Sant Gadge Baba Amravati University, Amravati

Additional Instructions to the Paper Setters

BSc Botany, Environmental Sciences and Seed Technology as per Scheme under NEP 2020

- 1. The duration of University theory examination shall be of **Two hours** or appropriate hours as prescribed in the syllabus/curriculum of the pertinent course
- 2. The Maximum Marks for the Question Paper shall be **30**
- 3. The Question Paper shall consist of Short Answer type (60%) and Long Answer type (40%) questions.
- 4. Examiner shall set Long answer type Questions and Short Answer type Questions as specified in the following Table or as applicable as per the curriculum.
- 5. There shall be internal choice for Short-Answer type Question as well as Long Answer type Question for every Unit.
- 6. The Question paper should be set based on the Course Outcomes (COs) defined in the curriculum and setter shall ensure that all the outcomes are addressed through appropriate questions. Read and study the Course Outcomes of a paper/subject/course very carefully.
- 7. The Questions should help to measure attainment of their corresponding Course Outcomes as prescribed in the syllabus/curriculum. All questions must be mapped to their related Course Outcomes.
- 8. Questions paper should try to address the different levels of learning (Bloom's Taxonomy) i.e. Knowledge/Remembering, Understanding, Applying, Analyzing, Evaluating and Creating
- 9. All Units mentioned in the course should be covered with equal weightage. The question paper shall be set so as to cover the entire syllabus of the respective course (paper).
- 10. The degree of difficulty of the question paper should be such that a student, who has engaged himself in the continuous learning process should be able to clear with ease. However, for scoring further his all-round knowledge and skills should be tested.
- 11. Model Solutions/answers to the short answer type questions and long answer type questions and scheme of marking for all question shall be submitted along with the question paper in a separate envelope.
- 12. Please ensure that the total marks for a course/subject/paper amounts to the prescribed total as notified in the scheme/curriculum. The total number of marks available for each question and each part of a question should be shown in the mark scheme and must tally with the marks shown on the question paper.

- 13. Avoid Questions like "Write short notes on ..."
- 14. The question paper should be precise and should be designed such that the questions:
 - a) are unambiguous
 - b) are asked for appropriate marks
 - c) The questions should be serially numbered as 01, 02, 03, 04, 05, 06 etc.
 - d) Sub-questions, if any, shall be numbered as A,B,C,D,... continuously for all Units
 - e) It must be ensured that all questions are from within the prescribed syllabus
 - f) The paper setters should specify whether any Charts, Graphs, Tables, Codes, Books etc. are to be provided to the students. The use of which shall be permitted during the actual conduct of the examination.

15. For Short-Answer type Questions, ensure that:

- the item calls for a single, brief answer
- the item has been written as a direct question
- the desired response is related to the main point of the item
- clues to the answer have been avoided (e.g. "a" or "an", length of the blank)
- the units and degree of precision is indicated for numerical answers.

16. For Long Answer type questions, make sure that:

- questions starting questions with "who", "what", "when", "where", "name", "list" are avoided as these terms limit the response.
- questions must follow Bloom's taxonomy with inclusion of following levels:

Table 1: Sample Terms for inclusion in Questions

Outcome	Sample Terms
Comparing	Compare, classify, describe, distinguish between, explain, outline, summarize, etc.
Interpreting	Convert, draw, estimate, illustrate, interpret, restate, summarize, translate, etc.
Inferring	Derive, draw, estimate, extend, extrapolate, predict, propose, relate, etc.
Applying	Arrange, compute, describe, demonstrate, illustrate, rearrange, relate, summarize,
	etc.
Analyzing	Breakdown, describe, diagram, differentiate, divide, list, outline, separate, etc.
Creating	Compose, design, devise, draw, formulate, makeup, present, propose, etc.
Synthesizing	Arrange, combine, construct, design, rearrange, regroup, relate, write, etc.
Generalizing	Construct, develop, explain, formulate, generate, make, propose, state, etc.
Evaluating	Appraise, criticize, defend, describe, evaluate, explain, judge, write, etc.

 Table 2.
 Distribution of Marks amongst Question paper

Total marks of Theory Paper	Marks for Long + Short Answer	Distribution of Unit wise Long/Short Answer type Questions
30	30	 Compulsory Question: Two Very Short Type Questions Based on All Four Units, Total Eight Questions carrying 01 Mark Each out of with Compulsory 6 Questions to solve. Questions with Internal Choice of All Four Units:
		a. Long Answer: One or Two Units Question of Maximum Marks 6 with internal Choice on One or Two Units as per the choice of Paper setter.
		b. Short Answer: Two or Three Units Short Questions of Maximum 3 Marks with Internal Choice on Two or Three Units.
		Q1: 6 Marks Based on All Units (Two Questions on Each Unit) Q2: 6 Marks Unit I Q3: 6 Marks Unit II Q4: 6 Marks Unit III Q5: 6 Marks Unit IV

Note: For a unit, an identical pattern of long and short answer shall be adhered for internal choice, that is 'either-or' questions shall be in same pattern.

Table 3: Model Question Paper Pattern

Sr. No of Questions	Questions	Marks allotted to each Question	
	B.Sc (Botany) Semester Examination		
	NEP - 2020		
	Paper Title As per Curriculum		
	Time: Two Hours Total marks: 30		
	N.B.: (1) Question No 1 is compulsory		
	(2) Draw well labelled diagrams whenever necessary.		
	(3) Students may use various colors to signify answers.		
Q1:	Write answers in One or Two Lines: (Solve any Six)		
	[Set two questions on each unit (Total Four units). Students should solve any six questions out of eight and each question carry one	$ \begin{array}{c} \text{Marks} \\ (1x6) = 6 \end{array} $	
	mark]		
	1		
	ii		
	111		
	iv		
	V		
	vi		

	vii	
	V111	
Q. No	Answers in short (Any Two of the Following)	3 Marks
	[Paper Setter shall set Four Questions on Unit decided for Short	Each
	Type Questions carrying 3 Marks Each. Students should solve any	
	Two Questions out of Four]	
A.		3
В.		3
C.		3
D.		3
Q. No	Explain in detail (Any One of the following)	6 Marks
	[Paper Setter shall set Two Questions on Unit decided for Long	Each
	Type Questions carrying 6 Marks Each. Students should solve any	
	One Questions out of Four]	
E.		6
F.		6

Note:

- Paper Setter Shall set First Compulsory Question with Eight very short Questions on all FOUR Units (Two on each Unit). Student
- Paper Setter Shall set Two or Maximum Three Short Type and One or Maximum Two
 Long Type (either 6 Marks for One Question or 3 Marks each for Four Questions)
- 3. The Units from the Curriculum for Short and Long Type of Questions shall not be same for all the sets. Paper Setter shall decide it variably from the Units under the curriculum.
- 4. Avoid / Minimize the questions-based Fist level of learning as per Blooms Taxonomy like
 Define, State, Quote, List the steps, Identify, Who Discovered, Name the parts of, Recite the rules for, etc.

5. Strictly Avoid –

Once the Question Type is decided and prefixed as Explain / Describe / Distinguish / in details then while setting sub questions under the same should not repeat the usage of the same

For Ex.

Q1: Describe in Details:

Sub question 1A: Describe functional aspects of F1 Particles

Sub question 1B: Explain Biosynthetic pathway of Pyruvic Acid

Sub question 1B: Distinguish between Aerobic and Anaerobic Respiration

Instead it should be:

Q1: Describe in Details:

Sub question 1A: Functional aspects of F1 Particles

Sub question 1B: Biosynthetic pathway of Pyruvic Acid

Sub question 1B: Features of Aerobic and Anaerobic Respiration

6. Consistency shall be maintained in sub questions as A, B, C, D, Z

On exhaustion of the alphabets use AA, AB, AC, AD AZ in continuation for the further questions.

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Chairman,
Board of Studies in Botany
(Including Environmental Science and Seed
Technology)