



**KUVEMPU UNIVERSITY**  
**OFFICE OF THE DIRECTOR**  
**DIRECTORATE OF DISTANCE EDUCATION**

Jnana Sahyadri, Shankaraghatta – 577 451, Karnataka

Ph: 08282-256246, 256426; Fax: 08282-256370; Website: www.kuvempuuniversitydde.org

E-mail: info@kuvempuuniversitydde.org, ssgc@kuvempuuniversitydde.org



**TOPICS FOR INTERNAL ASSESSMENT ASSIGNMENTS - 2010-11**

**B.Sc. Second Year (PCM & CBZ)**

**General Note:** Students are advised to read the separate enclosed instructions before beginning the writing of assignments.

**Part I: Topics in Language Papers**

(Students to submit IAs of TWO Language Papers, (among them one should be English) which they have chosen at the time of admission to the Course.)

**ಕನ್ನಡ (ಭಾಷಾ ಪತ್ರಿಕೆ)**

1. ಕರ್ಣನ ಮನಸ್ಸಿನ ತುಮುಲವನ್ನು ಕುಮಾರವ್ಯಾಸ ಕಟ್ಟಿ ಕೊಟ್ಟಿರುವ ಬಗೆಯನ್ನು ಚಿತ್ರಿಸಿ. 10 ಅಂಕಗಳು
2. ದೇವರ ಬಗೆಗಿನ ಜನರ ನಂಬಿಕೆಗಳನ್ನು ಎ.ಎನ್. ಮೂರ್ತಿರಾಯರು ಹೇಗೆ ದಾಖಲಿಸಿದ್ದಾರೆ, ವಿವರಿಸಿ. 05 ಅಂಕಗಳು

**ENGLISH (Language Paper)**

1. Write a note on Metaphysical poetry. Attempt a critical appreciation of "A Valediction: Forbidding Mourning" in the light of your understanding of metaphysical qualities. 10 Marks
2. Sketch the character of Mark Antony. 05 Marks

**हिन्दी (भाषा)**

1. राष्ट्रभाषा और राजभाषा पर एक आलोचनात्मक लेख लिखिए। 10 Marks
2. अनुवाद; शिल्प, कला या विज्ञान? चर्चा कीजिए। 5 Marks

**SANSKRIT (Language Paper)**

1. श्री हर्षणु तन्न नाटकदल्लि वर्णसरुवणते जेमुठ वलकनन पलत, चेतुण नरेडेरि. Sketch the characteristic features of Jimutavahana as described by Sri Harsha in his Drama. 10 Marks
2. ಚಂಪುರಲಮಾಯಣದ ಸುಂದರ ಕಾಂಡದಲ್ಲಲಿ ವರ್ಣಸರುವಂತೆ ಲಂಕಲದಹನವನ್ನು ವಿವರಿಸಿ. Explain the Lankadahana as described in Sundarakanda of Campuramayana. 05 Marks

**URDU**

(Answer both the Topics. Topic 1 carries 10 marks, and topic 2 carries 5 marks)

1. سرسید احمد خان کے مضمون کے حوالے سے ثابت کیجئے کہ تعصب ایک بدترین خصلت ہے
2. خاکہ نگاری کے آغاز و ارتقاء پر روشنی ڈالئے

## Part II: Topics in Optional Papers

- Note: 1. Students to submit Internal Assignments of THREE Optional Papers (PCM or CBZ) in accordance with the combination opted by them.*
- 2. Out of 15 Internal Assignment marks per **Optional Paper** (For P, C, B & Z), 5 marks are earmarked for the attendance of the student at the Counseling/ Contact/ Practical Programme. Therefore, the topics given below are only for 10 marks each paper. Also note that for Mathematics paper, IA marks are 30 and hence topics are given for 25 marks.*

### PHYSICS

Topic Number	<i>Answer ALL the questions</i>	<i>Maximum 10 Marks</i>
1.	Explain the effect of damping on sharpening of resonance.	<b>02</b>
2.	Show that the radii of half period zones on a plane wavefront are proportional to square root of natural numbers.	<b>03</b>
3.	a) Define current density vector.	<b>02</b>
	b) A plane circular coil of radius 2cm. carries a current of 250mA. What is its magnetic moment? Find the magnetic field due to the current loop at a distance of 0.3m from the dipole on the axis of the loop.	<b>03</b>

### MATHEMATICS

Topic Number	<i>Answer ALL the questions</i>	<i>Maximum 25 Marks</i>
1.	$\frac{d^2x}{dt^2} - 3x - 4y = 0, \quad \frac{d^2y}{dt^2} + x + y = 0$ Solve the simultaneous equations.	
2.	Verify the Roll's theorem for the function $f(x) = e^x(\sin x - \cos x)$ in $\left(\frac{\pi}{4}, \frac{5\pi}{4}\right)$ .	
3.	Evaluate $\lim_{x \rightarrow 0} (\operatorname{cosec} x)^{\frac{1}{\log x}}$ .	
4.	Show that the series $1 + \frac{\alpha + 1}{\beta + 1} + \frac{(\alpha + 1)(2\alpha + 1)}{(\beta + 1)(2\beta + 1)} + \frac{(\alpha + 1)(2\alpha + 1)(3\alpha + 1)}{(\beta + 1)(2\beta + 1)(3\beta + 1)} + \dots$ converges if $\beta > \alpha > 0$ and diverges if $\alpha \geq \beta > 0$ .	
5.	Find the sum to infinity of the series $1 + \frac{1^2 + 2^2}{\sqrt{2}} + \frac{1^2 + 2^2 + 3^2}{\sqrt{3}} + \frac{1^2 + 2^2 + 3^2 + 4^2}{\sqrt{4}} + \dots$	

### CHEMISTRY

Topic Number	<i>Answer ALL the questions</i>	<i>Maximum 10 Marks</i>
1.	In water central oxygen atom is $sp^3$ hybridised. But H-O-H bond angle is not the same as tetrahedral bond angle. Account on the basis of VSEPR theory.	<b>04</b>

*J.U. Topics 2010-11: B.Sc. Second Year*

- |    |   |    |
|----|---|----|
| 2. | Discuss Lindemann's hypothesis for unimolecular reaction.   | 03 |
| 3. | Explain the effect of an electron releasing and electron attracting group on the acidity of Phenol. | 03 |

**BOTANY**

Topic Number	<i>Answer ALL the questions</i>	<i>Maximum 10 Marks</i>
1	Explain the sporophyte of porella.	05
2	Give an account of double fertilization.	05

**ZOOLOGY**

Topic Number	<i>Answer ALL the questions</i>	<i>Maximum 10 Marks</i>
1	Explain the functions of hormones secreted by the pituitary gland.	05
2	Write a note on vitamins.	05

**Part III: Topics in Compulsory Paper**

**ಭಾರತದ ಸಂವಿಧಾನ / INDIAN CONSTITUTION**

- |    |  |           |
|----|--|-----------|
| 1. | ಭಾರತದಲ್ಲಿ ಸ್ಥಳೀಯ ಸರ್ಕಾರಗಳ ಬೆಳವಣಿಗೆಯನ್ನು ವಿವರಿಸಿ.       | 10 ಅಂಕಗಳು |
| 2. | ರಾಜ್ಯಪಾಲರ ಅಧಿಕಾರ ಮತ್ತು ಕಾರ್ಯಗಳ ಕುರಿತು ಟಿಪ್ಪಣಿ ಬರೆಯಿರಿ. | 05 ಅಂಕಗಳು |
| 1. | Explain the growth of Local Self Governments in India. | 10 Marks  |
| 2. | Write a note on Powers and Functions of the Governor.  | 05 Marks  |

- ◆ ◆ ◆ -