

Andhra Pradesh State Council of Higher Education

Notations :

- 1.Options shown in green color and with ✓ icon are correct.
- 2.Options shown in red color and with ✗ icon are incorrect.

Question Paper Name :	Electronics and Instrumentation 19th Oct 2022 Shift 2
Duration :	120
Total Marks :	140
Display Marks:	No
Share Answer Key With Delivery Engine :	Yes
Calculator :	None
Magnifying Glass Required? :	No
Ruler Required? :	No
Eraser Required? :	No
Scratch Pad Required? :	No
Rough Sketch/Notepad Required? :	No
Protractor Required? :	No
Show Watermark on Console? :	Yes
Highlighter :	No
Auto Save on Console?	Yes
Change Font Color :	No
Change Background Color :	No
Change Theme :	No
Help Button :	No
Show Reports :	No
Show Progress Bar :	No
Is this Group for Examiner? :	No
Examiner permission :	Cant View
Show Progress Bar? :	No

Research Methodology

Section Id :	549470425
Section Number :	1
Mandatory or Optional :	Mandatory
Number of Questions :	59
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 1 Question Id : 54947030255 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The most desirable skill of teacher is to

Options :

1. ✓ make the students understand what the teacher says
2. ✘ cover the prescribed course
3. ✘ keep students relaxed while teaching
4. ✘ keep higher authorities informed about the class activities

Question Number : 2 Question Id : 54947030256 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following orders are the three levels of teaching?

- (i) Memory level of teaching
- (ii) Understanding level of teaching
- (iii) Reflective level of teaching
- (iv) Pedagogical level of teaching

Options :

1. ✓ (i), (ii), and (iii)
2. ✘ (ii), (iii), and (iv)
3. ✘ (i), (iii), and (iv)
4. ✘ (i), (ii), and (iv)

Question Number : 3 Question Id : 54947030257 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The best way a teacher can try to inculcate good values among students is

Options :

1. ✘ teaching by way of storytelling
2. ✘ by developing sense of discipline
3. ✔ ideal behaviour of teacher themselves
4. ✘ to take their parents into confidence

Question Number : 4 Question Id : 54947030258 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Morphographs is the term associated with

Options :

1. ✔ Corrective spelling

2. ✖ Corrective teaching

3. ✖ Corrective learning

4. ✖ Corrective behaviour

Question Number : 5 Question Id : 54947030259 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If you get an opportunity to teach a visually challenged student along with normal students, what type of treatment would you like to give him in the class?

Options :

1. ✖ Not giving extra attention because majority may suffer

2. ✖ Take care of him sympathetically in the classroom

3. ✖ You will think that blindness is his destiny and hence you cannot do anything

Arrange a seat in the front row and try to teach at a pace convenient to him

4. ✓

Question Number : 6 Question Id : 54947030260 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

For a teacher, which of the following methods would be correct for writing on the blackboard?

Options :

Writing fast and as clearly as possible

1. ✘

Writing the matter first and then asking students to read it

2. ✘

Asking a question to students and then writing the answer as stated by them

3. ✘

Writing the important points as clearly as possible

4. ✓

Question Number : 7 Question Id : 54947030261 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who developed the interaction analysis category system in education for increasing the teacher's effectiveness

Options :

1. ✓ Flander
2. ✘ Rayon
3. ✘ Amidon and Simon
4. ✘ Richard Over

Question Number : 8 Question Id : 54947030262 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What do you consider as the main aim of interdisciplinary research?

Options :

1. ✓ To bring out holistic approach to research
2. ✘ To reduce the emphasis of single subject in research domain

3. ✘ To oversimplify the problem of research

4. ✘ To create a new trend in research methodology

Question Number : 9 Question Id : 54947030263 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The research which is exploring new facts through the study of the past is called

Options :

1. ✘ Philosophical research

2. ✔ Historical research

3. ✘ Mythological research

4. ✘ Content analysis

Question Number : 10 Question Id : 54947030264 Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The government of India conducts census after every 10 years. The method of research used in this process is

Options :

1. ✘ Case study
2. ✘ Developmental
3. ✔ Survey
4. ✘ Experimental

**Question Number : 11 Question Id : 54947030265 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The process not needed in experimental research is

Options :

1. ✘ Observation

2. ✘ Manipulation and replication

3. ✘ Controlling

4. ✔ Reference collection

Question Number : 12 Question Id : 54947030266 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ex post facto research means

Options :

1. ✔ The research is carried out after the incident

2. ✘ The research is carried out prior to the incident

3. ✘ The research is carried out along with the happening of an incident

4. ✘ The research is carried out keeping in mind the possibilities of an incident

Question Number : 13 Question Id : 54947030267 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Arrange the following steps of research in correct sequence:

- I. Identification of research problem
- II. Listing of research objectives
- III. Collection of data
- IV. Methodology
- V. Data analysis
- VI. Results and discussion

Options :

- 1. ✘ I, II, III, V, IV, and VI
- 2. ✔ I, II, III, IV, V, and VI
- 3. ✘ II, I, III, IV, V, and VI
- 4. ✘ II, I, IV, III, V, and VI

Question Number : 14 Question Id : 54947030268 Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A variable that is presumed to cause a change in another variable is called

Options :

A categorical variable

1. ✘

A dependent variable

2. ✘

An independent variable

3. ✔

An intervening variable

4. ✘

Is Section Default? : null

Question Id : 54947030269 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Question Numbers : (15 to 21)

Read the following passage carefully and answer the questions from 15 to 21:

The great Acharyas have said that everything discovered has a great goal; surrender yourself to that goal and act towards it by drawing your inspiration from that goal whereby you will get a new column of energy. Do not allow this energy to be dissipated in the futile memory of past regrets or failures, or excitement of the present, and bring that entire energy focused into activity, that is, the highest creative action in the world outside, whereby the individual who is till now considered the most inefficient finds his way to the highest achievement and success.

This can be said very easily in a second. In order to train our mind to this attitude, consider able training is needed because we have already trained our mind wrongly to such an extent that we have become perfect in imperfections. Not knowing the art of action, we have mastered artists in doing wrong things; the totality of activity will bring the country to a wrong end indeed.

If each one is given a car to achieve an ideal socialistic pattern and nobody knows driving, but starts driving, what would be the condition on road? Everybody has equal rights on the public road. Then, each car will necessarily dash against the other and there is bound to be a jumble.

There seems to be a very apt pattern of life that we are heading to. Every one of us is a vehicle. We know how to go forward. The point intellect is very powerful and everybody is driving but nobody knows how to control the mental energy and direct it properly or guide it to the proper destination.

Sub questions

Question Number : 15 Question Id : 54947030270 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the effect of wrong training of our mind?

Options :

Becoming perfect in all aspects of life

1. ✘

Becoming master artists

2. ✘

Taking the country to wrong destination

3. ✘

Carrying on activities without knowing how to control mental energies

4. ✔

Question Number : 16 Question Id : 54947030271 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The source of energy according to the author is

Options :

Highest creative action

1. ✘

Proper training of mind

2. ✘

Inspiration from past events

3. ✘

Stimulation obtained from a set goal

4. ✔

**Question Number : 17 Question Id : 54947030272 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The author's main focus in the passage is

Options :

Finding out a worthy goal in life

1. ✘

Regulation of energy in proper channels

2. ✔

Struggle for equal rights

3. ✘

Car accidents due to lack of driving skills

4. ✘

**Question Number : 18 Question Id : 54947030273 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The country may perish because of

Options :

Failures in past acts

1. ✘

Wrong deeds performed without proper knowledge

2. ✔

Complete surrender to anyone goal

3. ✘

Directing mental energy to the right destination

4. ✘

**Question Number : 19 Question Id : 54947030274 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The author considers everyone to be a vehicle that knows how to go forward

Options :

1. ✘ Without driving energy
2. ✘ With least consideration for others
3. ✔ With no sense of direction
4. ✘ With no control on speed

Question Number : 20 Question Id : 54947030275 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following can be considered as the most suitable title for the passage?

Options :

1. ✘ Human mind versus car
2. ✔ Channelization of mental energy
3. ✘ Mental energy

Life without a goal

4. ✘

Question Number : 21 Question Id : 54947030276 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How do you interpret that “we have become perfect in imperfections”?

Options :

1. ✔ We have already trained our minds wrongly

2. ✘ We have trained the artists with proper art of action

3. ✘ Right performance with wrong training

4. ✘ Wrong performance with right training

Is Section Default? : null

Question Number : 22 Question Id : 54947030277 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the three components are parts of the human communication process?

Options :

1. ✘ Message, recording, and feedback
2. ✘ Noise, feedback, and jargon
3. ✔ Message, noise, and feedback
4. ✘ Feedback, message, and critiquing

Question Number : 23 Question Id : 54947030278 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Communication becomes circular when

Options :

1. ✔ The decoder becomes an encoder
2. ✘ The feedback is absent
3. ✘ The source is credible

The channel is clear

4. ✘

Question Number : 24 Question Id : 54947030279 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following statement(s) is/are true in context of paraphrasing?

(A) It is basically about stating in your own words, your understanding of what has just been said.

(B) It gives speaker opportunity to find out what message s/he is getting across to you.

Options :

Only A

1. ✘

Only B

2. ✘

Both A and B

3. ✔

Neither A nor B

4. ✘

Question Number : 25 Question Id : 54947030280 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In communication, chatting in internet is

Options :

1. ✓ Verbal communication
2. ✘ Non-verbal communication
3. ✘ Parallel communication
4. ✘ Grapevine communication

Question Number : 26 Question Id : 54947030281 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Chinese Cultural Revolution leader Mao Zedong used a type of communication to talk to the masses known as

Options :

1. ✓ Mass line communication

Group communication

2. ✘

Participatory communication

3. ✘

Dialogue communication

4. ✘

**Question Number : 27 Question Id : 54947030282 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Telephone is an example of

Options :

Linear communication

1. ✔

Non-linear communication

2. ✘

Circular

3. ✘

Mechanized

4. ✘

Question Number : 28 Question Id : 54947030283 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A message beneath a message is labelled as

Options :

1. ✘ Embedded text

2. ✘ Internal text

3. ✘ Intertext

4. ✔ Subtext

Question Number : 29 Question Id : 54947030284 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

0, 3, 8, 15, 24, 35, 48, 63, ...

Options :

1. ✓ 80

2. ✘ 82

3. ✘ 83

4. ✘ 84

Question Number : 30 Question Id : 54947030285 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

ABC, CBA, DEF, ... , GHI, IHG

Options :

1. ✘ JKL

2. ✓ FED

3. ✘ DFE

IJK

4. ✘

Question Number : 31 Question Id : 54947030286 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If 'PAT' is coded as 'QRBCUV', then how will you code 'GRACE'?

Options :

HISTBCDEFG

1. ✔

HISTBCDEGF

2. ✘

HISBTCDEFG

3. ✘

HISTBCEDFG

4. ✘

Question Number : 32 Question Id : 54947030287 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If B is the only child of C's grandfather's only daughter, then how is C's father related to B?

Options :

1. ✓ Maternal uncle
2. ✘ Father
3. ✘ Paternal uncle
4. ✘ Can't be determined

Question Number : 33 Question Id : 54947030288 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Shalini walked 15 m towards south, took right turn, and walked 3 m. She took a right turn again and walked 15 m before stopping. Which direction did Shalini face after stopping?

Options :

1. ✘ West
2. ✘ South

3. ✘ East

4. ✔ North

Question Number : 34 Question Id : 54947030289 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If A's income is 25% more than B's and B's income is 20% more than C's, by what percent is A's income more than C's?

Options :

1. ✘ 15%

2. ✘ 25%

3. ✘ 33.5%

4. ✔ 50%

Question Number : 35 Question Id : 54947030290 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A train whose length is 320 m is running at a speed of 36 kmph. How much time will it take to pass a pole?

Options :

1. ✘ 30 s

2. ✔ 32 s

3. ✘ 36 s

4. ✘ 40 s

Question Number : 36 Question Id : 54947030291 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A deductive argument is valid if

Options :

1. ✘ Premises are false and conclusion is true

Premises are false and conclusion is also false

2. ✘

Premises are true and conclusion is false

3. ✘

Premises are true and conclusion is true

4. ✔

Question Number : 37 Question Id : 54947030292 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The spread of the Internet for higher education is premised on

Options :

Research and development is vital

1. ✘

Browsing encourages critical thinking

2. ✘

Easy management and dissemination of knowledge

3. ✔

India should be second to none in the world

4. ✖

Question Number : 38 Question Id : 54947030293 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Given below are two statements followed by two conclusions I and II. Assuming that the given statements are true even if they are at variance with the commonly known facts, pick up one of the following answer choice which you think is correct.

Statements:

All boys are men.

All men are fathers.

Conclusions:

I. Some men are boys.

II. All boys are fathers.

Options :

If only conclusion I follows

1. ✖

If only conclusion II follows

2. ✖

3. ✓
If both I and II follow

4. ✖
If neither I nor II follows

**Question Number : 39 Question Id : 54947030294 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Given below are two statements followed by two conclusions I and II. Assuming that the given statements are true even if they are at variance with the commonly known facts, pick up one of the following answer choice which you think is correct.

Statements:

Some benches are chairs.

Hammer is a bench.

Conclusions:

I. Some chairs are benches.

II. Hammer is not a chair.

Options :

1. ✓
If only conclusion I follows

If only conclusion II follows

2. ✘

If both I and II follow

3. ✘

If neither I nor II follows

4. ✘

**Question Number : 40 Question Id : 54947030295 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which one of the following is not an argument?

Options :

Devadutt does not eat in the day so he must be eating at night.

1. ✘

If Devadutt is growing fat and if he does not eat during the day, then he will be eating at night.

2. ✔

Devadutt eats in the night so he does not eat during the day.

3. ✘

Since Devadutt does not eat in the day, he must be eating in the night.

4. ✘

Question Number : 41 Question Id : 54947030296 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following are Central Universities?

(i) Pondicherry University

(ii) Vishwa Bharati

(iii) H.N.B. Garhwal University

(iv) Kurukshetra University

Select the correct answer from the codes given below:

Options :

1. ✔ (i), (ii), and (iii)

2. ✘ (i), (iii), and (iv)

3. ✘ (ii), (iii), and (iv)

4. ✘ (i), (ii), and (iv)

**Question Number : 42 Question Id : 54947030297 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The first virtual University of India came up in

Options :

Andhra Pradesh

1. ✘

Maharashtra

2. ✔

Uttar Pradesh

3. ✘

Tamil Nadu

4. ✘

Is Section Default? : null

**Question Id : 54947030298 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type :
NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Question Numbers : (43 to 45)**

Note:

Study the following table carefully and answer questions 43 - 45. It consists of breakup of expenses of a company over different years.

Year	Items of expenditure rupees in lakhs				
	Salary	Fuel & Transport	Bonus	Interest on loans	Taxes
1998	288	98	3.00	23.4	83
1999	342	112	2.52	32.5	108
2000	324	101	3.84	41.6	74
2001	336	133	3.68	36.4	88
2002	420	142	3.96	49.4	98

Sub questions

Question Number : 43 Question Id : 54947030299 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the average amount of interest per year which the company had to pay during this period?

Options :

32.43 lakhs

1. ✖

- 2. ✘ 33.72 lakhs
- 3. ✘ 34.18 lakhs
- 4. ✔ 36.66 lakhs

Question Number : 44 Question Id : 54947030300 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Total expenditure on all these items in 1998 was approximately what percent of the total expenditure in 2002?

Options :

- 1. ✘ 62%
- 2. ✘ 66%
- 3. ✔ 69%
- 4. ✘ 71%

Question Number : 45 Question Id : 54947030301 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The ratio between the total expenditure on taxes for all the years and the total expenditure on fuel and transport for all the years, respectively, is approximately

Options :

4 : 7

1. ✘

10 : 13

2. ✔

15 : 18

3. ✘

5 : 8

4. ✘

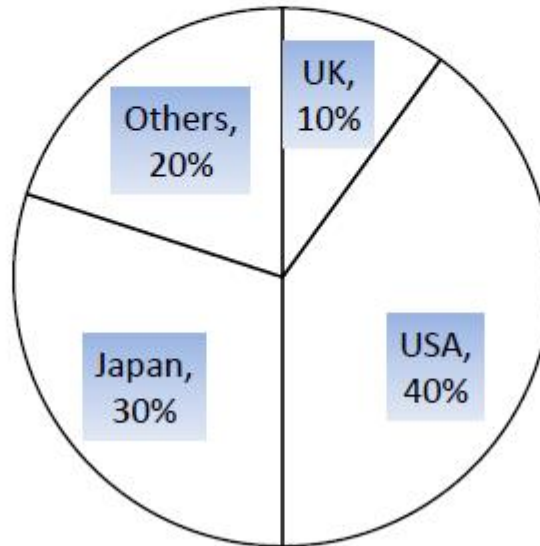
Is Section Default? : null

Question Id : 54947030302 Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No Question Pattern Type :
NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (46 to 49)

Note:

Study the following pie chart carefully and answer questions 46–49. It consists of data on tourist arrival from different countries. Total tourist traffic is 20 lakhs.



Sub questions

Question Number : 46 Question Id : 54947030303 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The difference between tourist numbers from USA and Japan is

Options :

1. ✓ 2 lakhs
2. ✗ 3 lakhs
3. ✗ 4 lakhs
4. ✗ 5 lakhs

Question Number : 47 Question Id : 54947030304 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the number of tourists from UK doubles up while the total remains the same, then the new angle extended by tourists from UK will be

Options :

1. ✗ 60°
2. ✓ 72°
3. ✗ 90°

120°

4. ✘

Question Number : 48 Question Id : 54947030305 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The angle extended at the centre by sector of tourists from USA is

Options :

108°

1. ✘

118°

2. ✘

144°

3. ✔

165°

4. ✘

Question Number : 49 Question Id : 54947030306 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

If the tourist traffic from USA shows a growth of 50% while the total number of tourists remains the same, then the new percentage from USA is

Options :

1. ✘ 40%
2. ✘ 45%
3. ✔ 50%
4. ✘ 60%

Is Section Default? : null

Question Number : 50 Question Id : 54947030307 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The institution promoted by the Department of IT to provide communication infrastructure and services to academic research institutions in India is

Options :

1. ✘ INFLIBNET
2. ✘ UGC

ERNET

3. ✓

No Option

4. ✘

**Question Number : 51 Question Id : 54947030308 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

MICR stands for

Options :

Magnetic Ink Character Reader

1. ✓

Magnetic Ink Code Reader

2. ✘

Magnetic Ink Cases Reader

3. ✘

No Option

4. ✘

**Question Number : 52 Question Id : 54947030309 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which of the following is not related to information security on the Internet?

Options :

Data encryption

1. ✘

Water marking

2. ✘

Data hiding

3. ✘

Information retrieval

4. ✔

**Question Number : 53 Question Id : 54947030310 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

World Wide Web was proposed by

Options :

Bill Gates

1. ✘

ARPANET

2. ✘

Tim Berners-Lee

3. ✘

Bill Rogers

4. ✔

Question Number : 54 Question Id : 54947030311 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Name of the protocol that supports linking from one web page to another page

Options :

HTML

1. ✘

IP

2. ✘

HTTP

3. ✔

FTP

4. ✘

Question Number : 55 Question Id : 54947030312 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

ISDN stands for

Options :

Integrated Services Digital Network

1. ✓

Intelligent Services Digital Network

2. ✗

Individual Services Digital Network

3. ✗

Image Services Digital Network

4. ✗

Question Number : 56 Question Id : 54947030313 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Exclusive educational channel of IGNOU is known as

Options :

Gyan Darshan

1. ✓

Gyan Vani

2. ✖

Doordarshan

3. ✖

Prasar Bharati

4. ✖

Question Number : 57 Question Id : 54947030314 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Ozone depletion is caused due to increase in the level of

Options :

Water vapour

1. ✖

Chlorofluorocarbo

2. ✔

Oxygen

3. ✖

Carbon monoxide

4. ✘

Question Number : 58 Question Id : 54947030315 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is the most dangerous and long-lasting?

Options :

Nuclear waste

1. ✔

Volcano ash

2. ✘

Mining waste

3. ✘

Biomedical waste

4. ✘

Question Number : 59 Question Id : 54947030316 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Petrol engines release gaseous oxides of

Options :

1. ✘ Sulphur
2. ✔ Nitrogen
3. ✘ Phosphorous
4. ✘ Carbon

Question Number : 60 Question Id : 54947030317 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following causes the least pollution when burnt?

Options :

1. ✘ Petrol
2. ✘ Diesel
3. ✘ Coal

Natural gas

4. ✓

**Question Number : 61 Question Id : 54947030318 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

The increased water demand in the cities can be better met by

Options :

Larger desalination plants

1. ✘

Adoption of conservation measures

2. ✓

Drilling more tube wells

3. ✘

By sewerage treatment plants

4. ✘

**Question Number : 62 Question Id : 54947030319 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Which one of the following is a renewable resource?

Options :

1. ✘ Natural gas
2. ✘ Petroleum
3. ✔ Ground water
4. ✘ Coal

Question Number : 63 Question Id : 54947030320 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which National Park is situated at the highest altitude in the country?

Options :

1. ✘ Corbett National Park
2. ✔ Hemis National Park

Silent Valley National Park

3. ✘

Dachigam National Park

4. ✘

Question Number : 64 Question Id : 54947030321 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The National Knowledge Commission, a high level advisory body to Prime Minister of India, with the objective of transforming India into a knowledge society was set up in the year

Options :

2005

1. ✔

2006

2. ✘

2007

3. ✘

2008

4. ✘

Question Number : 65 Question Id : 54947030322 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Who was the chairman of University Education Commission set up in 1948?

Options :

Dr S. Radhakrishnan

1. ✓

Dr D. S. Kothari

2. ✘

Maulana Abul Kalam Azad

3. ✘

C. D. Deshmukh

4. ✘

Question Number : 66 Question Id : 54947030323 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The Constitution of India (originally) is divided into

Options :

20 parts

1. ✘

2. ✓ 22 parts

3. ✘ 24 parts

4. ✘ 42 parts

Question Number : 67 Question Id : 54947030324 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which Fundamental Right is concerned with the abolition of social distinctions?

Options :

1. ✓ Right to equality

2. ✘ Right against exploitation

3. ✘ Right to life and liberty

4. ✘ Cultural and educational rights

**Question Number : 68 Question Id : 54947030325 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

An ordinance can be promulgated in case

Options :

of conflict between two Houses on a bill

1. ✖

both Houses of Parliament are not in session

2. ✔

the Lok Sabha has been dissolved

3. ✖

of elections

4. ✖

**Question Number : 69 Question Id : 54947030326 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

A Money Bill passed by the Lok Sabha has to be passed by Rajya Sabha within

Options :

1. ✘ Three months

2. ✔ Fourteen days

3. ✘ Twenty-one days

4. ✘ One month

Question Number : 70 Question Id : 54947030327 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

By which of the following measures NITI Aayog was established?

Options :

1. ✔ Cabinet resolution

2. ✘ Parliament resolution

President

3. ✖

Prime Minister

4. ✖

Electronics and Instrumentation

Section Id :	549470426
Section Number :	2
Mandatory or Optional :	Mandatory
Number of Questions :	70
Section Marks :	70
Enable Mark as Answered Mark for Review and Clear Response :	Yes
Maximum Instruction Time :	0
Is Section Default? :	null

Question Number : 71 Question Id : 54947030328 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Input is $\delta(t)$ and output is $10e^{-2t}u(t)$. The transfer function of the system is

Options :

1. ✓ $\frac{10}{s+2}$

2. ✘ $\frac{2}{s+10}$

3. ✘ $\frac{1}{s+2}$

4. ✘ $\frac{10}{s-2}$

Question Number : 72 Question Id : 54947030329 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A control system working under unknown random actions is called

Options :

1. ✘ Computer control system

2. ✘ Digital data system

3. ✔ Stochastic control system

4. ✘ Adaptive control system

Question Number : 73 Question Id : 54947030330 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The type of the system depends on the number of

Options :

1. ✘ Poles on S – planes
2. ✘ Poles at infinity
3. ✔ Poles at origin of S – plane
4. ✘ Zero's at infinity

Question Number : 74 Question Id : 54947030331 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

$G(s)H(s) = \frac{k(s+6)}{s(s+1)(s+2)}$. The point of inter section of root locus with respect to
imaginary axis is

Options :

1. ✘ $\pm j\sqrt{2}$

2. ✘ $\pm j6$

3. ✔ $\pm j2$

Does not intersect

4. ✘

Question Number : 75 Question Id : 54947030332 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The slope of the bode gain plot of the transfer function $G(s) = \frac{Ks}{(s+1)(s+10)}$

between $\omega = 1$ and $\omega = 10$ is

Options :

1. ✔ Zero slope

2. ✘ -20 dB/decade

3. ✘ -40dB/decade

4. ✘ +20dB/decade

Question Number : 76 Question Id : 54947030333 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find the angles of asymptotes of the open loop transfer function $G(s) = k(s + 1)/((s(s+2)(s+4))$?

Options :

1. ✘ $90^\circ, 180^\circ$
2. ✘ $0^\circ, 180^\circ$
3. ✔ $90^\circ, 270^\circ$
4. ✘ $60^\circ, 240^\circ$

Question Number : 77 Question Id : 54947030334 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Consider a characteristic equation given by $s^4 + 3s^3 + 5s^2 + 6s + k + 10 = 0$. The condition for stability is

Options :

1. ✘ $k > 5$
2. ✘ $-10 < k$

3. ✘ $k > -4$

4. ✔ $-10 < k < -4$

Question Number : 78 Question Id : 54947030335 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is termed as measurement error

Options :

1. ✘ Static error

2. ✔ Dynamic error

3. ✘ Systematic error

4. ✘ Statistical errors

Question Number : 79 Question Id : 54947030336 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Pressure of 0.0001 absolute psi can be measured by _____ gauge.

Options :

1. ✔ McLeod

2. ✘ Pirani
3. ✘ Barometer
4. ✘ Manometer

Question Number : 80 Question Id : 54947030337 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which type of error is caused due to friction or electrical capacitance?

Options :

1. ✔ Hysteresis
2. ✘ Zero
3. ✘ Systematic
4. ✘ Random

Question Number : 81 Question Id : 54947030338 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following are self – generating transducer

Options :

1. ✘ Primary
2. ✘ Inverse
3. ✔ Active
4. ✘ Passive

Question Number : 82 Question Id : 54947030339 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How many significant figures does 0.057 have?

Options :

1. ✔ 2
2. ✘ 4
3. ✘ 3

0

4. ✖

Question Number : 83 Question Id : 54947030340 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the relative error percentage of an observation taken by a distance measuring sensor. Which predicts the distance of an object to be 2.32cm but the actual value is 2cm?

Options :

1. ✖ 12%

2. ✖ 7.09%

3. ✖ 6%

4. ✔ 16%

Question Number : 84 Question Id : 54947030341 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Proximity sensor is a _____ type of position sensor

Options :

1. ✘ Contact
2. ✔ Non – contact
3. ✘ Eddy current
4. ✘ Resistive

Question Number : 85 Question Id : 54947030342 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The resistance of a thermometer is 5ohms at 30°C and 6.5ohms at 60°C . Using linear approximation the value of resistance temperature coefficient at 45°C

Options :

1. ✘ $0.0009/^{\circ}\text{C}$
2. ✔ $0.0087/^{\circ}\text{C}$
3. ✘ $0.0085/^{\circ}\text{C}$
4. ✘ $0.01/^{\circ}\text{C}$

Question Number : 86 Question Id : 54947030343 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following metals is to be preferred in a RTD employed for measuring temperature in the range - $200^{\circ}C$ to $1000^{\circ}C$?

Options :

1. ✓ Platinum
2. ✗ Copper
3. ✗ Nickel
4. ✗ Tungsten

Question Number : 87 Question Id : 54947030344 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An example of a variable area device for measuring flow is

Options :

1. ✗ Flow nozzle
2. ✗ Orifice meter

3. ✘ Venturi meter

4. ✔ Rota meter

Question Number : 88 Question Id : 54947030345 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Pirani Gauge is an example of which type of transducer?

Options :

1. ✔ Pressure transducer

2. ✘ Temperature transducer

3. ✘ Light transducer

4. ✘ Mechanical transducer

Question Number : 89 Question Id : 54947030346 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

MEMS stands for _____

Options :

1. ✘ Micro electric mechanical system
2. ✔ Micro electro mechanical system
3. ✘ Mini electro mechanical system
4. ✘ Mini electronic mechanical system

Question Number : 90 Question Id : 54947030347 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A resistive strain gauge having a gauge factor of 2 is fastened to a steel member which is subjected to a strain of 10^{-4} . If the resistance of the unstained gauge is 120ohms, the change in resistance of gauge is

Options :

1. ✘ 0.32 ohms
2. ✘ 0.2 ohms
3. ✔ 0.00024 ohms
4. ✘ 0.024ohms

Question Number : 91 Question Id : 54947030348 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A thermocouple arrangement is to be used to measure temperature in the range of $700-800^{\circ}C$. Which one of the following pairs would be most suitable?

Options :

1. ✘ Copper – constantan

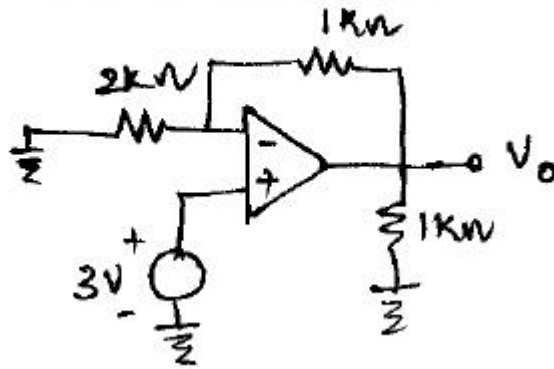
2. ✔ Iron – constantan

3. ✘ Chromel – alumel

4. ✘ Platinum – Platinum rhodium

Question Number : 92 Question Id : 54947030349 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In the circuit shown below find V_o ?

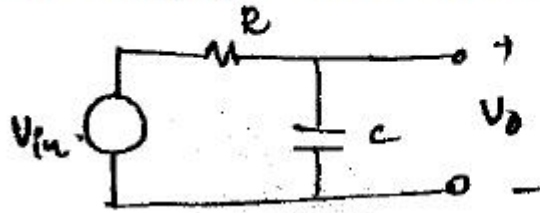


Options :

1. ✘ 4.5 mV
2. ✔ 4.5 v
3. ✘ 0.45 v
4. ✘ 45 v

Question Number : 93 Question Id : 54947030350 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Figure shows a low pass network. Calculate the 3db cut off frequencies



Options :

1. ✓ $\frac{1}{2\pi RC}$

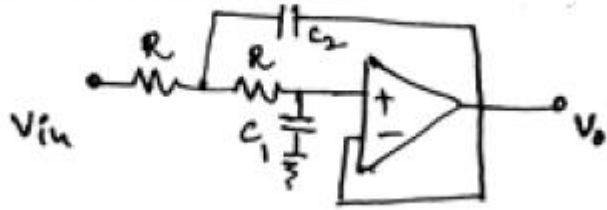
2. ✗ $\frac{-1}{2\pi RC}$

3. ✗ $\frac{1}{RC}$

4. ✗ $2\pi RC$

Question Number : 94 Question Id : 54947030351 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Recognize the type of filter



Options :

- 1. ✓ Low pass
- 2. ✗ Band pass
- 3. ✗ High pass
- 4. ✗ Band stop

Question Number : 95 Question Id : 54947030352 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which is not the internal circuit of operational amplifier?

Options :

- 1. ✗ Differential amplifier

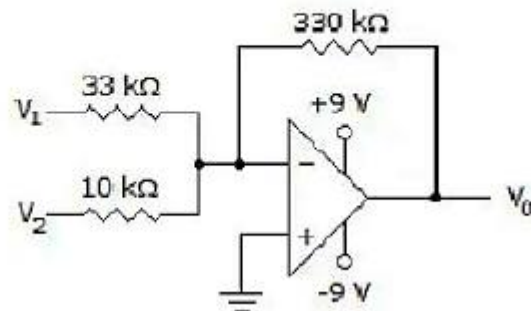
2. ✘ Level translator

3. ✘ Output driver

4. ✔ Clamper

Question Number : 96 Question Id : 54947030353 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Calculate the output voltage if $V_1 = -0.2 \text{ V}$ and $V_2 = 0 \text{ V}$.



Options :

1. ✘ 1 V

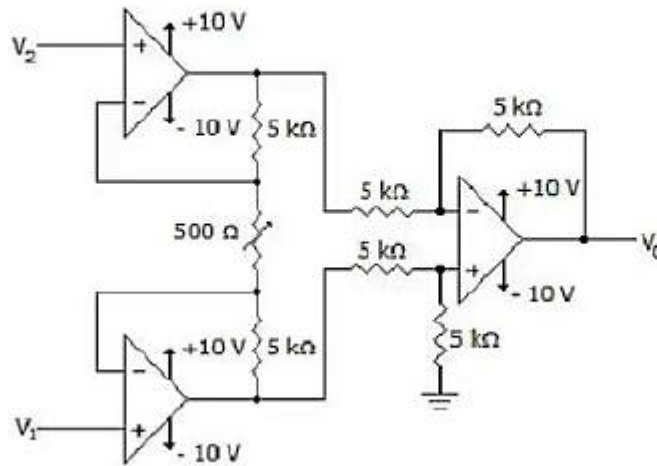
2. ✘ -6.6 V

3. ✘ -4 V

4. ✓ 2 V

Question Number : 97 Question Id : 54947030354 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Calculate the output voltage for this circuit when $V_1 = 2.5 \text{ V}$ and $V_2 = 2.25 \text{ V}$.



Options :

1. ✗ -5.25 V

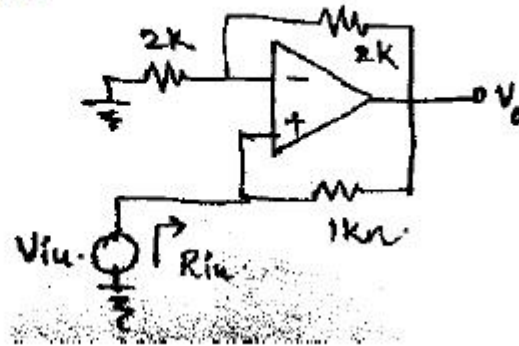
2. ✗ 2.5 V

3. ✗ 2.25 V

4. ✓ 5.25 V

Question Number : 98 Question Id : 54947030355 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Find the input resistance R_{in} ?



Options :

1. ✘ $1\text{ K}\Omega$

2. ✔ $-1\text{ K}\Omega$

3. ✘ $2\text{ K}\Omega$

4. ✘ $-2\text{ K}\Omega$

Question Number : 99 Question Id : 54947030356 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A UJT is sometimes called _____ diode

Options :

1. ✘ Low resistance
2. ✘ High resistance
3. ✘ Single-base
4. ✔ Double-base

Question Number : 100 Question Id : 54947030357 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An SCR behaves as a _____ switch

Options :

1. ✔ Uni direction
2. ✘ Bi direction
3. ✘ Mechanical
4. ✘ Electrical

Question Number : 101 Question Id : 54947030358 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Free running multivibrator is also called as

Options :

1. ✘ Stable multivibrator
2. ✔ Voltage controlled oscillator
3. ✘ Square wave oscillator
4. ✘ Pulse modulator

Question Number : 102 Question Id : 54947030359 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A Monostable multivibrator has $R = 120 \text{ K Ohms}$ and line delay $T = 1000 \text{ ms}$.
Calculate the value of C ?

Options :

1. ✘ $0.9 \mu F$
2. ✘ $1.32 \mu F$

3. ✓ $7.5 \mu F$

4. ✗ $2.4 \mu F$

Question Number : 103 Question Id : 54947030360 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An SCR is a solid state equivalent of _____

Options :

1. ✗ Triode

2. ✗ Pentode

3. ✓ Gas filled triode

4. ✗ Tetrode

Question Number : 104 Question Id : 54947030361 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The device that exhibits negative resistive region is

Options :

1. ✘ DIAC
2. ✘ TRIAC
3. ✘ Transistor
4. ✔ UJT

Question Number : 105 Question Id : 54947030362 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

At which state the Phase Locked loop tracks any change in input frequency?

Options :

1. ✘ Free running state
2. ✘ Capture state
3. ✔ Phase locked state
4. ✘ Does not track

Question Number : 106 Question Id : 54947030363 Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the operator used to make 1's (One's) compliment?

Options :

1. ✘ & Bitwise AND Operator
2. ✘ | Bitwise OR operator
3. ✔ ~ Bitwise Negate Operator
4. ✘ ^ Bitwise Exclusive OR

**Question Number : 107 Question Id : 54947030364 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0**

Choose a correct C Statement regarding for loop.
for(;);

Options :

1. ✘ for loop works exactly first time
2. ✔ for loop works infinite number of times
3. ✘ Compiler error

4. ✖ No error

Question Number : 108 Question Id : 54947030365 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following operator has lowest precedence?

Options :

1. ✔ ++ (post increment)

2. ✖ && (logical AND)

3. ✖ & (bit-wise AND)

4. ✖ , (comma)

Question Number : 109 Question Id : 54947030366 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Identify the keyword(s) for floating-point Data types.

Options :

1. ✖ float

2. ✖ double

3. ✘ int

4. ✔ float & double

Question Number : 110 Question Id : 54947030367 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What are Nibble, Word and Byte in computer language

Options :

1. ✘ Byte = 8 bits, Word= 4 Bytes, Nibble= 8 Bytes

2. ✔ Byte = 8 bits, Word=2 Bytes, Nibble=4 Bits

3. ✘ Byte = 8 bits, Word=12 bits, Nibble=32 Bits

4. ✘ Byte = 8 bits, Word=24 bits, Nibble=40 Bits

Question Number : 111 Question Id : 54947030368 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Choose a right statement.

```
int a=10+4.867;
```

Options :

1. ✘ a = 10
2. ✘ a = 14.867
3. ✔ a = 14
4. ✘ compiler error

Question Number : 112 Question Id : 54947030369 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the minimum number of functions to be present in C program?

Options :

1. ✔ 1
2. ✘ 2
3. ✘ 3
4. ✘ 4

Question Number : 113 Question Id : 54947030370 Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The asynchronous transmitter always begins with

Options :

1. ✓ State bit
2. ✘ Stop bit
3. ✘ Parity bit
4. ✘ Sync bit

Question Number : 114 Question Id : 54947030371 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

An example of 16 bit micro controller is

Options :

1. ✘ 8031 μc
2. ✘ 8051 μc
3. ✓ 8096 μc

None of these

4. ✘

Question Number : 115 Question Id : 54947030372 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

When the instruction MOV TMOD, 20H is executed _____ is elected

Options :

1. ✘ Mode 0 of timer 0

2. ✘ Mode 1 of timer 1

3. ✘ Mode 0 of timer 2

4. ✔ Mode 2 of timer 1

Question Number : 116 Question Id : 54947030373 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

_____ defines the byte type variable

Options :

1. ✘ EQU (equator)

2. ✓ DB (define bye)

3. ✗ ASCII

4. ✗ DBB

Question Number : 117 Question Id : 54947030374 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How many pins of the 8255 can be used as the I/O ports?

Options :

1. ✗ 8

2. ✗ 16

3. ✓ 24

4. ✗ 32

Question Number : 118 Question Id : 54947030375 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

How many data lines are there in a 16*2 alphanumeric LCD?

Options :

1. ✘ 16

2. ✔ 8

3. ✘ 1

4. ✘ 0

Question Number : 119 Question Id : 54947030376 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

A microcontroller at-least should consist of:

Options :

1. ✘ RAM, ROM, I/O ports and timers

2. ✘ CPU, RAM, I/O ports and timers

3. ✔ CPU, RAM, ROM, I/O ports and timers

4. ✘ CPU, ROM, I/O ports and timers

Question Number : 120 Question Id : 54947030377 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Beer's law states that the intensity of light decreases with respect to _____

Options :

1. ✓ Concentration
2. ✘ Distance
3. ✘ Composition
4. ✘ Volume

Question Number : 121 Question Id : 54947030378 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Interferometer is the heart of _____ spectrometer

Options :

1. ✘ UV – Vis
2. ✘ IR

3. ✓ FTIR

4. ✘ Mass

Question Number : 122 Question Id : 54947030379 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which method is used to separation of thermally stable and volatile substance ?

Options :

1. ✘ NMR

2. ✘ Mass spectroscopy

3. ✘ HPLC

4. ✓ Gas chromatography

Question Number : 123 Question Id : 54947030380 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Hydrogen electrode which is the reference electrode can be used as which of the following

Options :

1. ✘ Anode
2. ✘ Cathode
3. ✔ Both anode and cathode
4. ✘ Salt bridge

Question Number : 124 Question Id : 54947030381 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is not an application of calorimeter?

Options :

1. ✘ Paints
2. ✘ Inks
3. ✘ Cosmetics
4. ✔ Composition detection

Question Number : 125 Question Id : 54947030382 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

In Atomic Absorption Spectroscopy, which of the following is the generally used radiation source?

Options :

1. ✘ Tungsten lamp
2. ✘ Xenon mercury arc lamp
3. ✘ Hydrogen or deuterium discharge lamp
4. ✔ Hollow cathode lamp

Question Number : 126 Question Id : 54947030383 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the principle of IR spectroscopy

Options :

1. ✔ Absorption
2. ✘ Emission

3. ✘ Adsorption

4. ✘ AAS

Question Number : 127 Question Id : 54947030384 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

EMG Instrument is used to monitor

Options :

1. ✘ cardiovascular function

2. ✔ neuro muscular function

3. ✘ nervous function

4. ✘ immune function

Question Number : 128 Question Id : 54947030385 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

PPG is used to measure

Options :

1. ✘ pulse rate
2. ✘ ECG
3. ✔ Blood flow volume
4. ✘ EEG

Question Number : 129 Question Id : 54947030386 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following represents repolarization in action potential wave?

Options :

1. ✘ Positive slope
2. ✔ negative slope
3. ✘ zero slope
4. ✘ No Option

Question Number : 130 Question Id : 54947030387 Display Question Number : Yes Is Question Mandatory : No Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Which of the following is used as display device to produce permanent record of data?

Options :

1. ✓ pen recorder
2. ✘ 7 segment display
3. ✘ Needle
4. ✘ electrode

Question Number : 131 Question Id : 54947030388 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Spirometer is an instrument used to measure

Options :

1. ✘ heart rate
2. ✘ heart sounds
3. ✓ lung parameters

blood flow

4. ✘

Question Number : 132 Question Id : 54947030389 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Electrooculography (EOG/E.O.G.) is a technique for measuring what?

Options :

1. ✘ Abnormal function of the retina

2. ✘ heart rate

3. ✘ respiration rate

4. ✔ cornea-retinal standing potential

Question Number : 133 Question Id : 54947030390 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

What is the frequency range of ECG?

Options :

1. ✘ 70-120 Hz

2. ✓ 0.05-120 Hz

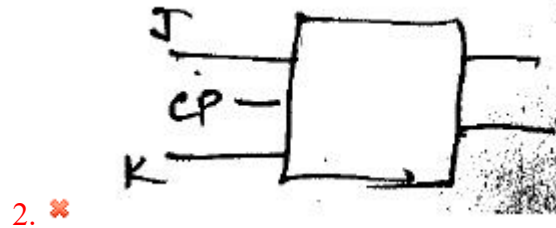
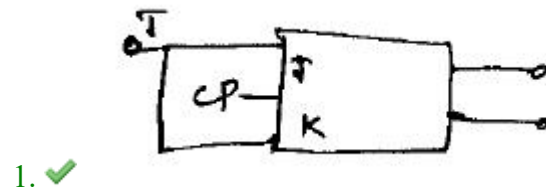
3. ✗ 5-120 Hz

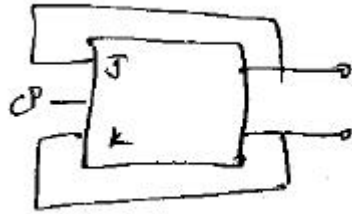
4. ✗ 12-120 Hz

Question Number : 134 Question Id : 54947030391 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

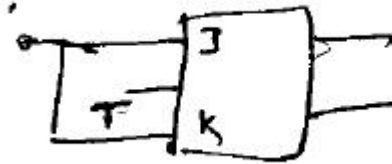
Which of the following circuit converts a JK flip flop to T – flip flop

Options :





3. ✘



4. ✘

Question Number : 135 Question Id : 54947030392 Display Question Number : Yes Is Question Mandatory : No Calculator : None
 Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

With which decoder, is it possible to obtain many code conversions

Options :

- 1. ✘ 2 line to 4 line decoder
- 2. ✘ 3 line to 8 line decoder
- 3. ✘ Not possible with decoder
- 4. ✔ 4 line to 16 line decoder

Question Number : 136 Question Id : 54947030393 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

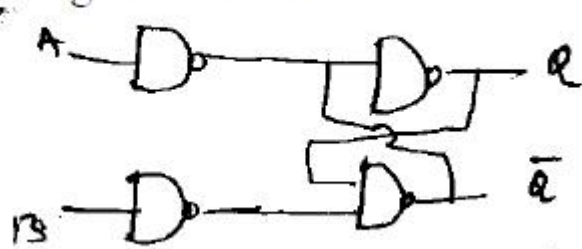
4 bit 2's complement representation of a decimal number of 1000. The number is

Options :

- 1. ✘ 8
- 2. ✘ Zero
- 3. ✘ -7
- 4. ✔ -8

Question Number : 137 Question Id : 54947030394 Display Question Number : Yes Is Question Mandatory : No Calculator : None
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The circuit given below is



Options :

1. ✘ JK flip flop
2. ✘ Johnson's counter
3. ✔ RS latch
4. ✘ T flip flop

Question Number : 138 Question Id : 54947030395 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The minimum number of 2-input NAND gates required to implement a 2-input XOR gate is

Options :

1. ✔ 4
2. ✘ 5
3. ✘ 6
4. ✘ 7

Question Number : 139 Question Id : 54947030396 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The number of comparators in 4-bit flash ADC is

Options :

1. ✘ 4

2. ✘ 5

3. ✔ 15

4. ✘ 16

Question Number : 140 Question Id : 54947030397 Display Question Number : Yes Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

The typical fan out of standard TTL is

Options :

1. ✘ 6

2. ✘ 14

3. ✖ 12

4. ✔ 10