

CBSE Class 12 Electronic Technology 2023 - Set 344 - Compartment



Question Paper

Conducted by the Central Board of Secondary Education (CBSE)

Time Allowed: 3 Hours

Maximum Marks: 60

General Instructions

- (i) Please read the instructions carefully.
- (ii) This question paper consists of 24 questions in two Sections: Section A and Section B.
- (iii) Section A has Objective Type Questions whereas Section B contains Subjective Type Questions.
- (iv) 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.
- (v) All questions of a particular section must be attempted in the correct order.
- (vi) Section A: Objective Type Questions (30 marks). This section has 6 questions. There is no negative marking. Follow the instructions given; marks are mentioned against each question/part.
- (vii) Section B: Subjective Type Questions (30 marks). This section has 18 questions; answer 11. Follow the instructions given; marks are mentioned against each question/part.

Section A

1. Answer any 4 questions out of the given 6 questions on Employability Skills. $4 \times 1 = 4$

1(i). Name the term used to refer to an arrangement of cells in a horizontal manner in OpenOffice Calc.

1(ii). PowerPoint is a presentation software which belongs to :

- (A) Apple (B) Google
(C) Microsoft Office (D) OpenOffice

1(iii). What is incorrect in SMART goal ?

- (A) Specific (B) Measurable
(C) Action-oriented (D) Readable time

1(iv). "Self-motivation is significant in building one's personality." State true or false.

1(v). What is the quality of a successful entrepreneur to work in adverse conditions ?

1(vi). Write any two personal barriers of entrepreneurship.

2. Answer any 5 out of the given 7 questions. $5 \times 1 = 5$

2(i). What do you mean by occupational disease ?

2(ii). Which fire extinguisher is used for flammable and running liquid fire ?

2(iii). What precautions should be taken to avoid electric shock ?

2(iv). Write names of any two occupational diseases.

2(v). _____ is the process to establish hazardous agent at the workplace.

2(vi). CPR stands for _____.

2(vii). Define Schafer's method of artificial respiration.

3. Answer any 6 out of the given 7 questions. $6 \times 1 = 6$

3(i). Which microphone has lowest output impedance ?

3(ii). Which type of loudspeaker is used for a large open area ?

3(iii). A Tweeter is a loudspeaker meant for high frequencies. (True/False)

3(iv). Sound pressure used for rating microphone is _____.

3(v). A carbon microphone needs a battery.
(True/False)

3(vi). Write advantages of a cone type
loudspeaker.

3(vii). Give applications of carbon microphone.

4. Answer any 5 out of the given 6 questions.
 $5 \times 1 = 5$

4(i). What is the storage capacity of a CD ?

4(ii). As compared to other audio storage media,
a compact disc has lower signal-to-noise ratio.
(True/False)

4(iii). Which type of signal is used in optical
recording ?

4(iv). Reverse process of recording is known as
_____.

4(v). What is the direction of rotation of a CD ?

4(vi). Household tape recorders use common
head for recording and playback. (True/False)

5. Answer any 5 out of the given 6 questions.
 $5 \times 1 = 5$

5(i). The primary colours are
_____.

5(ii). What are the special features of HDTV ?

5(iii). TV remote control works on the principle
of pulse code modulated light. (True/False)

5(iv). How many electron guns are there in a
colour TV picture tube ?

5(v). What do you mean by Aspect ratio ?

5(vi). Give the full form of PAL.

6. Answer any 5 out of the given 6 questions.
 $5 \times 1 = 5$

6(i). What do you mean by DTMF ?

6(ii). Microwave works differently from oven.
(True/False)

6(iii). FAX machine is a _____ asset.

6(iv). What is the function of a scanner ?

6(v). What do you mean by telephone ?

6(vi). _____ is referred to as 'heart' of the
image formation system in a printer.

Section B

Answer any 3 questions out of the given 5 questions on Employability Skills. Answer each question in 20 – 30 words. $3 \times 2 = 6$

7. Give any two advanced features of presentation.

8. Define entrepreneurial competencies.

9. A Startup is a company that is in the first stage of its operation. Describe it.

10. Write any two steps to overcome personality disorders.

11. What do you mean by self-awareness?

Answer any 3 out of the given 5 questions in 20 – 30 words each. $3 \times 2 = 6$

12. What are the benefits which a certified sick employee will receive ?

13. Write advantages of capacitance microphone.

14. Why is ADC used in CD recording system ?

15. Write any two features of remote control of TV.

16. State the function of timer circuit in microwave oven.

Answer any 2 out of the given 3 questions in 30 – 50 words each. $2 \times 3 = 6$

17. Explain the three groups of loudspeakers.

18. Draw the flowchart for finding and rectifying faults in recorder.

19. Explain the working of TV tuner.

Answer any 3 out of the given 5 questions in 50 – 80 words each. $3 \times 4 = 12$

20. Explain the following terms :

1. Occupational health
2. Occupational hazards
3. Occupational diseases
4. Occupational hygiene

21. Write merits, demerits, application and frequency response of Piezoelectric microphone.

22. With the help of a block diagram, explain the working of a CD/DVD player.

23. Explain the problems associated with vertical subsection, horizontal subsection, video subsection and antenna of TV receiver.

24. Write the working of a FAX machine.

- End of Question Paper -