

# THE UNIVERSITY OF BURDWAN

## UNIVERSITY REGULATIONS (REVISED) RELATING TO FOUR YEAR

### B E (BACHELOR OF ENGINEERING) COURSES OF STUDIES

(Effective from the academic session 2017-2018 onwards)

<b>U.Reg.1 (Engg)</b> Admission and Registration	Admission of General Students: Any candidate who has passed the Higher Secondary Examination in the 10+2 system School Education with Mathematics, Physics and Chemistry or any other subjects as may be specified by the All India Council for Technical Education (AICTE) and Director of Technical Education, West Bengal (DTE, WB) from time to time and any candidate possessing the equivalent qualification recognized by the University, DTE, WB and AICTE with specified percentage of marks, if any, as may be prescribed by the AICTE & DTE for the purpose may be admitted to the First Year (First Semester) of the four year Degree Course leading to Bachelor of Engineering (B E) degree in Engineering/ Technology of this University subject to fulfillment of usual norms of medical fitness criterion and may be registered with the University as per the University ordinances relating to the Registration of Students. Registration number should be given to newly admitted student before the commencement of 1 <sup>st</sup> semester examination.
<b>U. Reg.2 (Engg)</b> Admission of Lateral Entry Students	Polytechnic diploma holders in different branches of engineering and such other candidates as defined by AICTE or DTE from time to time shall be eligible for admission to the degree course of Engineering / Technology in 2nd year against the approved seats specified for them under the following terms and conditions: (a) They have passed diploma course from any AICTE approved polytechnic college or any other courses considered equivalent qualification as may be prescribed by the AICTE or DTE, WB with minimum percentage of marks in the relevant discipline. (b) They will be eligible in such branches of engineering as are specified by the DTE, WB with respect to their actual branch of Engineering in the diploma level.
<b>U. Reg.3 (Engg)</b> Change of Branch in the 3 <sup>rd</sup> Semester	A candidate may be allowed to change his/her branch of study subject to availability of the vacant seats against the approved intake of the particular branch subject to fulfillment of the following terms and conditions: (i) Vacancy shall be filled up in order of position of the candidate in the merit list of the students applied for branch change in the 3 <sup>rd</sup> semester of their study to be determined on the basis of CGPA of 1 <sup>st</sup> and 2 <sup>nd</sup> semester (when result of 2 <sup>nd</sup> Semester is available). (ii) The candidates has passed 1 <sup>st</sup> Semester or 1 <sup>st</sup> and 2 <sup>nd</sup> semester (when result of 2 <sup>nd</sup> Semester is available) without any back paper. (iii) The candidate has secured at least 7.0 SGPA/CGPA (CGPA being available) to be eligible for such opportunity. (iv) The total strength of the branch from which candidate(s) are willing to change their branch shall not ordinarily fall below 2/3rd of the approved intake of the branch.
<b>U. Reg.4 (Engg)</b> Duration of the Course	1. The 4 year Course as stated in U.Reg.1 (Engg.) shall be divided into 8 independent Semesters with two semesters ( <b>Odd Semester - July to December and Even Semester - January to June</b> ) in one academic year. 2. The number of <b>teaching weeks</b> in each semester shall be <b>16 to 18</b> with a <b>minimum of 90 teaching days</b> excluding the period of final

	<p>examinations.</p> <p>3. Academic calendar indicating all major events of an academic session must be published before the start of academic session.</p>
<p><b>U. Reg.5 (Engg)</b> Branches of Studies</p>	<p>The subjects prescribed in the BE Examinations and the Credit for each Subject are to be shown in the Curriculum for the Four Year Engineering Courses. Every candidate for the BE Examinations shall be examined in the Subjects mentioned in the Curriculum under respective heads. The Degree of Bachelor of Engineering shall be conferred on students who have followed the prescribed curriculum of suitable subjects for not less than 8 academic semesters (6 academic semester for lateral students) in any one of the following branches and have successfully passed the Examinations:</p> <ol style="list-style-type: none"> <li><b>1. Electronics &amp; Communication Engineering</b></li> <li><b>2. Computer Science and Engineering</b></li> <li><b>3. Information Technology</b></li> <li><b>4. Applied Electronics &amp; Instrumentation Engineering</b></li> <li><b>5. Civil Engineering</b></li> <li><b>6. Electrical Engineering</b></li> </ol> <p>And any other branch that may be introduced in future.</p>
<p><b>U. Reg.6 (Engg)</b> Semester system</p>	<p>There shall be <b>eight separate regular examinations</b> for the Degree of Bachelor of Engineering (B.E.), viz.</p> <ol style="list-style-type: none"> <li>(i) First Semester Regular Examinations.</li> <li>(ii) Second Semester Regular Examinations.</li> <li>(iii) Third Semester Regular Examinations.</li> <li>(iv) Fourth Semester Regular Examinations.</li> <li>(v) Fifth Semester Regular Examinations.</li> <li>(vi) Sixth Semester Regular Examinations.</li> <li>(vii) Seventh Semester Regular Examinations.</li> <li>(viii) Eighth Semester Regular Examinations.</li> </ol> <p>Each such regular examination will be held at the end of each semester. The date and venue shall be notified by the Controller of Examinations of the University.</p> <p>However the lateral entry candidates shall continue from third semester onwards.</p>
<p><b>U. Reg.7 (Engg)</b> Class Attendance</p>	<ol style="list-style-type: none"> <li>(i) A candidate may be allowed to appear at a semester examination provided he / she has been certified by the Principal of the college/institute to have prosecuted a regular course of study prescribed for the purpose for one academic semester and found eligible to appear at the examination.</li> <li>(ii) A candidate must attain a minimum of <b>75%</b> average attendance of all the theory and practical classes held during the session. However, a candidate may be allowed to appear in the semester examinations with a minimum of <b>60%</b> average attendance under sufficient medical ground or grounds like participation in cultural, sports, other academic (like attending vocational training, etc.) or official assignments in the interest of the Institution/ University / Government with the satisfaction of the authority against payment of the condemnation fee amounting to Rs. 600.00 (Rupees six hundred only).</li> <li>(iii) Attendance in individual subjects must not fall below <b>40%</b> even when the average attendance reaches minimum 60% or above. If any candidate fails to attain the minimum attendance in any one individual subject, he/she will not be allowed to appear in the whole semester examination.</li> <li>(iv) Attendance records per subject must be displayed before or after the mid semester examination to give a scope to students for improvements.</li> </ol>
<p><b>U. Reg.8 (Engg)</b> Issue of Admit Card for</p>	<p><b>Admit Card</b> for an examination will be issued to a candidate provided (i) he / she is registered with the University, (ii) he / she has prosecuted the prescribed course of study, (iii) he / she is eligible for regular or back paper examination</p>

examinations	(as the case may be) as per U.Reg. 6(Engg) of the Regulation, (iv) his /her application for appearing in the examination and certificate from the Principal in prescribed form with stipulated fees have been deposited within the prescribed date to be notified by the Controller of Examinations. The fees will be prescribed and may be revised by the University from time to time.
<b>U. Reg.9 (Engg)</b> Admit Card	A candidate shall be allowed to appear in an examination (Regular/Back – paper) only on production of the ‘ <b>Admit card</b> ’ issued by the University for the Examination.
<b>U. Reg.10 (Engg)</b> Pass marks	In order to pass in any of the semester examinations, a candidate must have to obtain <b>40% (i.e. Grade D and above)</b> of the full marks in each of the theoretical subjects and <b>50% (i.e. Grade E and above)</b> of the full marks in each of the sessional and practical subjects individually. No separate minimum aggregate marks will be required to pass the examination.
<b>U.Reg.11 (Engg)</b> Back paper examinations	The unsuccessful candidates of regular examinations will be called as <b>Back Paper Candidates</b> and they will appear in the regular examinations of the next academic year, if otherwise eligible, for clearing the back papers. However, after the publication of results of <b>Seventh Semester and Eighth Semester Regular Examinations</b> , there will be <b>Special Back Paper(s) Examinations</b> for the unsuccessful candidates. The time/schedule of such examinations will be decided as per the convenience of the academic calendar avoiding disturbance of the normal academic activities. If the candidates of seventh semester special back paper examination(s) and eight semester special back paper examination(s) fail to clear the back (un-cleared) papers, they will have to appear in the regular examination(s) of the next year, if otherwise eligible. There shall not be any special back paper examination from first to sixth semester examination for unsuccessful candidates.
<b>U. Reg.12 (Engg)</b>	If a candidate fails to clear one or more theory or sessional or practical subjects, he/she will have to appear in those back (un-cleared) subjects as back paper candidate [along with other back paper(s) in other semester(s) if any] in the next academic session, if otherwise eligible. However they can continue as regular candidates up to eighth semester along with back paper(s) of any semester.
<b>U. Reg.13 (Engg)</b> Coincided papers	The Examination scheduled should be formulated in such a manner that overlapping be avoided
<b>U. Reg.14 (Engg)</b> Maximum duration	A candidate has to secure Pass Marks in all the papers of the First to Eighth Semester <b>within eight years (seven years for lateral entry students)</b> from the date of his / her admission to the First semester (3rd semester of lateral entry) of the Four Year degree courses of Engineering of this University, failing which he / she will be debarred from continuing his / her studies and appearing at the final examinations.
<b>U. Reg.15 (Engg)</b>	Pass marks [as in U.Reg.10 (Engg)] in the theory or sessional or practical subjects / paper(s) obtained in the particular semester examination will be retained within the prescribed period/chances as laid in U.Reg. 14 (Engg.) in that subject throughout his / her studies in the College/Institute and he / she will be neither required nor allowed to appear in that paper again. However, the marks obtained by a candidate in ‘ <b>Continuous Assessment (CA)</b> ’ (i.e. 30 marks out of 100 in theory subjects) during attending regular semester classes will remain unchanged and be brought forward in the subsequent examination of the concerned subject.
<b>U. Reg.16 (Engg)</b> Degree award	To be entitled to the degree of Bachelor of Engineering in any branch a candidate has to pass separately all the papers of all semester examinations of a particular branch.

**U. Reg.17 (Engg)**

Question paper-  
settings and Issue  
of Marks sheets

- (i) At the end of semester University Examination will be of **3hours** duration for **70 full marks**.
- (ii) The format of the question papers must be uniform for all subjects. This format includes a compulsory question of objective type (10 questions of 1 mark each) and 4 other questions (of 15 marks each) to be attempted from each of the 4 groups. Therefore, the question format will comprise of a compulsory objective question and four other groups (each group consisting of two questions) of questions. Here the term 'group' of the question paper should be mapped identically with the term 'module' of the respective syllabus. Therefore two questions within a particular group should be framed from topics of the respective module of the syllabus. For old syllabus the question format includes a compulsory question of objective type (10 questions of 1 mark each) and 4 other questions (of 15 marks each) to be attempted from the 8 questions. The question papers shall be set covering the entire syllabus uniformly.
- (iii) For every examination, separate Marks sheet indicating the candidate's performance will be issued indicating academic session and date of publication of result. The remarks column should include 'P' for pass or 'XP' for eligibility with back papers.
- (iv) Barcode, Hologram and Digital Signature to be included in the mark sheets as security features.
- (v) When a candidate passes all the subjects of a semester in more than one attempt, he/she will be issued a comprehensive Marks sheet indicating that he/she has passed all the subjects in that semester.

**U. Reg.18 (Engg)**

Grading System

**SGPA and CGPA**

- a) L-T-P: Indicates Lecture Periods, Tutorial Periods and Practical periods.
- b) **Credits:** Weightage of a subject depending on its weekly lectures / practical hours and expressed in terms of Credits.
- c) A **Semester Grade Point Average (SGPA)** will be computed for each semester.

The SGPA will be calculated as follows:

$$SGPA = \frac{\sum_{i=1}^n c_i g_i}{\sum_{i=1}^n c_i}$$

where 'n' is the number of subjects registered and cleared for the semester, 'c<sub>i</sub>' is the number of Credits allotted to a particular subject, and 'g<sub>i</sub>' is the grade points carried by the letter corresponding to the grade awarded to the student for the subject. SGPA will be rounded off to the second place of decimal and recorded as such. The SGPA would indicate the performance of the student in the semester to which it refers.

- d) Starting from the second semester at the end of each semester S, a **Cumulative Grade Point Average (CGPA)** will be computed for every student as follows:

$$CGPA = \frac{\sum_{i=1}^m c_i g_i}{\sum_{i=1}^m c_i}$$

Where 'm' is the total number of subjects the student has registered and cleared from the first semester onwards up to and including the semester S, 'c<sub>i</sub>' is the number of Credits allotted to a particular subject 's<sub>i</sub>' and 'g<sub>i</sub>' is the grade-point carried by the letter corresponding to the grade awarded to the student for the subject 's<sub>i</sub>'. CGPA will be rounded off to the second place of decimal and recorded as such.

The CGPA would indicate the cumulative performance of the student from the

	<p>first semester up to the end of the semester to which it refers. The CGPA, SGPA and the grades obtained in all the subjects in a semester will be communicated to every student at the end of every semester. For determining the inter se merit ranking of a group of students, only the rounded off values of the CGPAs will be used.</p> <p>From the batch of 2017-2018 onwards the calculation of SGPA and CGPA will be based on all the subjects registered.</p> <p>The student's marks sheet will reflect <b>Grades</b> as <b>EX, O, A, B, C, D</b> and <b>F</b> for each corresponding subjects along with reflection of corresponding SGPA, CGPA and percentage of marks obtained.</p> <p>Where <b>EX (Excellent) = 90 and above.</b>  <b>O (Outstanding) = 80 – 89.</b>  <b>A (Very Good) = 70 – 79.</b>  <b>B (Good) = 60 – 69</b>  <b>C (Fair) = 50 – 59</b>  <b>D (Average) = 40 - 49</b>  <b>F (Fail) &lt; 40</b></p>
<p><b>U. Reg.19 (Engg)</b> Award of degree</p>	<p>While awarding BE degree, the final assessment of a student's performance will be done on the basis of the 'Cumulative Grade Point Average' (CGPA).</p> <p>The conversion from CGPA to percentage (%) will be given by the formula which should be printed in the overleaf of the mark sheet.</p> $\% = \text{CGPA} * (10 - 0.75)$
<p><b>U. Reg.20 (Engg)</b> Class of degree and honours</p>	<p>A candidate who has cleared all the subjects of all the eight Semesters of Course of Study will be awarded with the following degrees and honours.</p> <p>(i) <b>First Class with Honours:</b> Provided he/she has secured a <b>CGPA of 7.5</b> and above, having cleared all the examinations in a single attempt. However, if a candidate misses or fails to appear in a regular examination owing to medical ground only once during the entire duration of the course and clears the paper in the very next attempt, he/she will also be conferred with the Honours degree if he/she secures 7.5 or above CGPA.</p> <p>(ii) <b>First Class:</b> Provided he/she has secured a <b>CGPA of 6.5 or above</b> and is not eligible for Honours degree.</p> <p>(iii) <b>Second Class:</b> Provided he/she has secured a <b>CGPA of 5 or above but less than 6.5.</b></p> <p>(iv) <b>Pass Class:</b> Provided he/she has secured a <b>CGPA of 4 but less than 5.</b></p>
<p><b>U. Reg.21 (Engg)</b> Year of passing of final Examination</p>	<ol style="list-style-type: none"> <li>The CGPA results of 8 Semester Examination of those candidates who has not qualified their previous semester examinations, will be published as "SNC" i.e. <b>Semester(s) Not Cleared</b> and their CGPA mark sheets will not be issued.</li> <li>If a candidate after qualifying his/her final (8<sup>th</sup>) semester examination, clears his/her not-qualified Semester(s) Examinations(s) within the prescribed chance(s), he/she would be declared to have passed the Final Examination in the year in which he/she clears all his/her back log examinations and his/her CGPA mark sheet will be issued accordingly.</li> </ol>
<p><b>U. Reg.22 (Engg)</b> Post-Publication Scrutiny of answer scripts</p>	<ol style="list-style-type: none"> <li>Post publication scrutiny does not imply re-examination or re-assessment of scripts but involves verification of scripts and records to ascertain <ol style="list-style-type: none"> <li>Marks have been assigned to each of the required number of answers made by an examinee as per instructions printed on the question paper</li> <li>totaling of marks awarded by the examiners on the scripts/mark slips, as the case may be, has correctly be done</li> <li>Posting of marks has been made correctly from <ol style="list-style-type: none"> <li>Answer scripts to mark slips</li> <li>Mark slips to tabulation sheets and</li> <li>Tabulation sheets to mark-sheets.</li> </ol> </li> </ol> </li> </ol>

	2. There shall be no Post-Publication Scrutiny of Practical / Sessional Papers. 3. A candidate applying for post-publication scrutiny of his/her answer-scripts shall have to accept the change in marks (if any) after post publication scrutiny.
<b>U. Reg.23 (Engg)</b>	If any dispute arises as to the interpretation, intention or application of any of the provision of these Regulations or any matter not covered by these regulations, the decision of the Executive Council in this regard shall be deemed final and binding.
<b>U. Reg 24 (Engg)</b>	In case, a student scores 36 and above but less than 40, a grace of maximum 4 marks shall be added for attaining the pass marks. Albeit, this facility shall be provided for a maximum of two subjects only for a student.

**Note: Choice Based Credit System (CBCS) be introduced in each branch of B.E. courses, academic session 2017-18 onwards**

### **Rules Related to Examination of Four Year B.E. (Bachelor of Engineering) Courses of Studies**

<b>Rule 1</b> Process of awarding marks in continuous assessment process	<p>For the first to eight semester examination of the subsequent four year course each subject (Theory and Sessional) will carry full marks of 100.</p> <p>There will be continuous assessment (CA) on the progress of a student in his studies with regard to all the theory subjects. For each of the theory subjects, 70 % marks will be allotted for the End-of-semester University Examination and 30% marks for Continuous Assessment.</p> <p>Of the 30% marks allotted for continuous assessment in the theory subjects, 20% will be allotted for one mid semester examination and two class tests / two mid semester examinations to be conducted the departments under responsibility of the head/in-charges and 10% for percentage of attendance in Lecture and Tutorial Classes.</p> <p>The marks for attendance will be awarded as per following scheme provided that the attendance of a student in a particular subject will be counted only if at least 24 numbers of classes is held for theoretical subject and 6 days of practical classes be held in the concerned semester.</p>
<b>Rule 2</b> Process of awarding marks in practical/ sessional examinations	<p>(i) In case of practical papers, the 100 full marks to be distributed as follows normally: Internal Marks: 40% Final examination: 60%</p> <p>(ii) In case of project (which is a sessional paper), the 100 full marks to be distributed as follows normally: Guide Marks: 60% Final Examination: 40%</p> <p>(iii) In case of sessional papers (like grand viva, seminar etc.), the 100 full marks to be given in the final examination.</p> <p>If any candidate fails to attend the final practical/sessional examinations, he will be</p>

	deemed to be failed.
<b>Rule 3</b> Examination procedure	<b>Examination Procedures:</b> <ul style="list-style-type: none"> <li>(i) The recommendations of the Board of studies of the Engineering Faculty in connection with the names of the paper-setters, Moderators, Examiners &amp; Scrutinizers etc. are to be made in a prescribed format to be provided by the Engineering cell of the Controller of Examinations' Department.</li> <li>(ii) After the completion of assessment works within the stipulated period, the concerned examiners are required to submit the marks after assessment of answer – scripts of the respective subjects to the concerned Head Examiner where there would be a Head Examiner and the Head Examiner should submit the same before the Engineering Cell of the Controller of Examinations' Department.</li> <li>(iii) The scrutiny of the answer – scripts is to be held in two phases. The first one is at the stage of Pre-publication of results and the next one at Post-publication of results on submission of usual fees and forms. The concerned Head Examiner of the respective subjects are required to scrutinize the answer-scripts before the publication of results. For the purpose a teacher other than the Examiner(s) of the concerned subject is generally to be given the assignment to perform the job of the pre-publication Scrutiny works under the supervision of Head Examiner whereas post-publication scrutiny should be made by the person as to be appointed by the Controller of Examinations with prior approval of the Vice-Chancellor / Pro Vice – Chancellor.</li> </ul>
<b>Rule 4</b> Post publication scrutiny	The application of the Post Publication Scrutiny duly filled in and signed is to be submitted normally within 10 days (as to be notified by the Controller of Examinations) from the date of issue of mark sheets to the office of the Controller of Examinations.
<b>Rule 5</b> Role of Head Examiners	<ul style="list-style-type: none"> <li>(i) Just after completion of the examination the Head Examiner should take necessary initiative so that the answer scripts of the relevant subject / paper be distributed among the examiner (s) concerned for assessment.</li> <li>(ii) The Examiners should have to assess the answer scripts immediately after the completion of the examination of the paper/subject and submit the assessed answer scripts along with award slip duly signed by him/her to the Head Examiner concerned for processing. Marks should not be sent to the office of the Controller of Examinations by the examiner where there is a Head Examiner.</li> <li>(iii) Head Examiner shall recommend the names of Scrutinizer for completion of scrutiny works following the process as in U. Reg. 22(Engg) (1). On the basis of recommendation of the head examiner the Controller of Examinations will issue the appointment of Scrutinizer and be sent to the Head examiner.</li> <li>(iv) Head examiners shall reevaluate at least 5% of the answer scripts examined by the examiner concerned. In case, variation of award of marks is found to be more than 10%, the matter may be brought into notice of the Controller of Examinations and the Chairpersons of the Board of Under graduate studies concerned for further decision, if any.</li> <li>(v) Head Examiners shall submit all the marks of examinations including CA (after collecting from concerned Subject Teacher/Head/In-charge of the Department) duly signed by the examiner, head examiner and scrutinizer, if any.</li> <li>(vi) On the basis of requisition as to be made by the Controller of Examinations the Head Examiner shall have to make necessary arrangement for sending the answer scripts in sealed cover to the office of Controller of Examination for Post Publication Scrutiny works. The Head examiner may re-check the answer scripts before sending the same to the office of the Controller of Examinations for post</li> </ul>

	<p>publication scrutiny works.  (vii) Any discrepancy in this regard must be brought into the notice of the Controller of examinations.  (viii) Head examiner shall return all the answer scripts to the Controller of examinations after one year from the publication of results.</p>
<p><b>Rule 6</b>  Misconduct /  Malpractice  during  Examinations</p>	<p>An invigilator is required to be alert at every moment so that no student can adopt malpractice during examination.</p> <p>(i) <u>Nature of malpractices</u></p> <p>Category I:  (A) Writing erratic / irrelevant matters  (B) Writing obscene language / sketches  (C) Disclosing the identity in the answer script and / or requesting for specific marks.  (D) Writing wrong Roll No.  (E) Leaving the examination hall without permission / not signing in the attendance sheet.</p> <p>Category II:  (A) Possessing printed / handwritten notes / Electronic devices  (B) Copying or helping in copying  (C) Manual / group copying  (D) Possessing text book / sizeable handwritten / printed text  (E) Attempting to bribing / writing letter hinting at illegal gratification  (F) Mutilating the answer book issued</p> <p>Category III:  (A) Misbehaving / threatening examination official or other examinees / smuggling out question paper  (B) Receiving outside help  (C) Assaulting examination officials  (D) Indulging in / inciting anything other than normal  (E) Smuggling in / out answer script or attempting to do so  (F) Tampering with answer book issued and replacement of pages  (G) Impersonation or helping others to impersonate</p> <p>N.B.: The Controller of Examinations shall use his discretion in respect of the steps to be taken in case any other type of malpractice not mentioned above.</p> <p>(ii) <u>Board of Discipline</u>  There shall be a Board of Discipline to which all cases of breach of discipline in connection with examinations shall be reported with relevant documents and details.</p> <p>(iii) Highest Punishment recommended for consideration of the Board of Discipline</p> <ul style="list-style-type: none"> <li>• Category I – Cancellation of Paper</li> <li>• Category II – Cancellation of paper in case of (A) to (D). Cancellation of the entire examination of the semester in case of (E) and</li> </ul>



	<p>(F).</p> <ul style="list-style-type: none"><li>• Category III – Cancellation of entire semester examination with debarment from appearing in any examination for one year / two years including the current examination.</li></ul> <p>(iv) Steps to be followed for a student who is detected while indulging in malpractice</p> <ul style="list-style-type: none"><li>• The answer together with support material(s) used in the act of malpractice, if any, be ceased by the invigilator / supervisor.</li><li>• The student should be asked to fill in the unfair practice form and sign the same before the invigilator / supervisor. No verbal argument etc. shall be entered into.</li><li>• A fresh answer script be issued to the student after writing on the first inside page, the time of issuance of the said answer scripts by the invigilators. No signature on the page shall be made. The student shall be allowed to continue with the examination.</li><li>• The first answer book along with the unfair practice form duly completed by the invigilators / supervisor and the offending materials ceased at the center be packed in sealed envelope and conveyed to the Controller's Office separately.</li></ul>
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