

FACULTY OF MANAGEMENT

**BE (EEE/EIE/CSE/CME/DS) II – Semester (AICTE) (Backlog) Examination,
March / April 2022**

Subject: Indian Constitution

Time: 3 Hours

Max. Marks: 70

- Note: (i) First question is compulsory and answer any four questions from the remaining six questions. Each Questions carries 14 Marks.**
(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
(iii) Missing data, if any, may be suitably assumed.

1. a) Discuss the main features of the Government of India Act 1919.
b) Why and when the Constitution Day is celebrated?
c) Explain the method by which the Prime Minister of India is appointed.
d) How the Council of Ministry in States is formed?
e) Explain the powers and functions of the Governor
f) Describe the functions of the Panchayati Raj Institutions.
g) Examine the significance of Article 14.
2. a) Discuss the Socialistic (Directive) Principles of State Policy.
b) Distinguish between fundamental Rights and Directive Principles of State Policy.
3. a) Explain the Centre-State Legislative Relations.
b) Explain the composition and functions of the Inter State Council.
4. a) Discuss the important features of the Government of India Act, 1935.
b) List out the fundamental features of the Constitution of India.
5. a) Explain the Powers and Functions of the President of India.
b) Examine the power and functions of the Chief Minister.
6. a) Explain the composition and functions of the NITI Aayog.
b) Examine the role of the finance Commission in distributing the tax revenues.
7. a) Examine the role of the National Human Rights Commission in protecting the rights of the people.
b) Explain the composition and functions of the National Commission for Women.

FACULTY OF ENGINEERING
B.E. (ECE/MECH/PROD/AE/AI&DS/AI&ML/IoT/IT) II - Semester (AICTE)
(Backlog) Examination, March / April 2022

Subject: Essence of Indian Traditional Knowledge

Time: 3 Hours

Max. Marks: 70

- Note: (i) First question is compulsory and answer any four questions from the remaining six questions. Each Questions carries 14 Marks.**
(ii) Answer to each question must be written at one place only and in the same order as they occur in the question paper.
(iii) Missing data, if any, may be suitably assumed

- 1 (a) Write a note on Culture and Heritage?
(b) Explain the role of Sanskrit language in Indian Literature?
(c) Write about Indian Philosophy?
(d) Write a note on any one religious reform movement form modern India?
(e) Write briefly on Indian Handicrafts
(f) What is the importance of Indian Architecture?
(g) How was the Education system in the Medieval India?
- 2 (a) Explain the General Characteristics of Culture?
(b) What is the history of Ancient India?
- 3 (a) What is the significance of Indian scriptures to current society?
(b) Write a note on literature of South India?
- 4 (a) Explain about religion and philosophy of Ancient India?
(b) Explain in detail about Buddhism?
- 5 (a) Write about Indian music and its significance?
(b) Write an essay on Indian paintings?
- 6 (a) Give a detailed account of Dance and Drama?
(b) Write about Education system in Modern India?
- 7 (a) What are the aims of Indian Education system?
(b) Discuss the contribution of Indian Scientists from modern India in the world of science?

FACULTY OF ENGINEERING

**B. E. (Civil/EEE/EIE/CSE/CME) II – Semester (AICTE) (Backlog) Examination,
March / April 2022**

Subject: Indian Constitution

Time: 3 hours

Max. Marks: 70

(Missing data, if any, may be suitably assumed)

PART – A

Note: Answer all questions.

(10 x 2 = 20 Marks)

1. What was Cabinet Mission plan?
2. What do you mean by a constituent assembly?
3. How is the President of Indian Republic elected?
4. What is Collective Responsibility?
5. How a Chief Minister is elected?
6. Why was Balwant Rai Mehta Committee set up?
7. 'Fundamental Duties are both civic and moral in nature'. Discuss.
8. What are the objectives and features of NITI Aayog?
9. What are the functions of Inter State Council?
10. Write brief about electoral reforms in India.

PART – B

Note: Answer any five questions.

(5 x 10 = 50 Marks)

- 11 Discuss the evolution of the constitution of India.
- 12 Explain the fundamental features of the Indian Constitution.
- 13 Explain the legislative powers of the President of India?
- 14 Examine the powers and functions of the Prime Minister of India.
- 15 Compare the Directive Principles of State Policy and Fundamental Rights.
- 16 What are the recommendations of Sarkaria Commission on Centre-State relations? Discuss.
- 17 Explain the powers and functions of the Election Commission in India.

FACULTY OF ENGINEERING

**B.E. (ECE/MECH/PROD/AE/IT) II – Semester (AICTE) (Backlog) Examination,
March / April 2022**

Subject: Essence of Indian Traditional Knowledge

Time: 3 Hours

Max. Marks: 70

(Missing data, if any, may be suitably assumed)

PART – A

Note: Answer all questions.

(10 x 2 = 20 Marks)

1. What is Civilization?
2. What is Ahimsa?
3. Define Philosophy?
4. Concept of “Indian Painting” – Explain.
5. How many Vedas? Explain.
6. “Indian Architecture”? Explain in brief.
7. Concept of “Heritage”? Explain.
8. What is NEP-2020? Explain.
9. Explain the Scientists of Ancient India?
10. What are the aims of Indian Education System?

PART – B

Note: Answer any five questions.

(5 x 10 = 50 Marks)

11. What are the general characteristic of Culture?
12. Discuss about the Dance and Drama?
13. Explain the source of Indian Philosophy?
14. Write an essay on “Four Noble Truths” Explain.
15. Write a note on “Fine Arts in India”?
16. What are the relation between Philosophy and Religion?
17. Explain the note on Education System in Ancient India?

FACULTY OF ENGINEERING

**B. E. (Civil/EEE/EIE/ECE/MECH/PROD/AE/CSE/IT) II – Semester (CBCS)
(Backlog) Examination, March / April 2022**

Subject: Engineering Chemistry

Time: 3 hours

Max. Marks: 70

(Missing data, if any, may be suitably assumed)

PART – A

Note: Answer all questions.

(10 x 2 = 20 Marks)

1. Draw the graphical representation for the conductometric titration of strong acid v/s strong base.
2. Define equivalence conductance and mention its units.
3. Why do the car batteries frequently go dead in higher altitudes?
4. Write the advantages with fuel cells.
5. What is Pilling Bedworth rule. Define.
6. What are plasticizers? Give the names of any three plasticizers.
7. Define Ignition temperature. How its value should be for a good fuel?
8. What do you understand by trans esterification? Give its importance.
9. Define heterogeneous catalysis. Give example.
10. Write any three applications of composites.

PART – B

Note: Answer any five questions.

(5 x 10 = 50 Marks)

- 11 (a) How can you determine the pH of a solution using quinhydrone electrode.
(b) Calculate the standard potential of Ni²⁺/Ni electrode, if the cell potential of the cell Ni/Ni²⁺(0.01M)//Cu²⁺(0.1M)/Cu is 0.59v. Given, E⁰ Cu²⁺/Cu is 0.34v.
- 12 (a) Define primary and secondary batteries. Discuss the construction and working of Zinc-Carbon battery with anodic and cathodic reactions.
(b) Discuss the construction of Lithium-ion battery and mention its applications.
- 13 (a) What is the principle involved in electroplating? Discuss this with the help of neat diagram.
(b) Explain the following factors that can influence the rate of corrosion?
(i) Nature of oxide film (ii) Relative areas of anode and cathode
(iii) Over voltage.
- 14 (a) Define calorific Value. How would you determine it by using Dulong's formula?
(b) A gaseous fuel has the following composition by volume. CO=30%, H₂=12%, CO₂=4%, CH₄=2% and N₂=52%. What will be the quantity of air and oxygen required for burning 100m³ of the fuel?
- 15 (a) What are composites? Discuss the classification and advantages of composite materials.
(b) What is Green Chemistry? Write the twelve principles of green chemistry.

- 16 (a) Define fuel cell. Explain the construction and working of Methanol-Oxygen fuel Cells. Write the chemical reactions involved in it.
- (b) What are the essential ingredients of a paint? What are their functions? Give examples.
- 17 (a) How the quality of coal is analyzed by proximate analysis? Explain.
- (b) What is atom economy? Explain its importance in green protocols with any two example reactions showing atom economy.

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