

Enrollment No.....



**Faculty of Engineering**  
**End Sem (Even) Examination May-2018**  
**EN3HS01 History of Science and Technology**

Programme: B.Tech.

Branch/Specialisation: All

**Duration: 3 Hrs.****Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

- Q.1 i. When science day is celebrated in India? **1**  
 (a) 1 January (b) 28 February  
 (c) 8 March (d) 15 September
- ii. What Galileo invented? **1**  
 (a) Barometer (b) Pendulum Clock  
 (c) Microscope (d) Thermometer
- iii. What is the full form of CSIR? **1**  
 (a) Council of Scientific and Industrial Research  
 (b) Computer Science Institute of Research  
 (c) Compounded Simple Interest Rate  
 (d) Council of Social and Indian Research
- iv. Digital India scheme was launched in **1**  
 (a) 2014 (b) 2016 (c) 2013 (d) 2015
- v. What was the duration of 12th five year plan **1**  
 (a) 2007-2012 (b) 2012-2017 (c) 2002-2007 (d) 2010-2015
- vi. TDB stands for **1**  
 (a) Technical Discussion Board  
 (b) Technology Discussion Board  
 (c) Technology Development Board  
 (d) None of these
- vii. Which was the first satellite launch vehicle in India? **1**  
 (a) SLV-3 (b) ASLV (c) PSLV (d) GSLV
- viii. Nuclear energy is due to **1**  
 (a) Fission reaction (b) Combustion reaction  
 (c) Chemical reaction (d) Fusion reaction

- ix. "The speed of an aircraft in the year 2020 will be 'x' units" is an example of: **1**  
 (a) Technology Development (b) Technology Forecasting  
 (c) Technology Transfer (d) Appropriate Technology
- x. Hindrances in development of technology are referred as \_\_\_\_\_. **1**  
 (a) Technology obstacle (b) Technology barrier  
 (c) Technology problems (d) Technology difficulties
- Q.2 i. Name three famous Indian Scientists with their area of research work? **3**  
 ii. Describe the roots of science and technology in the ancient period of India. **7**
- OR iii. Elaborate your views on role of Science and Scientist in society? **7**
- Q.3 i. What are the different Programs aimed at technological self reliance? **3**  
 ii. Enlist the activities of CSIR with its achievements. **7**
- OR iii. What do you understand by research activities and promotion of technology development? Highlights few technology missions. **7**
- Q.4 i. What was Nehru's vision of science for independent India? Explain? **3**  
 ii. Examine the development of Science and Technology during current five year plan. **7**
- OR iii. Discuss any three technology policies with its year of release. **7**
- Q.5 Attempt any two:  
 i. Differentiate between GEO, LEO and MEO. **5**  
 ii. Write a short note on India's nuclear energy program? **5**  
 iii. Write a short note on Launch Vehicle Technology? **5**
- Q.6 Write a short note on any two:  
 i. Give an account of Technological Assessment **5**  
 ii. Types of Technological Transfer **5**  
 iii. Appropriate Technology **5**

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P.T.O.

**Marking Scheme**  
**EN3HS01 History of Science and Technology**

Q.1	i.	When science day is celebrated in India? (b) 28 February	1
	ii.	What Galileo invented? (b) Pendulum Clock	1
	iii.	What is the full form of CSIR? (a) Council of Scientific and Industrial Research	1
	iv.	Digital India scheme was launched in (d) 2015	1
	v.	What was the duration of 12th five year plan (b) 2012-2017	1
	vi.	TDB stands for (c) Technology Development Board	1
	vii.	Which was the first satellite launch vehicle in India? (a) SLV-3	1
	viii.	Nuclear energy is due to (a) Fission reaction	1
	ix.	“The speed of an aircraft in the year 2020 will be ‘x’ units” is an example of: (b) Technology Forecasting	1
	x.	Hindrances in development of technology are referred as_____. (b) Technology barrier	1
Q.2	i.	Three famous Indian Scientists with their area of research work 1 mark for each scientist and correct specialization (1 mark *3)	3
	ii.	Roots of science and technology in the ancient period of India. Introduction 2 marks Any five areas or domain of development in science & technology from ancient till present 5 marks	7
OR	iii.	Role of Science in society 3.5 marks Role of Scientist in society 3.5 marks	7
Q.3	i.	Programs aimed at technological self reliance Objective, achievements, projects amongs these aspects any one explained with respect to 3 points 1 mark each (1 mark * 3)	3

	ii.	Activities of CSIR Its achievements.	3 marks 4 marks	7
OR	iii.	Research activities and technology development Any five technology missions 1 mark each (1 mark *5)	2 marks 5 marks	7
Q.4	i.	Nehru’s vision of science for independent India		3
	ii.	Development of Science and Technology during current five year plan Correct Year 1 mark Upliftment done 6 marks		7
OR	iii.	Any three technology policies 2 marks for each (2 marks*3) Its year of release.		7
Q.5		Attempt any two:		
	i.	Differentiate between GEO. LEO and MEO. Full form 1 mark Difference 4 marks		5
	ii.	India’s nuclear energy program Introduction 2 marks 1 mark for each phase described (1mark * 3) 3 marks		5
	iii.	Launch Vehicle Technology Introduction 1 mark 1 mark for each different launch vehicles (1mark * 4) 4 marks		5
Q.6		Write a short note on any two:		
	i.	Give an account of Technological Assessment Introduction 1 mark 1 mark each point described (1 mark *4) 4 marks		5
	ii.	Types of Technological Transfer Introduction 1 mark 1 mark each types (1 mark *4) 4 marks		5
	iii.	Appropriate Technology Description 2 marks Examples/advantages/characteristics 3 marks		5

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