# DIRECTORATE OF OPEN & DISTANCE LEARNING UNIVERSITY OF KALYANI



Attach this Sheet on the Top to Your answer Sheet for each paper

# **TOP SHEET (For Core Paper)**

of Students Response Sheet
(1<sup>st</sup> Internal / 2<sup>nd</sup> Internal) Please tick

M.A. /M.Sc. (2 <sup>nd</sup> Semester, 2021-23)					
Subject:		Paper Code	Paper Code		
Name of the Stu	Name of the Student :				
Address:					
Enrolment No					
Name of the Study Centre:					
Study Centre Code: Session: . 2021-23 (only)					
For Office Use only					
Paper No.					
Marks Obtained					
Date:				Signa	ture of Evaluator

- 1. Fill in the top sheet provided, and attach in to your answer sheets for each paper before submission by hand to the Study Centre/ KU Main Campus.
- 2. Send back your response sheets (SRS) positively as per schedule supplied from office for session concerned.

# কল্যাণী বিশ্ববিদ্যালয় মুক্ত ও দূরবর্তী শিক্ষা অধিকরণ

২০২২

# স্নাতকোত্তর দ্বিতীয় সেমেস্টার

বিষয় : বাংলা

2<sup>nd</sup> Internal Examination (Assignment)

প্রতিটি পত্র থেকে একটি করে প্রশ্নের উত্তর দাও :

প্রতিটি প্রশ্নের মান - ০৫

পত্ৰ – B-CORE-205

১। জীবনানন্দ দাশের 'শিকার' কবিতার কাব্যসৌন্দর্য বিশ্লেষণ করো।

Ø

অথবা

মনসামঙ্গল কাব্যের মিথকে কবি শঙ্খ ঘোষ 'হেতালের লাঠি' কবিতায় নতুনভাবে ব্যবহার করেছেন। বিষয়টি সম্পর্কে আলোকপাত করো।

### পত্র - B-CORE-206

১।"এবারে বিশ হাজার টাকা পণ হাতে হাতে আদায়।" উদ্ধৃত অংশটির সপ্রসঙ্গ ব্যাখ্যা করো। ৫ অথবা

গোরার জন্মবৃত্তান্ত উপন্যাসে কতটা শৈল্পিক তা নিজের ভাষায় আলোচনা করো। ৫

### পত্র - B-CORE-207

১। 'আরণ্যক' উপন্যাসের কুন্তা চরিত্র সম্পর্কে আলোচনা করো ।

Ø

### অথবা

'ঢোঁড়াই চরিত মানস' উপন্যাসের রামিয়া চরিত্র সম্পর্কে সংক্ষেপে আলোচনা করো । ৫

## পত্ৰ - B-CORE-208

১। 'নবান্ন একইসঙ্গে দুর্গতি ও প্রতিরোধের নাটক' – আলোচনা করো। ৫ অথবা

'টিনের তলোয়ার' নাটকের পটভূমি বাংলা নাট্যসাহিত্যের একটি বিশেষ ঐতিহাসিক প্রেক্ষিতকে ইঙ্গিত করে। বিষয়টির যুক্তিসঙ্গত ব্যাখ্যা দাও।

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### UNIVERSITY OF KALYANI DIRECTORATE OF OPEN AND DISTANCE LEARNING

# M.A. in ENGLISH SEMESTER: II

### SECOND INTERNAL ASSESSMENT (ASSIGNMENTS)- 2022

Full Marks: 5 (for each paper)

### Answer any ONE question from each paper

# <u>COR - 205: ROMANTIC AND VICTORIAN (1789-1900):</u> POETRY AND DRAMA

### 1. Locate and Annotate:

"Out flew the web and floated wide; The mirror crack'd from side to side; 'The curse is come upon me,' cried The Lady of Shalott."

OR,

2. Write a short note on the character of Sir George Crofts in Shaw's *Mrs. Warren's Profession*.

## <u>COR - 206: ROMANTIC AND VICTORIAN (1789-1900):</u> <u>FICTION AND NON-FICTIONAL PROSE</u>

1. Comment on the nature of the relationship that existed between Heathcliff and his wife Isabella.

OR,

2. Why does Matthew Arnold refer to the Victorian aristocrats as "Barbarians" in his *Culture and Anarchy*?

# <u>COR - 207: TWENTIETH CENTURY: POETRY AND DRAMA:</u> (1901-TO THE PRESENT)

1. Samuel Beckett's *Waiting for Godot* is loaded with various symbols which define the purposelessness of human existence. Relate the significance of some of the major symbols used in the play.

OR,

2. Critically analyze the importance of Stanley and Lulu's interaction in Act I of *The Birthday Party* 

# COR - 208: STRUCTURE OF MODERN ENGLISH, ENGLISH LANGUAGE TEACHING AND STYLISTICS

- 1. Write short notes on any **TWO** of the following four alternatives: a. Simile b. Oxymoron c. Hyperbole d. Alliteration
  - OR,

2. What do you know about the Chomskyan view of language acquisition known as the "Innatist position"?

### **UNIVERSITY OF KALYANI**

#### **DIRECTORATE OF OPEN AND DISTANCE LEARNING**

### M.A. SEMESTER -II:: HISTORY PAPER- COR-206

#### **COMBINED INTERNAL EXAMINATION 2022**

Candidates are required to give answers to all questions. Full Marks-10

- 1. Queen's Proclamation was passed in the year-
- A) 1856 B) 1857C) 1858D) 1892
- 2. 'Industrial Evolution of India' was written by-
- A) D.R, Gadgil B) Thomas Roe C) George Blyn D) None of above.
- 3. Who termed de-industrialization as myth?
- A) Morris.D.Morris B) Dadabhai Naoroji C) Sabyasachi Bhattacharya D) None of the above
- 4. 'Economic History of India' is written by-
- A) Dadabhai Naoroji B) Ramesh Chandra Dutta C) Ramesh Chandra Majumder D) H.C.Roychowdhuri
- 5. Railways was extended to Ranigung in the year-
- A) 1853 B) 1854 C) 1855D) None
- 6. Kol revolt occurred on:-
- A) 1832 B) 1833C) 1834D) 1836
- 7. Leader of Wahabi movement in Bengal was-
- A) Mir Nisar Ali B)Hazi Shariyat ullahn C)Dadu Minyah D) None of Them
- 8. Criminal Tribes Act was passed in the year:-
- A) 1861 B) 1865C) 1871 D) 1895
- 9. Bengal Namasudra Association was formed in the year-
- A) 1912B) 1912 C) 1914 D) 1918
- 10. First Jute mill in Bengal was established in -
- A) Chandannagar B) Rishra C) Barahnagar D) None of them

# UNIVERSITY OF KALYANI DIRECTORATE OF OPEN AND DISTANCE LEARNING M.A. SEMESTER –II :: HISTORY PAPER- COR-207

# COMBINED INTERNAL EXAMINATION 2022 Candidates are required to give answers to all questions.

Full Marks-10

- 1) Who among the following is not an Imperialist Historian?
- A) Valentine Chirol B) J. Gallagher C) Percival Spear D) Reginal Coupland.
- 2) 'A Nation in Making' was a concept of-
- A) Bal Gangadhar Tilak B) Rishi Aurobindo C) Mahatma Gandhi D) Surendranath Banerjee.
- 3) Who was the Viceroy of India in 1885?
- A) Lord Ripon B) Lord Dufrin C) Lord Canning D) None of them.
- 4) 'Subaltern Studies' is written by-
- A) Sumit Sarkar B) Rajanipam Dutta C) Ranajit Guha D) None.
- 5) Laxmi Bhandar during Swadeshi movement was introduced by
- A) Annie Besant B) Basanti Devi C) Sarala Devi D)None of them.
- 6) Communist Party of India was established at Kanpur in-
- A) 1923 B) 1925 C) 1920 D) None of these.
- 7) The word 'Pakisthan' was introduced by-
- A) Rahmat Ali B) Md. Ali Jinnah C) Aga Khan D) Liyakat Ali
- 8) National Council of Women in India (NCWI) was established in the year-
- A) 1923 B) 1925 C) 1926 D) 1928.
- 9) Bengal Chemicals was established in the year-
- A) 1893 B) 1907 C) 1904 D) 1908.
- 10) Who among the following was not a president of Indian National Congress?
- A) Annie Basant B) Kasturba Gandhi C) Sarojini Naidu D) Neli Sengupta

## UNIVERSITY OF KALYANI

# DIRECTORATE OF OPEN AND DISTANCE LEARNING M.A. SEMESTER -II :: HISTORY PAPER- COR-208

### **COMBINED INTERNAL EXAMINATION 2022**

# Candidates are required to give answers to all questions. Full Marks-10

- 1) 'Rajabali' was written by-
- A) Ramram Basu B) Mrityunjaye Vidyalankar C)Ragati Nyanratna D)None of them.
- 2) Thuggee Act was passed in the year
- A) 1836 B) 1841 C) 1846 D) 1847
- 3) Missionaries who were involved in famine relief were known as -
- A) Charity Christians B) Charity Missionary C) Rice Christians D) Grain Christians
- 4) Derozio was appointed as a Faculty of the Hindu college in the year-
- A) 1825 B) 1826 C) 1827 D) None of the Above
- 5) Who stated,' I do not believe in the sacredness of the river Ganges'?
- A) Radhanath Sikder B)Rasik Krishna Mallik C) Pyarichand Mitra D) None of them.
- 6) Printing Press was established in Sreerampore in the year-
- A) 1788 B) 1800 C) 1801 D) 1805
- 7) Which among the following was done/established in the year 1823?
- A) Wood's Despatch B) General committee of Public Instructions C) Meckle Minute D) None of them.
- 8) Geological Survey of India was established in the year
- A) 1834 B) 1850 C) 1851 D) 1854.
- 9) 'Naba Babu Bilash' was written by-
- A) Ishwar Gupta B) Bhabanicharan Bandyopadhya C) Kaliprasanna Singha D) None of Them.
- 10) Chandramukhi Bose passed M.A in the year-
- A) 1882 B) 1884 C) 1885 D) None of them.



# DIRECTORATE OF OPEN AND DISTANCE LEARNING (DODL) UNIVERSITY OF KALYANI KALYANI, NADIA

# M.A. in Education 2nd Semester Assignment Ouestions Attempt *One* question from each Paper

# **Educational Philosophy (COR-205)**

2 <sup>nd</sup> Internal  1. Briefly discuss the basic education of Mahatma Gandhi.	5
Or	
Mention the various perspectives of philosophy of education.	5
Educational Psychology-2 (COR-206)	
2 <sup>nd</sup> Internal	
1. Discuss the features of emotional intelligence.	5
Or	
Describe the concept of cognitive approach to learning.	5
Educational Sociology (COR-207)	
2 <sup>nd</sup> Internal	
1. Mention the different factors of social mobility.	5
Or	
Analyse different qualities of a good Leader of an educational institution.	5

# **History, Politics & Economics of Education (COR-208)**

# **2<sup>nd</sup> Internal**

1. Discuss the concept of Cost Benefit Analysis and Cost Effective Analysis.		
Or		
Write short note on 'Legal Approaches' in politics.	5	
Research Methodology-2(COR-209)		
2 <sup>nd</sup> Internal		
1. Describe the style format of a research report with necessary illustration.	10	
Or		
Elucidate the steps of conducting ethnographic research	10	

# 2<sup>nd</sup> Internal Assignment Examinations of <u>ZOOLOGY</u> (2021-23) SEMESTER-II

# Directorate of Open and Distance Learning University of Kalyani

Date: 13.11.2022

Paper Code	Questions	Marks
	Write down the functions of large intestine. Why stomach remains protected from the HCl? How bile help digestion of lipid?	
ZCORT - 205	OR	2+3+2=7
	Define taxonomy. Write down the differences between Taxonomy and systematic. What do you mean by Taxonomic characters?	
	Discuss the structure of electric organ in fish with suitable diagram? Discuss the fish hormones released from urophysis.	4+3=7
ZCORT - 206	OR	
	What do you mean by spat? Write down the systematic position of pearl oyster. Describe the utilization of oyster.	2+2+3=7
	What is shotgun method of DNA sequencing? Differentiate microsatellite and minisatellite? Why ddNTPs are called terminators in DNA replication?	3+2+2=7
7.00 P.W. 0.07	OR	
ZCORT - 207	What do you mean by auto antigen? What are the properties of an antigen molecule? Write short notes on APC	1+3+3=7

- Assignment should be written in A4 size page only.
- Paper code, Name of the Paper, Date of examination, and Date of Submission, Enrollment number, and Registration number should be mentioned on the front page.
- For Each paper, make Separate answer script.

# **University of Kalyani**

# **Directorate of Open and Distance Learning**

# 2<sup>nd</sup> Internal Assignment Examination of BOTANY (Session 2021-23) SEMESTER-II

Date: 13/11/2022

PAPER CODE	QUESTIONS	MARKS
BOTCOR T205	What is Mass Extinction? Mention the Major Five Mass Extinction events in Earth's history. Write the causes of Mass Extinction.	1+2+3=6
	Or,	
	Mention one significant adaptation for entomophilous pollen grains. Define pollen limitation and briefly discuss about the causes of pollen limitation. What do you mean by Palynodebris?	1+3+2=6
BOTCOR T206	What is Ramachandran plot? What are the characteristics of $\alpha$ -helix and $\beta$ -pleated sheets? Or,	2+4=6
	Cite experimental evidences in support of the role of circadian rhythm in photoperiodic induction for flowering. What is chemiosmotic hypothesis of ATP synthesis?	4+2=6
BOTCOR T207	What are IS elements? How do you calculate chiasma frequency? State the similarities between <i>lac</i> operon and <i>ara</i> operon.  Or,	2+2+2=6
	Following are the results obtained from a bivariate data collected from 16 experimental plots on yield of green fodder (x) and maize	5+1=6

grains (y) measured by weight in kg per plot. (N=16).

$$\sum x = 532.9$$
,  $\sum y = 429.7$ ,  $\sum xy = 14376.9$ ,  $\sum x^2 = 17845.6$  and  $\sum y^2 = 11601.4$ 

(Table value of "r" for 15DF is 0.482, 0.606, 0.725 at 5%, 1% and 0.1% respectively).

# Find out:

- a) Phenotypic correlation between the attributes.
- b) Comment.

# INTERNAL ASSESSMENT II **SEMESTER II**

**SUBJECT: MATHEMATICS** 

Answer the questions in your own words as far as practicable

#### **COR 2.1**

### Answer any two of the following questions:

 $2 \times 3.5 = 7$ 

- (1) Let  $T: X \to Y$  be a linear operator where X and Y are normed spaces. Show that T is bounded if and only if T maps bounded sets in X into bounded sets in Y.
- (2) Show that a subset M of a metric space X is nw dense if and only if  $X \setminus \overline{M}$  is dense in X.
- (3) Show that in an inner product space  $X, x \perp y$  if and only if  $||x + \alpha y|| \geq ||x||$  for all scalars  $\alpha$ .
- (4) Let  $\{x_n\}$  be a sequence in a Hilbert space H and  $x \in H$  is such that  $\lim_{n \to \infty} ||x_n|| = ||x||$  and  $\lim_{n \to \infty} ||(x_n, x)||$  $=\|(x,x)\|.$  Show that  $\lim_{n\to\infty}x_n=x.$

#### **COR 2.2**

### Answer any two of the following questions:

 $2 \times 3.5 = 7$ 

- (1) Determine all ring homomorphisms from  $\mathbb{Z}_{12}$  to  $\mathbb{Z}_{30}$ .
- (2) Let R be an integral domain with unit element. Then, every prime element in R is irreducible. Is the converse true? Comment with justifications.
- (3) Let R be a Euclidean domain with the integer valued function d. If d' is another function defined as d'(a) = d(a) + m, for some positive integer m, with  $d(1) + m \ge 0$ , check whether R is a Euclidean domain with respect to d'.
- (4) Check for the irreducibility of the following polynomials in the specified domains.
  - (a)  $x^{10} + 4x^7 + 18x + 14$  over  $\mathbb{Q}$ ;
  - (b)  $x^4 5x^2 + 6$  over  $\mathbb{Q}$ .

#### **COR 2.3**

### Answer any one of the following questions:

 $1 \times 5 = 5$ 

(1) Fit a parabola to the following data using the method of least squares:

	1.0					
y	0.98	1.40	1.86	2.55	2.28	3.20

(2) Prove the following result with the help of Euler-Maclaurin formula:

$$\sum_{x=1}^{n} x^2 = \frac{n(n+1)(2n+1)}{6}.$$

(3) Estimate the value of y(1.05) using Hermite interpolation formula from the following data:

x	y	y'
1.00	1.00000	0.5000
1.10	1.04881	0.47673

### **DSE 2.4 (Applied Stream)**

### Answer any one of the following questions:

 $1 \times 4 = 4$ 

- (1) Derive the equation of motion of the sphere.
- (2) A velocity field is given by  $\vec{q} = -\frac{iy + jx}{x^2 + y^2}$ . Determine whether the flow is irrotational. Calculate the circulation round
  - (a) a square with corners at (1,0), (2,0), (2,1), (1,1);
  - (b) a unit circle with centre at the origin.

1+3

### DSE 2.4 (Pure Stream)

### Answer any one of the following questions:

 $1 \times 4 = 4$ 

- (1) Prove or disprove: A subgroup H of a topological group is open iff it contains a nonempty open subset.
- (2) Let G be a topological group and H be a normal subgroup of G. Show that  $\overline{H}$  is also so.