



Enrollment No.....

Faculty of Engineering

End Sem (Even) Examination May-2019

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. Who is the Indian father of Green Revolution? **1**
 (a) N. Borlaug (b) J L Nehru
 (c) M S Swami Nathan (d) JC Bose
- ii. Bhabha Atomic Research Centre was founded in Year- **1**
 (a) 1942 (b) 1954 (c) 1963 (d) 1971
- iii. National Aerospace laboratory is located at- **1**
 (a) New Delhi (b) Mumbai (c) Chennai (d) Bangalore
- iv. Digital India Scheme was launched in the year- **1**
 (a) 2015 (b) 2014 (c) 2013 (d) 2016
- v. SRISHTI is the goal of which science policy- **1**
 (a) 2003 (b) 1983 (c) 2013 (d) 1993
- vi. Plan holidays were held during year- **1**
 (a) 2001-2006 (b) 1966-1969 (c) 1951-1956 (d) 1990-1992
- vii. Mangalyaan was launched from- **1**
 (a) Andhra Pradesh (b) Tamil Nadu
 (c) Maharashtra (d) Kerala
- viii. Mangalyaan was launched on- **1**
 (a) 5 Nov, 2013 (b) 5 Sept, 2013
 (c) 5 Nov, 2012 (d) 5 Nov, 2012
- ix. Term Used to describe predicting the direction and impact of a new technology? **1**
 (a) Technology Predicting (b) Technology forecasting
 (c) Direction forecasting (d) None of these
- x. Which of the following is not a mode of international technology transfer? **1**
 (a) Parents (b) Joint Venture
 (c) Licensing (d) None of these

P.T.O.

- Q.2 i. Define Science. Give an example each of applied science and pure science. **2**
 ii. Justify the statement "Science and society are inter-dependant". **3**
 iii. Define Technology along with examples. Explain how science supports technological innovation. **5**
- OR iv. Discuss about five significant science and technological discoveries that ancient India gave world. **5**
- Q.3 i. Name four project completed successfully under PATSER scheme. **2**
 ii. Discuss any four Technology Mission with their launching dates, area of work and goal. **8**
- OR iii. What are the roles and responsibilities of CSIR? Name any four of its centres. Discuss various achievement made by CSIR. **8**
- Q.4 i. Explain Nehru's perspective towards development of Nation. **3**
 ii. Mention various science policies launched for promotion of science and in the country. Explain the role of science policy 1983 and STI-2013 in the development of country. **7**
- OR iii. What is Planning Commission and when it was setup? Discuss science and technology development during five year plans (any five) **7**
- Q.5 i. INSAT system and services **4**
 ii. Biotechnology, its types and applications **6**
- OR iii. Any four Non-conventional Energy sources in India **6**
- Q.6 Attempt any two:
 i. What is transfer of technology? Illustrate its type with examples. **5**
 ii. Discuss any five methods through which technology transfer is possible. **5**
 iii. What is technology forecasting? Discuss various forecasting techniques. **5**

Marking Scheme

EN3HS01 History of Science and Technology

Q.1	i.	Who is the Indian father of Green Revolution? (c) M S Swami Nathan	1
	ii.	Bhabha Atomic Research Centre was founded in Year- (b) 1954	1
	iii.	National Aerospace laboratory is located at- (d) Bangalore	1
	iv.	Digital India Scheme was launched in the year- (a) 2015	1
	v.	SRISHTI is the goal of which science policy- (c) 2013	1
	vi.	Plan holidays were held during year- (b) 1966-1969	1
	vii.	Mangalyaan was launched from- (a) Andra Pradesh	1
	viii.	Mangalyaan was launched on- (a) 5 Nov,2013	1
	ix.	Term Used to describe predicting the direction and impact of a new technology? (b) Technology forecasting	1
	x.	Which of the following is not a mode of international technology transfer? (a) Parents	1
Q.2	i.	Define Science Example of applied science Example of pure science.	1 mark 0.5 mark 0.5 mark
	ii.	Science and society are inter-dependant Justification with example	3
	iii.	Technology with examples Contribution of science in technology	2 marks 3 marks
OR	iv.	Five significant science and technological discoveries 1 mark for each	5 (1 mark * 5)
Q.3	i.	Name four project completed successfully under PATSER scheme. 0.5 mark for each project	2 (0.5 mark * 4)
	ii.	Any four Technology Mission with their launching dates, area of work and goal. 2 marks for each mission	8 (2 marks * 4)

OR	iii.	Define CSIR and CSIR objectives Names of CSIR centre Any eight CSIR achievement	2 marks 2 marks 4 marks	8
Q.4	i.	Nehru's perspective towards development of Nation.		3
	ii.	Name of four policies with launching year Explanation of two policies 2.5 marks for each (2.5 marks * 2)	2 marks 5 marks	7
OR	iii.	Define Planning Commission and setup year Any five plan with year 1 mark for each (1 mark * 5)	2 marks 5 marks	7
Q.5	i.	INSAT system INSAT services	2 marks 2 marks	4
	ii.	Biotechnology definition Its types Applications	1 mark 2 marks 3 marks	6
OR	iii.	Define Non-conventional Energy sources Any four Non-conventional Energy sources in India 1 mark for each (1 mark * 4)	2 marks 4 marks	6
Q.6		Attempt any two:		
	i.	Transfer of technology Its type with examples	2 marks 3 marks	5
	ii.	Any five methods through which technology transfer is possible. 1 mark for each (1 mark * 5)	5 marks	5
	iii.	Technology forecasting Forecasting techniques	2 marks 3 marks	5
