

CIRCULAR :-

A reference is invited to the Ordinances, Regulations and syllabi relating to the Master of Science (Herbal Science) degree examination vide this office Circular No.UG/247 of 2006 dated 12th July, 2006 and the Director /Heads of the recognized Science Institutions concerned and Principals of the affiliated colleges in the faculty of Science vide hereby / are informed that the recommendation made by the Board of Studies in Botany at its meeting held on 29th August, 2006 has been accepted by the Academic Council at its meeting held on 10th November, 2006 vide item No.4.1 and that in accordance therewith the pattern of question paper for M.Sc. (Part-I) in Herbal Science (Theory and Practical) examination is as per Appendix and that the same will be brought into force with effect from the examination to be held in the first half of the year 2007.

MUMBAI-400 032
7th February, 2007

for REGISTRAR

To,
The Director /Heads of the recognized Science Institutions concerned and Principals of the affiliated colleges in the faculty of Science

A.C/4.1/10.11.2006

No.UG/ 42-A of 2007 MUMBAI-400 032, 7th February, 2007

Copy forwarded with compliments to :-

1. The Dean, Faculty of Science
2. The Chairman, Board of Studies in Botany

for REGISTRAR

Copy to :-

The Director, Board of College and University Development, the Deputy Registrar (Eligibility and Migration Section), the Director of Students Welfare, the Personal Assistants to the Vice-Chancellor, the Pro-Vice-Chancellor, the Registrar and the Assistant Registrar, Administrative sub-center, Ratnagiri for information.

The Officer on Special Duty and Controller of Examinations (10 copies), the Finance and Accounts Officer (2 copies), Record Section (5 copies), Publications Section (5 copies), the Deputy Registrar, Enrolment, Eligibility and Migration Section (3 copies), the Deputy Registrar, Statistical Unit (2 copies), the Deputy Registrar (Accounts Section), Vidyanagari (2 copies), the Deputy Registrar, Affiliation Section (2 copies), the Director, Institute of Distance Education, (10 copies) the Director University Computer Center (IDE Building), Vidyanagari, (2 copies) the Deputy Registrar (Special Cell), the Deputy Registrar, (PRO) the Assistant Registrar, Academic Authorities Unit (2 copies) and the Assistant Registrar, Executive Authorities Unit (2 copies). They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above Circular and that no separate Action Taken Report will be sent in this connection. the Assistant Registrar Constituent Colleges Unit (copies), BUCT (1 copy), the Deputy Account, Unit VI (1 copy), the In-charge Director, Centralize Computing Facility (1 copy), the Receptionist (1 copy), the Telephone Operator (1 copy), the Secretary MUASA (1 copy), the Superintendent, Post-Graduate Section (2 copies), the Superintendent, Thesis Section (2 copies)

10.11.06

UNIVERSITY OF MUMBAI



Pattern of Question Papers For M.Sc.(Part-I) in Herbal Sciences

(With effect from the examination
to be held from first half of 2007)

M. Sc. Herbal Sciences

Question Paper pattern

M. Sc. (I)

Paper I

Total Marks :- 75

	Marks
Q.1. Unit - I OR Unit - I	14/8+6
Q.2. Unit - II OR Unit - II	14/8+6
Q.3. Unit - III OR Unit - III	14/8+6
Q.4. a) Unit - I b) Unit - II c) Unit - III	6 7 6 7 6 7
Q.5. Write short notes on (any three out of Five)	15 12

Total Marks :- 75

		Marks
Q.1.	Unit - I OR Unit - I	14/8+6
		14/8+6
Q.2.	Unit - II OR Unit - II	14/8+6
		14/8+6
Q.3.	Unit - III OR Unit - III	14/8+6
		14/8+6
Q.4.	a) Unit - I b) Unit - II c) Unit - III	6 7 6 7 6 7
Q.5.	Write short notes on (any three out of Five)	15 12

Paper III

Total Marks :- 75

		Marks
Q.1.	Unit - I OR Unit - I	14/8+6
		14/8+6
Q.2.	Unit - II OR Unit - II	14/8+6
		14/8+6
Q.3.	Unit - III OR Unit - III	14/8+6
		14/8+6
Q.4.	a) Unit - I b) Unit - II c) Unit - III	6 7 6 7 6 7
Q.5.	Write short notes on (any three out of Five)	15 12

Paper IV

Total Marks :- 75

		Marks
Q.1.	Unit - I OR Unit - I	14/8+6
Q.2.	Unit - II OR Unit - II	14/8+6
Q.3.	Unit - III OR Unit - III	14/8+6
Q.4.	a) Unit - I b) Unit - II c) Unit - III	6 7 6 7 6 7
Q.5.	Write short notes on (any three out of Five)	15 12

Practical-I

Total Marks : 50

Time : 10.00 am to 5.00 pm

N. B:- Candidates should show their slides/ preparations/results for all questions to the examiner.

Q.1. Classify specimens A & B upto their respective families giving reasons. Write the exomorphic characters. Sketch labeled diagram of L. S. of flower and T. S. of ovary. 10

Q.2. With the help of macroscopic / microscopic structures identify the herbal drugs C & D. 16

Q.3. Find out the ash content of the given plant material E 6

OR

Identify the ingredients from herbal drug E by performing suitable tests.

Q.4. Identify the specimen F, G, H, I & J (Spotting) 10

Q.5. Journal 4

Q.6. Viva voce 4

Practical-II

Total Marks : 50

Time : 10.00 am to 5.00 pm

N. B. :- Candidates should show their slides/ preparations/results for all questions to the examiner.
Use of logarithm tables / Calculator is allowed.

- | | | |
|------|--|----|
| Q.1. | Determine the absorption maxima of the given sample. | 10 |
| Q.2. | Separate the phytochemicals of given plant material by TLC. | 10 |
| Q.3. | Carry out the experiment to determine the fingerprinting of the given plant extract using HPTLC. | 12 |
| Q.4. | Separate the protein from given sample by using PAGE. | 10 |

OR

Isolate genomic DNA from the given sample and separate on agarose by agarose gel electrophoresis.

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|------|-----------|---|
| Q.5. | Journal | 4 |
| Q.6. | Viva voce | 4 |

Practical-III

Total Marks : 50

Time : 10.00 am to 5.00 pm

N. B. :- Candidates should show their slides/ preparations/results for all questions to the examiner.

Q.1. Demonstrate the effect of pH / Temperature / PGR on seed germination. 12

Q.2. Inoculate the given explant to initiate callus culture. 10

OR

Q.2. Initiate the suspension culture from the given callus.

Q.3. Identify the specimen/ Photograph A, B, C, D & E (Spotting) 10

Q.4. Report on Polyhouse Technology 10

Q.5. Journal 4

Q.6. Viva voce 4

Practical-IV

Total Marks : 50

Time : 10.00 am to 5.00 pm

N. B. :- Candidates should show their slides/
questions to the examiner.
Use of logarithm tables / Calculator is allowed.

- Q.1. Determine the K_m of the enzyme From the given plant material A. 14
- Q.2. Determine the Saponification value of the given oil B 8
- Q.3. Estimate the free fatty acids from the given plant material C 12
- Q.4. Estimate the protein by method from the given plant material D 8

OR

Estimate the Reducing Sugar / Alkaloid from the given plant material D

- Q.5. Journal 4
- Q.6. Viva voce 4
