme.

Name of Degree Program	Name of Group of Studies Eligibility for Admission
Bachelor of Science in Computer Science	<ul style="list-style-type: none"><li>• Pre-Engineering</li><li>• Pre-Medical (on condition) **</li><li>• General Science</li><li>• Diploma of Associate Engineer (DAE)</li></ul>

(v) The candidates who have passed their **HSC Part-II** in the Annual Examination before 2021 under any of the above-mentioned groups or equivalent shall not be eligible to apply for admission.

\* **Diploma of Associate Engineer (DAE)** is a three years' post-secondary program of instruction in various **engineering** disciplines. It includes regular **studies** with classroom lectures, workshop assignments, laboratory experiments, industrial projects and industrial tours.

\*\* The students need to clear Foundation Mathematics-I and II in the first year of their studies.

- (vi) a). The candidates who are changing their groups from Pre-Engineering to Pre-Medical or vice-versa; they have to provide evidence for the change of group in shape of slip issued by the controller of the concerned education board. The slip shall be uploaded on the Admission Portal.
- b). Further that CPN of such candidates shall be calculated on the basis of **HSC Part-I** marks certificate provided by the candidate at the time of submission of documents decided by the University.
- c). Furthermore, the pre-admission test for such candidates will align with the group mentioned in the slip. Once they have taken the test within that group, they will only be eligible for admission in disciplines relevant to that group, and no subsequent group changes will be allowed under any circumstances.
- d). The group changing candidates shall submit an affidavit that he/she shall not claim any additional marks after the declaration of result of changed subject in any case whatsoever.
- (vii) The candidates who are getting admission on the basis of the result of **HSC Part-I** have to secure 60% marks (**excluding Grace Marks**) in **HSC Part-II**, otherwise, **their admission shall stand canceled and none of the fees shall be refunded.**
- (viii) Those students, who were admitted to any other institutes/universities before applying for admission in HiAST, Hyderabad and were rusticated, debarred or their admissions were canceled, shall not be considered for admission in the Institute. Additionally, if the students withhold information regarding such disciplinary action and they were granted admission; their admission shall be canceled immediately after ascertaining such facts. Those candidates who have been convicted involving of moral turpitude shall also be refused admission in the Institute.
- (ix) The candidates who have been allowed admission previously with any batch by this Institute shall not be considered for fresh admission. Their admission forms, if received by the Institute shall be rejected without any notice and their admission shall be cancelled at any stage later on.

### **Admission Form:**

Call for admissions is advertised on the Mehran UET, Jamshoro website [www.muett.edu.pk/](http://www.muett.edu.pk/) Newspapers. The candidates who intend to apply for admission must follow the guidelines mentioned on the Directorate of Admissions website [admissions.muett.edu.pk](http://admissions.muett.edu.pk).

The candidates are required to deposit the admission processing fee online or otherwise in any branch of Habib Bank Ltd, under **HBL CMD-A/C. No. 00427991903403**. The candidates have to submit a set of photocopies of all the required documents and paid copy of bank challan with Mehran UET, Jamshoro. The University authorities after receipt of application and admission processing fee will send admit slips to candidates for pre-admission test. The candidates have to print admit slips and bring the same on the day of pre-admission test along with original CNIC/ B-Form. The appearance / passing in the pre-admission test does not mean the candidate is eligible for admission. The eligibility of candidate for admission is decided by the admission office of the University after scrutinizing the documents provided by the candidates. The eligibility criteria for admission are given here above in relevant Clause. Since the admission form is a legal document, any wrong information provided therein or tampering it in any other way is illegal and may result in rejection of the form outrightly

### **Pre-Admission Test:**

In accordance with the policies adopted by the Federal as well as Provincial Governments, all the eligible candidates applying for admission are required to appear in the Pre-admission Test



organized by the University. Candidates having secured less than 40% score in the Pre-admission Test shall not be eligible for the admission.

The final merit list of the candidates is prepared by calculating their overall merit, based on the marks obtained in each of the following examinations, multiplying them with the respective weightage and adding the result to calculate the “Composite Percentage Number” (CPN\*) as described below:

Sr. No.	Percentage of Marks in	Multiplying Weightage
A.	Secondary School Certificate - Matriculation:	0.10
B.	Higher Secondary School Certificate - Intermediate: (with adjusted marks**)	0.30
C.	Pre-admission Test Score:	0.60

\* **For example:** If a candidate has secured 70% marks in SSC, 60% marks in HSC and 50% marks in Pre-admission Test; his/her CPN would be:  $(70 \times 0.1) + (60 \times 0.3) + (50 \times 0.6) = 7 + 18 + 30 = 55.0000$

\*\*Adjusted marks mean marks secured in HSC examination plus additional marks if any, as defined in the relevant Clause, minus marks to be deducted as defined in relevant Clause.

The CPN of the candidates on the merit list may be calculated with four digits after decimal point. The following steps may be taken, in case of tie of CPN even after exercising the above action:

- The candidate having higher pre-admission test marks will be higher in merit.
- The candidate having higher HSC marks will be higher in merit.
- The candidate having higher SSC marks will be higher in merit.
- The candidate having higher HSC Math-II marks will be higher in merit.
- The candidate having higher HSC Math-I marks will be higher in merit.

### Interviews:

After the receipt of the result of Pre-admission Test, a comprehensive merit list is prepared and a number of candidates roughly equivalent to the reserved seats is called for interview before the Admission Committee of the University.

The candidates may be accompanied with his/her guardian declared in his/her admission form during interview. The interviews are held at Mehran UET, Jamshoro on the dates as announced on MUET and HiAST websites: [www.mueta.edu.pk](http://www.mueta.edu.pk)/[www.admissions.mueta.edu.pk](http://www.admissions.mueta.edu.pk) and [www.hiast.edu.pk](http://www.hiast.edu.pk).

The candidates will also be required to bring their original documents as mentioned below for verification:

- Marks Certificate of SSC – (Matriculation).
- Marks Certificate of HSC Part-I (Pre-Engineering, Pre-Medical, and General Science Groups).
- Marks Certificate of DAE (if applicable)
- Domicile Certificate of candidate.
- PRC on ‘C’ Form of candidate.
- National Identity Card / B-form (as applicable).
- Medical Certificate on prescribed proforma\*.
- Undertaking Certificate on prescribed proforma\*.

\*Proformas can be downloaded from [www.admissions.mueta.edu.pk](http://www.admissions.mueta.edu.pk).

It is mandatory for the candidates to appear before the Admission Committee for interview. If any candidate fails to produce all or any of the above-mentioned documents, he / she shall not be allowed to appear in the interview and will be disqualified from the process of admission.

The admission shall be allowed on the day of interview; and if admitted, all the above original documents would be retained by the institute for at least **one entire year**. The candidates are advised to keep a photocopy of all the documents with them. The candidate has to deposit the fees as mentioned in relevant fees **Clause** at the time of interview.

### **Distribution of Seats:**

All forty (40) seats of the program shall be allocated on the day of interview on open merit basis to the candidates holding domicile of Sindh Province only.

### **Rectification of Mistakes:**

The Admission Merit Lists/Call Lists announced by the University are provisional and if any mistake is detected, it is rectified accordingly.

### **Admission of Candidates Who Fail to Deposit the Admission Fees on the Interview Day**

If any of the candidates fails to deposit admission fees on the day of interview in the University bank account, his / her seat will be allotted to the following candidate on the merit list.

### **Additional Marks:**

The candidates, who have produced certificates of Hafiz-e-Quran on printed form from registered Madrasahs and clear the test of Hifz taken by the University, are also considered to have additional 10 marks to be added to the marks of **HSC Part-I**.

### **Deduction of Marks Due to Gap in Education:**

In case of a gap or repetition of HSC/DAE examination, the merit is determined as described below:

One-half (½) percent of the aggregate marks is deducted for each gap of one academic year after Matriculation examination from the total marks of HSC Part-I/DAE examination or equivalent for the purpose of determination of merit. This deduction is applicable whether the HSC Part-I/DAE examination had been repeated or the gap had occurred owing to any other reason.

### **Closing of Admissions Process:**

The admissions process for the session is made up to the end of **FOURTH week** from the date of start of the classes. After this period, no new admissions are made.

### **NOC and Study Leave Order for Candidates already in Service:**

The candidates who are already in service at the time of submission of admission form should attach NO OBJECTION CERTIFICATE from their employers for their admission. After selection to the First Year Class, they are required to submit study leave order and relieving order from their employers for study purpose at the University because the BS in Computer Science Degree Program is a regular full time and day program and no student admitted in the institute is allowed to engage himself/herself in any employment during his / her studies.

### **Admission in any Other Institute:**

Being a full-time program of studies, no student of this Institute is allowed to enroll in any other full time or part time courses of studies in any other educational institution without prior permission of the authorities of the institute. Violation of the above may lead to the cancellation of his/her admission.

## Re-Admission Policy:

Those students who are eligible for any semester of any year and remained absent from their classes and examinations for any reason, are considered for re-admission in the appropriate semester where they left their studies with the appropriate batch subject to application of other relevant rules by the Re-admission Committee, provided that their absence is not more than **two calendar years**. However, their attendance to determine their eligibility to appear in the semester examination is considered from the date of issuance of re-admission order. Such admissions may be made **within four weeks** from the date of start of classes of particular session.

## Enrolment Card:

Each student is required to enroll himself / herself in the University / Institute after the finalization of the discipline in the First Semester of First Year and obtain enrolment card accordingly. In case of failure, he / she is not allowed to appear in the examination of the First Semester of the First Year.



## Admission and Tuition Fees:

The admission fee is non-adjustable and non-transferable. The fees details are given below:

<b>(1) FEES PAYABLE AT THE TIME OF ADMISSION:</b>	
<b>(a). Fees Payable to MUET, Jamshoro*:</b>	
Admission Fees (Per Year)	Rs. 25,000-00
Enrollment Card Fee (Once)	Rs. 2,010-00
Marks Certificate Verification Fee (Once)	Rs. 2,500-00
Exam Fee (including Marks Certificate) for the Regular Exams (Per Semester)	Rs. 6,500-00
<b>Total Fees Payable at the Time of Admission:</b>	<b>Rs. 36,010-00</b>
<b>(b). Fees Payable to HiAST, Hyderabad:</b>	
Semester Fee (Per Month)	Rs. 60,000-00
Security Deposit (Once)**	Rs. 10,000-00
<b>Total Fees Payable at the Time of Admission:</b>	<b>Rs. 70,000-00</b>
<b>Total of (a) + (b):</b>	<b>Rs. 106,010-00</b>

**(2) FEES PAYABLE TO MUET, JAMSHORO EACH YEAR:**

Admission Fees Payable to <b><u>MUET, Jamshoro Annually:</u></b>	Rs.	25,000-00
Examinations Fee (including Marks Certificate) for the Regular Semester Examinations (Per Semester – <b>6,500 x 2 = 13,000</b> )	Rs.	13,000-00
<b>Total Fees Payable to MUET, Jamshoro Annually:</b>	<b>Rs.</b>	<b>38,000-00</b>

**(3) FEES PAYABLE TO HIAST, HYDERABAD AT THE START OF EACH SEMESTER:**

<b>Semester Fees Payable to <u>HiAST, Hyderabad:</u></b>	<b>Rs.</b>	<b>60,000-00</b>
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\*The students are required to pay admission fee at the time of admission and at the start of every semester in the **HBL Bank Account No. 00427991903403 in any branch of Habib Bank Limited**, through challan available on the MUET admissions website.

\*\*The Security Deposit is charged once at the time of admission and the same is refunded upon written request of the students after successful completion of their studies.

**Admission Fee Refund Policy:**

Where the University strictly follows the National Level Fee Refund Policy at Higher Education Institutions at Pakistan which is as under:

<b>% of Admission Fee</b>	<b>Timeline for Semester</b>
Full 100% fee refund	Up to 7 <sup>th</sup> day (including holidays) of convene of classes
Half 50% fee refund	Up to 15 <sup>th</sup> day (including holidays) of convene of classes
No Refund 0%	From 16 <sup>th</sup> day of convene of classes.

**Note:** All fees shall be paid on or before the 10<sup>th</sup> day of every month. A late payment surcharge of Rs.100/- will be charged till 15<sup>th</sup> day of the month. If the fee is not paid till the 15<sup>th</sup> day of the month, late payment surcharge of Rs. 500/- will be charged, which *shall not be waived off*.

## THE COURSES

The details of the courses for BSCS a 4 years / 8 semesters program (131 CHs) with effect from the academic year 2024 and onwards are given hereunder:

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>1<sup>st</sup> Semester</b>			
CSC-101	Computer Fundamentals	3	1
CSC-102	Computer Programming Concepts	3	1
IS-111/SS-104	Islamic Studies/Ethics	2	0
PS-106	Pakistan Studies	2	0
MATH-108	Applied Calculus	3	0
<b>Total</b>		<b>13</b>	<b>2</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>2<sup>nd</sup> Semester</b>			
CSC-151	Object Oriented Programming	3	1
ENG-101	Functional English	2	0
ES-112	Basic Electronics	3	1
EL-116	Applied Physics	3	1
MATH-112	Linear Algebra and Analytical Geometry	3	0
<b>Total</b>		<b>14</b>	<b>3</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>3<sup>rd</sup> Semester</b>			
CSC-201	Digital Logic and Design	3	1
CSC-202	Web Technologies	3	1
CSC-203	Data Structures and Algorithms	3	1
CSC-204	Database Systems	3	1
MATH-228	Discrete Mathematics	2	0
<b>Total</b>		<b>14</b>	<b>4</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>4<sup>th</sup> Semester</b>			
CSC-251	Computer Organization and Assembly Programming	3	1
CSC-252	Computer Graphics and Animations	3	1
MATH-214	Statistics and Probability	3	0
ENG-206	Communication Skills	2	0
	<b>Elective-I</b>	3	1
<b>Total</b>		<b>14</b>	<b>3</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>5<sup>th</sup> Semester</b>			
CSC-301	Operating Systems	3	1
CSC-311	Computer Networks	3	1
MGT-122	Principles of Management	2	0
MATH-319	Numerical Analysis	3	0
	<b>Elective-II</b>	3	1
<b>Total</b>		<b>14</b>	<b>3</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>6<sup>th</sup> Semester</b>			
CSC-351	Software Engineering	3	0
CSC-361	Theory of Automata	3	0
CSC-371	Microcontroller & Embedded Systems	3	0
ENG-000	Technical & Business Writing	3	0
	<b>Elective-III</b>	3	1
<b>Total</b>		<b>15</b>	<b>1</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>7<sup>th</sup> Semester</b>			
CSC-401	Distributed Computing	3	0
CSC-411	Artificial Intelligence	3	1
CSC-421	Professional Ethics	2	0
	<b>Elective-IV</b>	3	0
CSC-498	Thesis Project	0	3
<b>Total</b>		<b>11</b>	<b>4</b>

Course Code	Subject Name	Credit Hours	
		Theory	Practical
<b>8<sup>th</sup> Semester</b>			
CSC-451	Entrepreneurship and Leadership Skills	3	0
CSC-461	Data Sciences	3	1
CSC-471	Human Computer Interaction	3	0
	<b>Elective-V</b>	3	0
CSC-499	Thesis Project	0	3
<b>Total</b>		<b>12</b>	<b>4</b>



## SCHOLARSHIP / FINANCIAL ASSISTANCE

There is no standing fee concession to the students at the time of admission. However, merit cum need based Scholarship / Financial Assistance will remain in vogue by the HiAST, Hyderabad as long as the student's conduct, attendance and academic performance remain satisfactory i.e., attendance not less than 75%. It will be forfeited partly or completely, should the conduct, attendance and academic performance of the student decline.

## SOCIAL WELFARE AND CO-CURRICULAR ACTIVITIES

Students in all programs are encouraged to participate in social and academic activities. Programs for Social and academic activities are arranged for the benefit of the society and grooming of students. Currently, the HiAST has a number of student bodies to organize various activities as follow:

- i. Art & Culture
- ii. Extra Curriculum
- iii. Social Work
- iv. Flora and Fauna

## INTERNSHIP PROGRAMS / SEMINARS

Internships of substantial durations are arranged by the HiAST for the benefit of the students in order to get them the feeling and taste of the professional atmosphere. Practical training shall be given more priority than theory.

Students of diverse fields shall undergo through the process of learning by preparing and compiling reports on multinational companies and doing research and project works. Seminars shall be arranged and guest speakers will be invited to deliver lectures on different topics related to the students' course works.

## IMPORTANT NOTICES

The University reserves the right to make changes, delete or add any of the programs or parts thereof and any other information on matters referred to in this prospect, without any prior notice. All the students are subject to the rules, regulations and procedures of the HiAST in accordance with Sindh Assembly Act No. VI of 2013 and the University.



## REGULATIONS FOR SEMESTER SYSTEM FOR AFFILIATED COLLEGES

**Regulations regarding the General Scheme of Studies for the Bachelor's Degree Programs (including BS and BBA) of the Colleges/Institute affiliated with the Mehran University of Engineering and Technology, under Section 47(1) (n) of the Act 1977.**

1. **Short Title:** These Regulations may be called the Mehran University of Engineering and Technology Bachelor of Degree Courses Regulations 2021 for the affiliated College/Institute, repealing such regulations framed by the University authorities (if any).
2. These Regulations shall be subject to the Mehran University of Engineering and Technology General scheme of Studies for the Bachelor's degree courses Statutes 2012.
3. **Commencement:** These Regulations shall be deemed to have come into force *with effect from 21 Batch* offered at affiliated College/Institute.
4. **Definitions:** In these Regulations unless otherwise expressly stated:
  - i. "University" means the Mehran University of Engineering and Technology, Jamshoro.
  - ii. "Academic Year" means the Academic Year of the University.
  - iii. "spring/Fall Semester" means a Period of 21 weeks out of an academic year for teaching and evaluation and /or guidance of the students of the University.
  - iv. "Vice-Chancellor", "Pro Vice Chancellor", "Dean", "Director", "Chairman/Chairperson", "Teacher" and "Controller of Examinations" means respectively the Vice-Chancellor, the Pro Vice Chancellor, the Dean of Faculty, the Director of Institute, the Chairman/Chairperson of Teaching Department, the Teacher and the Controller of Examinations of the University.
  - v. "Affiliated College". Each College/Institute affiliated with Mehran University of Engineering & Technology, Jamshoro.
  - vi. "Departmental Committee". Each College/Institute will have a Departmental Committee consisting of three seniors most teachers of the Department of the College/Institute including Principal/Director as Convener.
  - vii. "Credit Hours (C.H.)" have been defined in Section 6.
  - viii. "Quality Point (Q.P.), Grade Point Average (GPA), and "Cumulative Grade Point Average (CGPA) has been defined in Section 17.
  - ix. "Internal Examiner" means the subject teacher who taught the subject.
  - x. "External Examiner" means the subject expert from the MUET or any other University or expert from the industry having 15 years' experience in the relevant area; who have not taught the subject to the concerned class.
  - xi. "Supervisor" is the teacher who guided the student(s) in the project.





5. **Undergraduate Structure of Bachelors of Science/Study/Business Administration Degree Course is given in the table below:**

**Table 5.1**

<b>Degree Programs</b>	
<b>4 Years Duration</b>	
Total No. of Credit Hours (Minimum)	130 Credit Hours
Total No. of Credit Hours (Maximum)	140 Credit Hours
Semester Duration	Minimum of 16 weeks of teaching excluding examinations
Course Duration	Minimum of 8 semesters Maximum time limit of 6 years, further extendable for one year with the approval of Statutory Bodies
Course Load per Semester for Regular Full -Time Students	15-18 Credit Hours (In special cases 15 –19 Credit Hours)

6. **Credit hours for undergraduate degrees:**

- 6.1 A credit hour means teaching/learning a theory course for one hour each week throughout the semester.
- 6.2 One credit hour in laboratory or practical work/project would require lab contact of three hours per week throughout the semester.
- 6.3 The credit hours are denoted by two digits within brackets with a plus in between. The first digit represents the theory part while the second (right side) digit represents the practical. Below Table 6.1 gives the possible distribution of Theory and Practical Credit hours.

**Table 6.1**

**Distribution of Theory and Practical Credit Hours**

<b>Credit Hours</b>	<b>Distribution in Theory and Practical Hours</b>
01	(0+1)
02	(2+0) / (0 + 2)
03	(3+0) / (2 + 1) / (0 + 3)
04	(3+1)

7. **Course layout for undergraduate students:**

- 7.1 4 years BS(CS) Degree Program is composed of 130-140 credit hours in which 130 represents the minimum and 140 represents the maximum credit hours required to be completed.
- 7.2 **For Computer Science Programs:** The courses for the Computer Science program will consist of minimum 130 credit hours, out of which a minimum of 100 credit hours of Computing and Computer Science courses and minimum of 30 credit hours of general and university courses, subject to meeting the requirement of the respective accreditation councils.
- 7.3 **For Social & Basic Sciences Programs:** The courses for social and basic sciences disciplines will consist of 60-65% of curriculum towards the discipline specific

areas, and 35-40% minor/electives, subject to meeting the requirement of the respective accreditation councils.

- 7.4 **Final Year Project (FYP)/Thesis/Business Plan:** Every student should write a thesis project report/Business Plan in the final year (7<sup>th</sup> & 8<sup>th</sup> Semesters), of 06 credit hours in a group comprises of maximum 03 students, on approved research.
- 7.5 **Internship:** Students should be encouraged to do internship in industry/research/business organization.

## 8 Academic Year:

There will be two regular semesters in an academic year. Following is the breakup:

Sr. No.	Description	Duration
i.	Teaching duration of 1 <sup>st</sup> semester (Including Mid Semester Exam).	16 Weeks
ii.	Preparation and conduct of final 1 <sup>st</sup> Semester Exam	06 Weeks
iii.	Teaching duration of 2nd Semester (Including Mid Semester Exam).	16 Weeks
iv.	Preparation & conduct of Final 2 <sup>nd</sup> Semester Exam	06 Weeks
v.	Summer Break	06 Weeks
vi.	Winter Break	02 Weeks
	<b>Total Duration of Semesters</b>	<b>52 Weeks</b>

### Minimum Number of Contact Hours for a Theory and Practical Subject.

Sr. No.	Theory / Practical	Credit Hours	Contact Hours
1	Theory	2	28
2	Theory	3	42
3	Practical	1	42
4	Practical	2	84

## 9 The minimum requirement for each semester course:

- Attendance
- Assignments
- Tests (minimum two)
- Mid Semester Examination
- Final Semester Examination

The Schedule of Tests, Mid Semester & Final Semester Examination shall be as under:

Sr. No.	Activity	Period
1.	Mid Semester Examination	After 8-weeks
2.	Final Semester Examination	After 16-weeks

## 10. Distribution of Marks:

The distribution of marks for each theory and practical course in a Semester will be as follows:

THEORY			
Description		Maximum	Minimum
		100 Marks	50 Marks
i.	Attendance	10	05
ii.	Test(s)	05	03
iii.	Assignments	05	02
iv.	Mid Semester Exam:	20	10
v.	Final Semester Exam:	60	30
Totals		100 Marks	50 Marks

PRACTICAL			
Description		Maximum	Minimum
		100 Marks	50 Marks
i.	Attendance	10	05
ii.	Lab Evaluation Work	30	15
(a)	Objective Type Test	30	15
(b)	Conduct of Practical / Viva Voce	30	15
Totals		100 Marks	50 Marks

**Note:** For the courses carrying other than 100 & 50 marks the distribution of marks will be accordingly.

### Final Year Project / Thesis / Business Plan

Semester	Thesis CH	Thesis Credit Marks	Maximum Sessional Marks (By Supervisor)	Maximum Marks for Thesis Viva Voce/Examination		
				Internal	Expert	Chairman
7 <sup>th</sup>	3	100	25	25	25	25
8 <sup>th</sup>	3	100	25	25	25	25

## 11. Grade Equivalent:

Grade	Grade Point	MARKS			
		THEORY		PRACTICAL	
		Max. Marks 100	Min. Marks 50	Max. Marks 100	Min. Marks 50
A+	4.0	85 & above	42 & above	85 & above	42 & above
A	3.75	75 to 84	37 to 41	75 to 84	37 to 41
B+	3.5	66 to 74	33 to 36	66 to 74	33 to 36
B	3.0	60 to 65	30 to 32	60 to 65	30 to 32
C+	2.5	55 to 59	27 to 29	55 to 59	27 to 29
C	2.0	50 to 54	25 to 26	50 to 54	25 to 26
F	0.0	0 to 49 (fail)	0 to 24 (fail)	0 to 49 (fail)	0 to 24 (fail)

- Fraction is to be considered as a whole number.
- Subjects carrying more than 100 marks in Theory/Practical will be awarded grades accordingly.
- The results will be prepared on the basis of Grade Point Average (GPA).

### Computation of semester grade point average (GPA) and cumulative grade point average (CGPA)

#### **GPA:**

This is a figure ranging preferably from 0.00 to 4.00 be used to indicate the performance of a student in the semester concerned. A standard scale of 0.00 to 4.00 is adopted.

$\text{GPA} = \frac{\text{Sum of all courses in a semester (Course Credit Hours x Grade Point Earned)}}{\text{Total Credit Hours taken in the semester}}$
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Semester Grade Point Average (GPA) and Cumulative Grade Point Averages (CGPAs) will be calculated using the following relationship:

$\text{CGPA} = \frac{\text{Sum of all courses taken in all semesters (Course Credit Hours x Grade Point Earned)}}{\text{Total Credit Hours taken in all Semesters}}$
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### 12 Attendance Requirement:

- i. A student should have at least 75% attendance to appear in Final Semester Examination.
- ii. In genuine cases, maximum 10% condonation in attendance shall be the discretionary powers of the Dean, FoST&H on the basis of an application to be scrutinized by Principal/Director of the College/Institute concerned and routed through Inspector Colleges of the University.
- iii. The eligibility attendance of Theory/Practical for late admitted students to First Semester of First Year only shall be calculated from the date of admission.

### 13 Distribution of Attendance Marks:

Distributions of attendance marks will be as given in the following tables:

<b>A. For Theory Head of 3 Credit Hours, i.e., 100 Marks</b>		
<b>Sr. No.</b>	<b>Lecture Hours attended</b>	<b>Marks to be awarded</b>
1	41 to 42	10
2	37 to 40	09
3	33 to 36	08
4	31 to 32	07
5	Below 31	00

<b>B. For Theory Head of 2 Credit Hours, i.e., 50 Marks</b>		
<b>Sr. No.</b>	<b>Lecture Hours attended</b>	<b>Marks to be awarded</b>
1	27 to 28	05
2	24 to 26	04
3	21 to 23	03
4	Below 21	00

<b>C. For Practical Head of 2 Credit Hours, i.e., 100 Marks</b>		
<b>Sr. No.</b>	<b>Lecture Hours attended</b>	<b>Marks to be awarded</b>
1	95% to 100%	10
2	86% to 94%	09
3	81% to 85%	08
4	75% to 80%	07
5	Below 75%	00

<b>D. For Practical Head of 1 Credit Hour, i.e., 50 Marks</b>		
<b>Sr. No.</b>	<b>Lecture Hours attended</b>	<b>Marks to be awarded</b>
1	90% to 100%	05
2	80% to 89%	04
3	75% to 79%	03
4	Below 75%	00

The Lab's carrying marks other than 50 or 100 the distribution of attendance marks will be accordingly.

#### **14 Conduct of Sessional Work/Mid-Semester and Final Semester Examinations:**

- i. 10/5 marks of assignment for subjects carrying 100/50 marks shall be awarded by the teacher concerned after conducting 3/2 class tests (MCQs type) and 2/1 best of 3/2 class tests shall be counted toward award of 10/5 marks. The entire record of evaluated class tests shall be submitted by the concerned subject teacher to Examinations Department at the time of submission of final results.
- ii. At the end of each semester, the marks of attendance, sessional work, and lab work secured by the student in Theory and Practical of the concerned subject shall be announced by the concerned subject teacher by displaying on the Notice Board.
- iii. Mid Semester Examination will be conducted by the Examination Department in collaboration with the concerned Department/Institute of the University.
- iv. The mid-semester examination will be conducted only for theoretical subjects.
- v. The time duration for mid semester examination will be 1 hour for 3 CHs course and each question paper will contain 3 questions with a choice to attempt any two, whereas the time duration for 2 CHs course examination will be 45 minutes and the question paper will contain 3 questions with a choice to attempt any two.
- vi. The marks of the mid semester examination question paper of 3 CHs will be 20, and for the 2 CHs course will be 10.
- vii. No MCQ's, fill-in the blanks or objective type questions will be given in mid semester examination. The questions shall be descriptive.
- viii. The scripts of all assignments will be returned and those of the tests and mid-semester examination will be shown to the students after evaluation. Each blank page/gaps in the scripts will be stamped/lines drawn, by the teacher concerned.
- ix. The marks of each test and mid-semester examination will be displayed and solutions will be discussed in the class room immediately after evaluation. If any student is not satisfied with the evaluation, he/she may convey this to the Principal/Director of the concerned College/Institute within 7 days of the result thus displayed and the matter will then be looked into by the Departmental Committee, whose decision will be final. Any such objections after the expiry of 7 days will not be accepted. A copy of the Marks of the tests and mid-semester will

be deposited by teacher in department office immediately after the announcement of the results.

- x. Final Semester Examination will be of 3-hours duration for 3 CHs course and each question paper will contain 5 questions without any choice. Similarly, Final Semester Examination will be of 2-hours duration for 2 CHs course and each question paper will contain 3 questions without any choice. Final semester examination will be conducted from the whole course.
- xi. The teachers will prepare 3 copies of the result of each course separately at the end of each semester (attendance, test, mid semester examination. Assignments and final semester examination) on the prescribed proforma and shall forward two copies to the Controller of Examinations of the University.
- xii. The cumulative result (including all the marks of attendance, assignments, tests, mid-semester examination and final semester examination) of each semester of a year will be announced by the Controller of Examinations of the University.

#### **15. Appearance in the Semester Examination:**

The semester examination will be open to the students who full-fills the following conditions:

- i. During the semester immediately preceding the examination, he/she has been on the roll list of the concerned Department.
- ii. He/she has submitted his/her Examination Form duly filled-in completely along with the prescribed fee to the Controller of Examinations of the University within the due date announced by the University.

#### **16. Setting of Question Paper/Assessment of Scripts and conduct of Practical Examination:**

The mode of setting of question papers (Theory/Practical) and assessment of scripts for Theory Examination of the University as well as conduct of Practical Examination shall be as under:

##### **(a) Setting of Question Paper:**

###### **Theory:**

- i. The Internal Examiner of both theory and practical in Regular/Supplementary Examinations shall be recommended by the Principal/Director to the Controller of Examinations of the University. The internal Examiner shall preferably be the subject teacher otherwise a proper justification may be communicated to the Controller of Examination for further consideration.
- ii. The External Examiners of both Theory and Practical in Regular/Supplementary Examinations shall be appointed by the Vice-Chancellor from the Panel of Examiners recommended by the Controller of Examinations of the University in coordination with the Chairman/Director of the Department/ Institute of the University through Dean, FoST&H.
- iii. The Internal Examiner for the Theory paper will set the Question Paper induplicate which shall be sent to the External, along with a copy of syllabus in sealed envelope by the Controller of Examinations of the University who shall set the final question paper with 30% moderation/change of the total number of questions. The Internal Examiner shall submit question paper two weeks before the commencement of the Exams and same shall be sent to External Examiner by Controller of Examinations of the University one week before commencement of Final Examination.
- iv. In specific cases if the question paper is not submitted by the External Examiner two days before the date of commencement of the Examination, the question paper set by the Internal Examiner shall be deemed final.

- v. The choice of attempting the questions shall be limited to a maximum of 60%, i.e., Five (05) out of Eight (08) questions to be solved by the students. The question paper shall comprise various sections in exceptional cases determinable as per nature of the course.

**Practical:**

- i. The Objective Type Question Paper of Practical Examination shall be set in duplicate first by internal Examiner and thereafter the same shall be got moderated by External Examiner concerned as per procedure already applicable for Theory Examination.
- ii. The Following Guideline Parameters shall be included by the Examiners for setting of objective type Question Papers.
- iii. Fill in the Blanks, True of False, Multiple-Choice Questions (MCQs), Definition of Technical Terms, Drawing Skill Oriented Questions and Interpretation of Diagrams.
- iv. The duration for conduct of Objective Type Test shall be minimum of 30 Minutes and maximum of one hour for Question Papers carrying 15 & 30 Marks, respectively.

**(b) Assessment of Scripts:**

- i. The scripts of Theory Examination shall be sent to the concerned External Examiner first and thereafter the scripts shall be assessed by the respective Internal Examiner. Both the examiners will send the award lists (in triplicate) to the Controller of Examinations of the University separately.
- ii. The average of the marks of the Internal & External Examiners shall be awarded to the candidates. In case the variation in the award of marks of Internal & External Examiners exceeds 20% of the marks assigned to the Final Examination, the matter shall be referred to the Dean, FoST&H for final decision.

**(c) Conduct of Practical Examination:**

- i. The Practical and Viva-Voce Examination shall be conducted jointly by the Internal & External Examiners approved by the Vice-Chancellor. The signature sheets of examinees for conduct of Objective Type Test and Viva-Voce/Jury shall be maintained separately and the same shall be submitted to the Examinations Department for office record by the Examiners. The award lists signed by the both examiners shall be submitted in triplicate under sealed cover to the Controller of Examinations of the University.
- ii. The Internal Examiner as well as External Examiner shall both submit separate report under sealed confidential cover to the Controller of Examinations of the University regarding the standard of the examination taken by them.

**17. Scanning of Results:**

- (a) A committee comprising of the Inspector Colleges/Institutes, MUET, Jamshoro as Convener, Head of Department Concerned, Affiliated Colleges/Institutes as Member, and Director Academics, Affiliated Colleges/Institutes as Member/Secretary.
- (b) The Committee Shall evaluate and check the quality and consistency of assessment of scripts, would at random re-assess of the scripts and in case gross discrepancy is detected.
- (c) The Committee shall recommend to take appropriate action through Dean FoST&H as per SOP of Scanning Results prior to result announcement & sending ledger to the Vice-Chancellor for his signature of the results of Regular/ Supplementary/Special Examinations.

## 18. Announcement of Results:

The Cumulative results (including Sessional Marks & Semester Examinations) of each Semester shall be announced by the Controller of Examinations.

## 19. Promotion Rules:

- i. A student will be promoted to the 2<sup>nd</sup> Semester of the first year provided he/she has completed minimum attendance and filled up examination form and appeared in at least one of the Heads of the Final Semester examinations (1<sup>st</sup> Semester).

### **Theory or Practical would be treated as separate Heads.**

- ii. A student will be promoted to the 1<sup>st</sup> Semester of the 2<sup>nd</sup> year (3<sup>rd</sup> Semester) provided he/she has obtained C-Grade or higher in at least 50% Heads (including minimum of 02 theory papers) of 1<sup>st</sup> Semester of First year in Regular Examination and has completed minimum attendance requirement (75%) of the 2<sup>nd</sup> Semester of the 1<sup>st</sup> year and has filled up the Regular Examination form and appeared in at least one of the Heads of the Examinations (2<sup>nd</sup> Semester).
- iii. A student will be promoted to the 2<sup>nd</sup> Semester of the 2<sup>nd</sup> year (4<sup>th</sup> Semester) provided he/she has completed minimum attendance requirement (75%) of the 3<sup>rd</sup> Semester, filled up the examination form and appeared in at least one head of the final Semester examinations (3<sup>rd</sup> Semester).
- iv. A student will be promoted to the 1<sup>st</sup> Semester of the 3<sup>rd</sup> Year (5<sup>th</sup> Semester) provided he/she has obtained C-Grade or higher in at least 50% Heads (including minimum of 05 Theory papers) of 1<sup>st</sup> year prior to start of classes of 5<sup>th</sup> Semester and has completed minimum attendance requirement (75%) of the 4<sup>th</sup> Semester, and has filled up the examination form and appeared in at least one of the Heads of the Examinations (4<sup>th</sup> Semester). **Benefits of the fraction will be given to the students.**
- v. A student will be promoted to the 2<sup>nd</sup> Semester of the 3<sup>rd</sup> year (6<sup>th</sup> Semester) Provided he/she has completed minimum attendance requirement (75%), filled up the examination form and appeared in at least one of the Heads of the final Semester examination (5<sup>th</sup> Semester).
- vi. A student will be promoted to the 1<sup>st</sup> semester of the 4<sup>th</sup> year (7<sup>th</sup> Semester) provide he/she has cleared all Heads of First Year secured minimum CGPA of 2.00 obtained C-Grade or higher in at least 50% Heads of 2<sup>nd</sup> Year (including 05 Theory papers) prior to start of classes of 7<sup>th</sup> Semester, and has completed minimum attendance requirement (75%) of the 6<sup>th</sup> Semester and has filled up the Regular Examination form and appeared in at least one of the Heads of the Examinations (6<sup>th</sup> Semester).
- vii. A student will be promoted to the 2<sup>nd</sup> Semester of the 4<sup>th</sup> Year (8<sup>th</sup> Semester) provided he/she completed minimum attendance requirement (75%), filled up the examination form and appeared in at least one of the Heads of the final Semester examination (7<sup>th</sup> Semester). **Benefits of the fraction will be given to the students.**

The Principal/Director College/Institute shall prepare promoted, not promoted & dropout students list before start of each semester and shall send to the Controller of Examination of the University otherwise students will not be allowed to appear in the MID & FINAL examinations of the running semester. The Examination Department of the University shall verify the above list from original results as per above promotion rules.



## 20. Academic Calendar:

The calendar will include the following information: to be adopted from next academic year.

- a. Date of start of classes
- b. Conduct of midsemester
- c. Date of suspension of classes
- d. Schedule of examination
- e. Display of sessional marks
- f. Examination preparation up to
- g. Conduct of final semester exam
- h. Announcement of results

## 21. Medium of Instructions:

Instructions in all courses and laboratories are carried out in English Language.

## 22. Indiscipline in examinations (Unfair Means Cases Committee):

22.1 The Unfair Means Committee for the affiliated Colleges shall be comprised of the following:

- i. The Dean Faculty of Science, Technology & Humanities, MUET (Chair)
- ii. The Controller of Examinations, MUET (Member)
- iii. The Inspector of the Colleges, MUET (Member)
- iv. The Principal/Director of the College/Institute (Member)
- v. The In charge, Affiliated Colleges Section, Examinations Deptt., MUET (Secretary)

22.2 Any candidate found guilty of following matters; his/her case will be submitted to Unfair Means Cases Committee constituted by the University.

- i. Removes a leaf from his/her answer book, the answer book shall be cancelled.
- ii. Submits forged or fake documents in connection with the examination.
- iii. Commits impersonation in the examination.
- iv. Copies from any paper book or notes.
- v. Mutilates the Answer Book.
- vi. Possesses any kind of material, which may be helpful to him/her in the exam.
- vii. Does anything that is immoral or illegal in connection with the exam.
- viii. and which may be helpful to him/her in the examination.
- ix. Refuses to obey the invigilation staff or refuses to follow the instructions issued by the University in connection with the examination.
- x. Misbehaves/creates any kind of disturbance in/around the examination center.
- xi. Uses abusive or obscene language on the answer script.
- xii. Possesses any kind of weapon in or around examination center.
- xiii. Possesses any kind of electronic device which may be helpful in the exam.

His/Her case shall result in penalties keeping in view the nature and intensity of offence.

- i. Cancellation of paper\*.
- ii. Suspension from program for one semester.
- iii. Heavy and light Fine
- iv. Expulsion forever from the University.
- v. Any other.

\*Unfair Means Cases Committee will decide that the student will have to appear in summer semester/with regular semester for the cancelled paper.

### 22.3 Appeal against the decision of the Unfair Means Cases Committee

If a student is not satisfied with the decision of the Unfair Means Cases Committee, she/he can submit his/her appeal within a week after the decision of the Committee to the Vice Chancellor. No appeal shall lie against the decision of the Syndicate.

### 23. Award of Degree:

A candidate shall be awarded degree who has to pass all heads of current batch subjects including (theory & practical), fulfill the final year thesis/project submission & completed the all requirements with due course of degree which is seven years for four-year bachelor program with following CGPA conditions:

- i. A candidate shall be awarded degree if he/she has secured minimum 2.0 CGPA in each year. However, a candidate who does not qualify CGPA condition of each year then he/she may be allowed to improve CGPA of each year.
- ii. And, he/she has secured minimum overall 2.0 CGPA from 1<sup>st</sup> to final semesters.
- iii. In readmission candidates if any course does not match current batch course scheme, then Equivalency Committee shall be constituted by Dean FoST&H through concerned college to provide equivalency or deficiency of subjects.

### 24. College/Institute/Department Committee:

Each college/institute will have an internal committee comprising of three members of the college/institute including principal of college, Director Academics & most senior teacher to assess the progress of the students during the semester.

### 25. Final Award:

The final award of theory & practical examinations once received by the office of the Controller of Examinations shall not be liable to a subsequent change by the concerned Examiner until unless with the permission of the Vice Chancellor through Concerned Dean & Inspector Colleges.

### 26. Awards and Distinctions:

- i. Medals/Positions will be awarded to the students passing their courses/papers in Semester System in the first attempt only.
- ii. In the Semester System, Letter Grades will be awarded on the basis of GPA/CGPA and Positions would be given on the basis of CGPA. The CGPA Calculation will be considered up to four decimal places for award of positions. In case two or more students are acquiring same CGPA up to four (4) decimal places, only then the positions will be shared among those students.
- iii. No medal and position will be granted to candidates who passed the examination in 2<sup>nd</sup> attempt/supplementary/special/summer semester attempt.
- iv. No Medal/Roll of Honor will be awarded in the case of improving CGPA.
- v. The disciplines where number of students is less than 10, no position will be awarded in semester system.

### 27. Re-admitted Students

The above **Regulations for Semester Systems** are also applicable to those student(s) who have got re-admission at affiliated colleges/institutes with 21 and onward batches.

The University reserves the right to modify the regulation from with approved of the competent authority during the course of study.

## CODE OF CONDUCT OF HiAST

Ignorance of HiAST Code of Conduct, Rules and Regulation is no excuse. It is the responsibility of the students to familiarize themselves with code of conduct and seek clarification wherever required.

The code is aimed at encouraging and shaping professional behavior and ethics in the students. The code, as laid down below, is to be strictly observed:

### General:

1. All the students will be issued HiAST student Identity Cards. They should display the ID Cards while they are in the Institute.
2. Shalwar Qameez, T-shirts, Caps, Jeans and Joggers are not allowed. Formal dress code will be maintained with closed collars. College students must be in prescribed uniform. Their trousers must be dress pants with minimum 18” bottom collar, and cuff buttons of their shirts must be closed and neck ties must be worn properly.
3. The use of ornaments by female students is strictly prohibited.
4. Use of Mobile Phones in the premises is *strictly prohibited*. A fine of Rs. 500/- will be charged on mobile phone usage in the classrooms. For college students, the mobile phones are not allowed within the college premises. Students can be searched if doubted of bringing the phone to the campus. The students going against this rule for the first time will be fined Rs. 500/- and the phone will be returned to the parents only. If any student repeats this violation, the administration reserves the right to take firm action against him/her.
5. Behave courteously and politely and respect all the teachers, fellow students, staff and visitors to the Institute.
6. Be punctual in attending the classes, lab sessions and other academic activities.
  - ✓ Students coming 5 minutes after commencement of class are not allowed to enter the classroom.
  - ✓ During the class, students are normally not allowed to leave for drinking water/visiting washroom etc., unless unavoidable.
7. Maintain the cleanliness, layout, arrangement discipline and decorum of the class room, computer lab and library.
8. Keep voice low while walking through corridors so that the classes in progress may not be disturbed.
9. The Institute has the authority to suspend or expel any student from the Institute if he/she is found involved in politics any student’s union, use of unfair means in the examination or guilty of an act of indiscipline. The scope of an act of indiscipline shall be determined by the Management of Institute and shall be final and binding.
10. The following shall constitute acts of indiscipline and would render the student concerned liable for disciplinary action:
  - ✓ Inciting or staging a walk out, strike or organizing unauthorized procession.
  - ✓ Any act which is against the prestige of the Institute, the reputation of its staff or faculty.
  - ✓ Involvement in any sort of quarrels, rowdiness or disputes.
  - ✓ Bringing unauthorized person(s) in the Institute premises.
  - ✓ Destroying and damaging institute’s property, furniture and fixtures etc.
  - ✓ Irregular class attendance/unauthorized absence from classes.
  - ✓ Being habitually unpunctual and untidy.
  - ✓ Rudeness of the students or their Parents/Guardians towards the staff members.

11. All decisions taken by the Institute's Management to handle disciplinary cases would be final and binding upon the student concerned and these decisions cannot be challenged at any forum.
12. The students are not allowed to collect any type of subscription or funds for any purpose whatsoever without the prior permission of the competent authority.
13. Visitors are not allowed to enter the Institute premises without prior permission of the Institute's Management.
14. Any student may be suspended or dismissed from academic program, if the Institute determines that he/she has failed to achieve satisfactory academic progress in the program.

### **Campus:**

1. Reading the STOP PRESS is compulsory. It must be read in the morning as well as at the end of the classes.
2. Smoking, chewing Paan etc. or any other such activity is prohibited in and around the campus.
3. Loose talks, un-parliamentary/coarse language will not be used in the class/Institute.
4. Writing on walls, doors, chairs and washroom is strictly prohibited.
5. Standing in the staircases, corridors and office passages are not allowed.
6. In case of any damage to the property of the institute, penalty will be levied upon the student responsible for the damage.
7. Students are not allowed to visit the senior management offices without appointment.
8. Students should leave the campus within 10 minutes after the end of last lecture. Female students are advised to arrange transport facility by the appointed time, if availed by them. In case the stay is necessary beyond 10 minutes, permission may be obtained from the concerned Coordinator/Director Academics/Principal. Names of late goers will be reported by the Security Guards on duty to the Coordinator/Director Academics/Principal/Registrar immediately.
9. Services, like, telephone, photocopy and transparencies are not complimentary.

### **Attendance:**

1. Students should come to the assigned classroom before the commencement of classes.
2. Students shall attend the lectures/practical/lab sessions regularly.
3. Students must attend a minimum of 75% of the classes, and clear their dues, failing which the examination form will not be forwarded to the concerned University/Board.

### **Leave:**

The concept of leave does not prevail at HiAST. Students are expected to have 75% attendance to be eligible to appear in the examinations. If he/she fails to get 75% attendance, he/she will have to repeat the semester as per policy.

### **Financial Assistance:**

The institute provides need/merit base scholarships to certain students. Students provided this assistance are expected to be more punctual, regular, disciplined and good in academics. The scholarship/financial assistance would be withdrawn without prior notice if a student

- ✓ Has less than 80% attendance.
- ✓ Is mostly absent from morning assembly (applicable for college students).
- ✓ Falling in Mid-semester examination.
- ✓ Falling in semester examination.
- ✓ Is instrumental in disturbing the class.
- ✓ Is having a less than 70% mark in the monthly tests.

All the scholarship cases would be reviewed periodically and financial assistance to the students not fulfilling the above criteria will be forfeited.

### **Internal Evaluation:**

1. Students must take all periodic tests and complete all the given assignments for the purpose of internal assessments by the set date.
2. Assignments given to the students should be completed and submitted within the specified time period. The faculty or the management shall not be under any obligation to extend the time.
3. Evaluation of test and assignments by the faculty, for the purpose of internal assessment, shall be final and binding on the students. Generally, complaints in this regard shall not be entertained.
4. The management has the right to debar any student from appearing in any examination at the Center, if his/her attendance or performance in the internal or preliminary examination is not satisfactory.
5. Internal evaluation is done by the teacher concerned and is based on the student's performance on the following:
  - ✓ Midterm tests
  - ✓ Quizzes
  - ✓ Class tests
  - ✓ Assignments
  - ✓ Case study
  - ✓ Presentation
  - ✓ Community Services

### **Computer Laboratory:**

1. Students should come to the computer laboratory at the time allocated/booked for them. Each student is required to observe all rules and regulation in the computer lab.
2. The management may give extra time depending on the availability of the computer lab, on first come first served basis.
3. Eating, drinking, making noise, chatting and playing games in the labs are strictly prohibited. Students are advised to take care of the hardware. In case of any damage, the student shall be charged accordingly.
4. Before leaving, arrange the computer peripherals (i.e., Keyboards, monitor, mouse etc.) and chairs.
5. Don't shut down the system without the permission of lab-staff.
6. The lab staff is to be informed on finding any computer related trouble. Don't try to fix it by yourselves.
7. No printing is allowed without the permission of lab In-charge.
8. Don't bring your hardware in the labs.

### **Library:**

1. To avail this facility, the student must register his/her name and pay the prescribed library deposit.
2. Once a student pays the library deposit, he/she becomes a bonafide member of the library and a library card is issued to him/her.
3. Only valid card holders may use the library.
4. Books are issued for six days only. Not more than two books shall be retained by a borrower at a time. Penalties/Fines may also be levied if the returned book is damaged, spoiled or has missing pages or is not in the same condition in which it was issued. Marking the book either with pencil, highlighter, marker or pen is strictly prohibited.
5. The books marked as "REFERENCE" will not be issued. This can be consulted only in the library. However, photocopies of some of the pages can be availed on payment.
6. Dictionaries/Encyclopedias will not be allowed to be taken outside the library in any case.
7. If a diskette/CD is enclosed along with a reference book, the student must ensure that it is not damaged.

8. In case of loss of a library book, the student will have to pay two times more than the actual price of the book.
9. Vandalism in any form will not be tolerated.
10. Bad language/behavior and disruption in library activity will be appropriately dealt with.
11. Consumption of food, chewing gum and paan in library is completely prohibited.
12. Without Institute's student Identity Card, no student will be allowed to enter the library.
13. Complete silence should be observed in the library.
14. Before taking out any book one has to consult the Library In-charge.
15. Students should return the books in good condition and on specified date which is mentioned on due date slip.
16. Regarding penalties/fines or any matter concerning the library, the decision of Management will be final and binding.





**PRE-ADMISSION TEST**

**SAMPLE TEST PAPER**

**General Instructions**

The test is divided into following four parts and sub-parts:

<b>Part I:</b>	<b>English</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• Vocabulary</li><li>• Grammar</li><li>• From Text</li><li>• Sentence correction</li></ul>		
<b>Part II:</b>	<b>Physics</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• All chapters (XI and XII)</li></ul>		
<b>Part III:</b>	<b>Mathematics/Biology</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• All chapters (XI and XII)</li></ul>		
<b>Part IV:</b>	<b>Chemistry/Computer Science</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• All chapters (XI and XII)</li></ul>		

## **General Instructions**

The test is divided into following four parts and sub-parts:

<b>Part I:</b>	<b>English</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• Vocabulary</li><li>• Grammar</li><li>• Comprehension</li><li>• Sentence correction</li></ul>		
<b>Part II:</b>	<b>General Mathematics</b>	<b>30 Questions</b>
<ul style="list-style-type: none"><li>• Sets and series problems</li><li>• Algebraic problems</li><li>• Arithmetic problems</li><li>• Geometric and trigonometric problems</li></ul>		
<b>Part III:</b>	<b>General Science</b>	<b>25 Questions</b>
<ul style="list-style-type: none"><li>• Physics</li><li>• Chemistry</li><li>• Biology</li><li>• Computer Science</li></ul>		
<b>Part IV:</b>	<b>Intelligence Quotient (IQ)</b>	<b>20 Questions</b>



## Part I English

### Vocabulary

1. A week before the MUET exam, Ahmad started to \_\_\_\_\_ vocabulary, which he had not studied yet.
- a) Underscore
  - b) Betroth
  - c) Inundate
  - d) Martinet

### Grammar

1. I \_\_\_\_\_ tennis every Sunday morning.
- a) playing
  - b) play
  - c) am playing
  - d) am play

### Comprehension

A man is known by the book he reads as well as by the company he keeps; for there is a companionship of books as well as of men and one should always live in the best company, whether it be of books or of men.

A good book may be among the best of friends. It is the same today that it always was, and it will never change. It is the most patient and cheerful of companions. It does not turn its back upon in times of adversity or distress. It always receives us with the same kindness; amusing and interesting us in youth, comforting and consoling us in age.

1. Which of the following would be the most appropriate title for the given passage?
- a) Books show the reader's character
  - b) Books as man's abiding friends
  - c) Books are useful in the youth
  - d) The importance of books in old age

### Sentence Correction

1. Jeans was not permitted in out college.
- a) were
  - b) had
  - c) will
  - d) have

## Part II

### General Mathematics

#### Sets and Series Problems

1. If  $A = \{a, b, c, d\}$  then how many subsets of  $A$  can be formed?
- a) 16
  - b) 32
  - c) 12
  - d) 8

#### Algebraic Problems

2. If  $P(x) = 3x^2 + (k-1)x + 9$  and  $P(3) = 0$ ; then  $k = ?$
- a) -13
  - b) 11
  - c) 13
  - d) -11

#### Arithmetic Problems

3. If the ratio of two numbers is 8:3, and their difference is 25. Then what are the two numbers?
- a) 15 and 40
  - b) 17 and 42
  - c) 20 and 45
  - d) 22 and 47

#### Geometric and Trigonometric Problems

4. In a right-angle triangle, the highest possible measure of an angle is \_\_\_\_\_ degrees.
- a) 90
  - b) 180
  - c) 60
  - d) 180

## Part III

### General Science

#### Physics

1. The product of mass and velocity is called:

- a) Acceleration
- b) Moment Arm
- c) Negative Accelerations
- d) Momentum

#### Chemistry

2. The Chemistry of Carbon is Called:

- a) Organic Chemistry
- b) Inorganic Chemistry
- c) Physical Chemistry
- d) Pharmaceutical Chemistry

#### Biology

1. Which blood cells are called 'Soldiers' of the body?

- a) WBC
- b) Platelets
- c) RBC
- d) All of the above

#### Computer Science

4. Keyboard is a:

- a) Input device
- b) Output device
- c) Important device
- d) Plastic device

**Part IV**  
**Intelligence Quotient (IQ)**

1. Find the missing pattern in the next pair.



2. Which three words have the same meaning?

i. Information; ii. Indoctrinate; iii. Brainwash; iv. Convince; v. Class

- a) ii; iii; iv
- b) i; iii; iv
- c) iii; iv; v
- d) i; ii; iv

-----GOOD LUCK-----