# **CBSE | DEPARTMENT OF SKILL EDUCATION**

### **Electronics and Hardware (SUBJECT CODE - 847)**

Blue-print for Sample Question Paper for Class XII (Session 2024-2025)

Max. Time: 3 Hours Max. Marks: 60

#### PART A - EMPLOYABILITY SKILLS (10 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS 1 MARK EACH	SHORT ANSWER TYPE QUESTIONS 2 MARKS EACH	TOTAL QUESTIONS
1	Communication Skills- IV	1	1	2
2	Self-Management Skills- IV	2	1	3
3	ICT Skills- IV	1	1	2
4	Entrepreneurial Skills- IV	1	1	2
5	Green Skills- IV	1	1	2
TOTAL QUESTIONS		6	5	11
NO. OF QUESTIONS TO BE ANSWERED		Any 4	Any 3	07
	TOTAL MARKS	1 x 4 = 4	2 x 3 = 6	10 MARKS

#### PART B - SUBJECT SPECIFIC SKILLS (50 MARKS):

UNIT NO.	NAME OF THE UNIT	OBJECTIVE TYPE QUESTIONS	SHORT ANS. TYPE QUES I 2 MARKS	SHORT ANS. TYPE QUES II	DESCRIPTIVE/ LONG ANS. TYPE QUESTIONS 4 MARKS	TOTAL QUESTIONS
		EACH	EACH	EACH	EACH	
i	Computer network essential	7	1	1	1	10
ii	Installation of windows server	7	1		1	9
iii	Installation of Linux server	6	1		1	8
iv	IT security fundamentals	6	1	1	1	9
v	Basics of ITIL V3	6	1	1	1	9
	TOTAL QUESTIONS	32	5	3	5	45
	NO. OF QUESTIONS TO BE ANSWERED	26	Any 3	Any 2	Any 3	34
	TOTAL MARKS	1 x 26= 26	2 x 3 = 6	3 x 2 = 6	4 x 3 = 12	50 MARKS

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### **ELECTRONICS & HARDWARE (SUBJECT CODE - 847)**

#### Sample Question Paper for Class XII (Session 2024-2025)

Max. Time: 3 Hours Max. Marks: 60

#### **General Instructions:**

- 1. Please read the instructions carefully.
- 2. This Question Paper consists of 24 questions in two sections Section A & Section B.
- **3.** Section A has Objective type questions whereas Section B contains Subjective type questions.
- 4. Out of the given (6 + 18 =) 24 questions, a candidate has to answer (6 + 11 =) 17 questions in the allotted (maximum) time of 3 hours.
- **5.** All questions of a particular section must be attempted in the correct order.
- 6. SECTION A OBJECTIVE TYPE QUESTIONS (30 MARKS):
  - i. This section has 06 questions.
  - ii. There is no negative marking.
  - iii. Do as per the instructions given.
  - iv. Marks allotted are mentioned against each question/part.

#### 7. SECTION B – SUBJECTIVE TYPE QUESTIONS (30 MARKS):

- i. This section contains 18 questions.
- ii. A candidate has to do 11 questions.
- iii. Do as per the instructions given.
- iv. Marks allotted are mentioned against each question/part.

## **SECTION A: OBJECTIVE TYPE QUESTIONS**

Q. 1	Answer any 4 out of the given 6 questions on Employability Skills (1 $\times$ 4 = 4 m	arks)
i.	One must physically remove the distractions to listen attentively.	1
	True/ False	
ii.	In a spreadsheet, what is the intersection of a row and a column called?	1
	A) Cell B) Table C) Chart D) Graph	
iii.	In a steel factory, a lot of utensils are being made. The manager finds several	1
	defective pieces, which have to be discarded. How can the person minimize the	
	waste?	
	(a) Give it to kabaadiwala or scrap dealer	
	(b) Dump it in a landfill site	
	(c) Send it back to the production line — to be melted	
	(d) Sell it in the market	
iv.	The ability to act in a situation before others do is	1
	(a) interpersonal skills	
	(b) initiative	
	(c) perseverance	
	(d) organisational skills	1
V.	is a trait, wherein, individuals show a tendency towards anxiety, self-	1
	doubt, depression, shyness and other similar negative feelings.	
vi.	(i) Paranoid (ii) Neuroticism (iii) Narcissistic (iv) Dependent	1
VI.	What are the People with lack empathy for other people and tend to exaggerate their own achievements are known as?	
Q. 2		
<u>ų. ટ</u> i.	Answer any 5 out of the given 7 questions (1 x 5 = 5 marks)	1
1.	Which layer of OSI model takes care of Bit Synchronization? -	'
	A. Data-link Layer B. Physical Layer C. Network Layer D. Session Layer	
ii.	A protocol that is used to transfer files within two computers on a network -	1
11.	A. TCP (Transmission Control Protocol)	ı
	B. IP (Internet Protocol)	
	C. FTP (File Transfer Protocol)	
	D. SMTP (Simple Mail Transfer Protocol)	
iii.	Walkie-Talkie is an example of Simplex Mode of transmission.	1
••••	A. True B. False	•
iv.	IPv6 has a bit address length. (Fill in the blanks)	1
٧.	The jack used to connect an Ethernet cable to the ethernet port is	. 1
٧.	The jack about to confide an Eulerice basis to the other port is	`  •
	A. RJ 11 B. RJ 14 C. RJ 25 D. RJ 45	
vi.	Which one of the following network devices works in the network layer?	1
	A) Router B) Switch C) Both a and b D) None of the above	
vii.	Write down the full form of S.M.T.P.	1
	Answer any 6 out of the given 7 questions (1 x 6 = 6 marks)	
Q. 3 i.	What is the minimum number of processors required for Windows Server 2012	1
١.	Standard Edition?	'
	a) 1 b) 2 c) 4 d) 8	
ii.	Which of the following editions of Windows Server 2012 supports up to 640 logical	1
•••	processors?	•
	a) Standard Edition b) Datacenter Edition	
	c) Essentials Edition d) Foundation Edition	
	a) i odridatori Editori	
iii.	GPT type partition style supports Drives up to 2 Terabytes.	1
	a) True b) False	"
iv.	Which of the following is NOT a component of Active Directory?	1
ıv.	A) Domains B) Forests C) Trees D) Databases	"
٧.	is the highest level of organization within Active Directory.	1
٧.	a) Domain b) Trees c) Forest d) Organization within Active Directory.	'
	j aj Domain – bj nees – bj rolest – uj Organizational Onit	

vi.	Which tool is commonly used to manage and configure Domain Controllers in	1
٧1.	Active Directory?	•
	A) Server Manager B) Active Directory Users and Computers (ADUC)	
	C) Event Viewer D) Task Manager	
vii.	The GPO object is stored in an active directory database and each object has its	
	own unique	
Q. 4	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	Which command is used to list all files and directories in Linux?	1
	a) list b) show c) ls d) dir	
ii.	The Linux terminal is a text-based interface used to control a Linux computer.	1
	a) True b) False	
iii.	Total primary partition can exist on one drive is-	1
	A.1 B.2 C.16 D.4	
iv.	The hidden files in Linux are represented by a before the file name.	1
	A. asterisk(*) B. ampersand(&) C.dot (.) D. Hash(#)	
V.	Write down the name of one Linux-based Distribution.	1
vi.	Is there any differences between "test.txt" and "Test.txt" in Linux file system?	1
Q. 5	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	What is the primary goal of a Denial of Service (DoS) attack?	1
	a) To steal sensitive information	
	b) To gain unauthorized access to a system	
	c) To make a network service unavailable to its intended users	
	d) To spread malware	
ii.	Why is it important to regularly update antivirus software?	1
	a) To improve system performance	
	b) To ensure compatibility with new operating systems	
	c) To protect against the latest threats and vulnerabilities	
iii.	d) To reduce disk space usage Installing Apps from untrusted sources can lead to data breach in the personal	1
	devices	'
	A. True B. False	
iv.	What is the purpose of a firewall in cybersecurity?	1
	A. To encrypt data transmissions	•
	B. To monitor network traffic	
	C. To block unauthorized access to a network	
	D. To authenticate users	
٧.	Software firewalls are installed separately on devices.	1
vi.	Write down the full form of "ICF".	1
Q. 6	Answer any 5 out of the given 6 questions (1 x 5 = 5 marks)	
i.	ITIL v3 included processes.	1
	A. 24 B. 25 C. 26 D. 23	
ii.	Which version of ITIL includes security management as a core aspect?	1
iii.	One of the best advantages of ITIL is that it helps in increasing customer satisfaction.	1
	a) True b) False	
iv.	Which ITSM metric measures the total downtime of IT services over a specific	1
	period?	
	A. Mean Time Between Failures (MTBF)	
	B. Mean Time to Restore Service (MTRS)	
	C. Service Level Agreement (SLA)	
	D. Availability	
V.	What is KEDB?	1
vi.	Which perspective of ITSM takes into consideration the "soft" side of IT-	1
	A. Partners/suppliers perspective B. Products/Technology perspectives	
	C. People perspective D. Process perspective	

### **SECTION B: SUBJECTIVE TYPE QUESTIONS**

# Answer any 3 out of the given 5 questions on Employability Skills (2 x 3 = 6 marks) Answer each question in 20 - 30 words.

Q. 7	What are the different stages of Active listening?	2
Q. 8	What is Intrinsic and extrinsic motivation?	2
Q. 9	Explain the purpose of a spreadsheet function.	2
Q. 10	Mention personal barriers to Entrepreneurship.	2
Q. 11	Name any two green jobs in the "Renewal Energy" sector.	2

#### Answer any 3 out of the given 5 questions in 20 - 30 words each $(2 \times 3 = 6 \text{ marks})$

Q. 12	What is a Peer-to-Peer (P2P) Network?	2
Q. 13	What are the basic requirements for installing Windows Server 2012	2
Q. 14	What are the Advantages of opting Linux server over a Windows server?	2
Q. 15	What is a Phishing Attack?	2
Q. 16	Explain Internal customers and external customers with examples.	2

#### Answer any 2 out of the given 3 questions in 30-50 words each $(3 \times 2 = 6 \text{ marks})$

Q. 17	What is MAC address? How to get MAC address on Windows PC?	3
Q. 18	What is CSF (Critical Success Factors)? Mention main 4 Critical Success Factors.	3
Q. 19	What are the steps to secure a network?	3

#### Answer any 3 out of the given 5 questions in 50-80 words each $(4 \times 3 = 12 \text{ marks})$

Q. 20	What is a Network Device? Short note on two Network devices.	4
Q. 21	Explain the benefits and limitations of a Domain controller.	4
Q. 22	Describe about Linux File System Structure.	4
Q. 23	Write down the most common benefits of ITSM.	4
Q. 24	What are the requirements of ITIL for business?	4