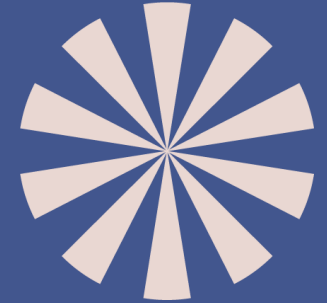

Paper-1

Induction Programme:

General Overview



ORIENTATION SESSION ON NTA-UGC-NET-PAPER-1

MANU B

25 YEARS OF
EXCELLENCE



VTES IS NOW
Vallath

Syllabus of NTA UGC NET

1. Teaching Aptitude
2. Research Aptitude
3. Reading Comprehension
4. Communication
5. Reasoning and Mathematical Aptitude
6. Logical Reasoning
7. Data Interpretation
8. Information and Communication Technology (ICT)
9. People Development and Environment
10. Higher Education System



Is Paper-1 a Nightmare??



Cannot Focus?

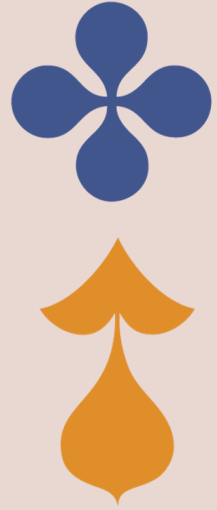
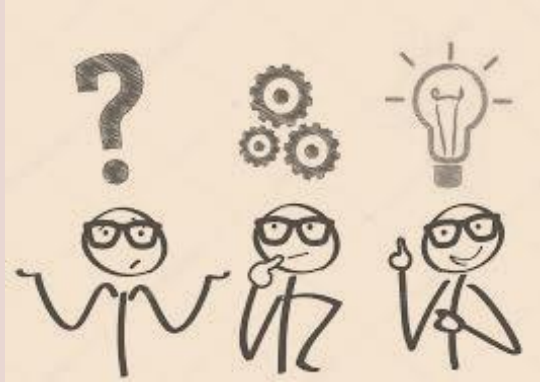
Problems of
Speed?

Worried of
Calculations??

Tired of
Aptitude
Theories??

Thoughts like
“Are we doing
it right”??

WE WILL ALWAYS HAVE A SOLUTION



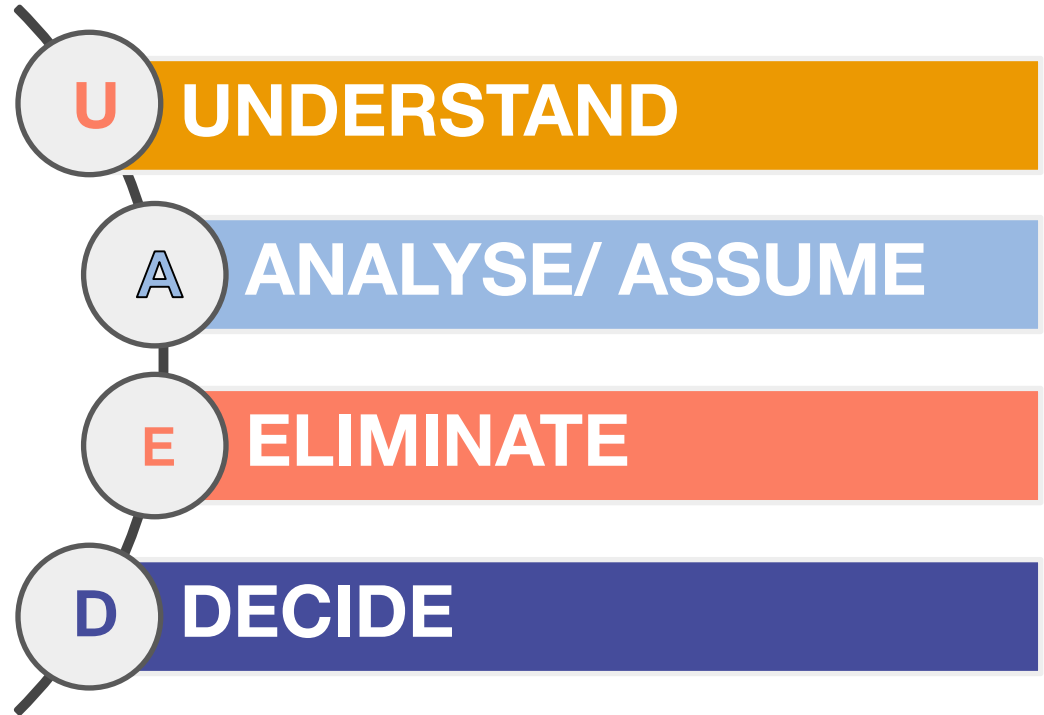
IT'S ALL ABOUT ARRIVING TO OUR ANSWERS

From Previous Q.P



- A customer writes to a bank, ‘Kindly send me a statement of my transactions in my savings bank account ‘A’ during the last three months’. In terms of communication it will be called
 1. Input
 2. Message
 3. Output
 4. Feedback

**The U-A-E-D
Method
in
Approaching a
Question**



From Previous Q.P



- A customer writes to a bank, ‘Kindly send me a statement of my transactions in my savings bank account ‘A’ during the last three months’. In terms of communication it will be called
 1. Input
 2. Message
 3. Output
 4. Feedback

Answer: 2.

ELEMENTS IN COMMUNICATION



Plot Diagram of Communication Process

Hence,
it is all about...



Identifying the question

Avoiding Panic,
Understanding it



Proper Analysis &
Final Conclusion

A play with the
options

The Question of “How To?”



HOW TO START PREPARATIONS?

HOW TO LOCATE MATERIALS?

HOW TO ORGANISE THEM?

HOW TO STAY FOCUSED?

HOW NOT TO MISS OUT QUESTIONS?

HOW TO MAKE UPDATES?

1. Starting Preparation



- Know your **Syllabus**
- Be sure about the **crux** of the exam
 1. What areas need to be focussed?
 2. What not to be left out?
 3. The number of units and available time
- **MAKE A WELL-BALANCED TIMETABLE**



Topic Wise Mark Distribution

UGC NET Paper 1 Sections	Questions in UGC NET Paper 1	UGC NET Paper 1 Marks
Teaching Aptitude	5	10
Research Aptitude	5	10
Reading Comprehension	5	10
Communication	5	10
Reasoning (including Maths)	5	10
Logical Reasoning	5	10
Data Interpretation	5	10
Information & Communication Technology (ICT)	5	10
People & Environment	5	10
Higher Education System: Governance, Polity & Administration	5	10
Total	50	100





Unit-1: Teaching Aptitude



- **Teaching:** Concept, Objectives, Levels of teaching (Memory, Understanding and Reflective), Characteristics and basic requirements.
- **Learner's characteristics:** Characteristics of adolescent and adult learners (Academic, Social, Emotional and Cognitive), Individual differences.
- **Factors affecting teaching** related to Teacher, Learner, Support material, Instructional facilities, Learning environment and Institution.
- **Methods of Teaching:** Teacher-centred vs. Learner-centred methods; Off-line vs. On-line methods (Swayam, Swayamprabha, MOOCs etc.).
- **Teaching Support System:** Traditional, Modern and ICT based.
- **Evaluation Systems:** Elements and Types of Evaluation, Evaluation in Choice Based Credit System in Higher Education, Computer-based testing, Innovations in evaluation systems.

Can you answer this?



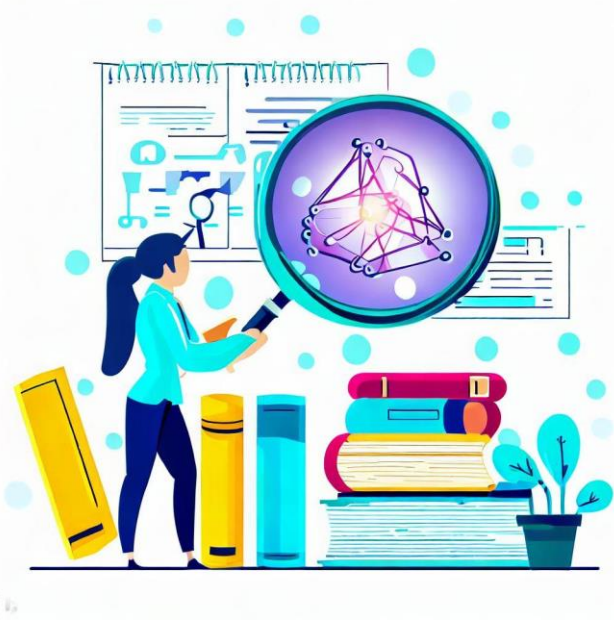
Which of the following statements is true about teaching-learning process?

- a. Teacher and student are dependent variables while parents are independent variables
- b. Teachers are independent variables, students are dependant variable and subject matter is intervening variable
- c. Students are independant variable, teachers are dependant variables and subject matter is intervening variable
- d. None of these

Answer: b.



Unit-2: Research Aptitude



- **Research:** Meaning, Types, and Characteristics, Positivism and Post-positivist approach to research.
- **Methods of Research:** Experimental, Descriptive, Historical, Qualitative and Quantitative methods.
- **Steps of Research.**
- **Thesis and Article writing:** Format and styles of referencing.
- **Application of ICT in research.**
- **Research ethics.**

Answer this one:

- **Assertion (A):** The literature review is a crucial step in academic research.
- **Reason(R):** The literature review helps identify the research gap and provides a theoretical framework for the study.

Choose the correct option:

1. Both (A) and (R) are true, but (R) is the valid explanation of the (A).
2. Both (A) and (R) are true, but the (R) is not the valid explanation of the (A).
3. (A) is true, but (R) is false.
4. (A) is false, but (R) is true.



Answer: 1



Unit-3: Reading Comprehension



- Questions are asked from a passage given in textual form
- Aims to check the analytical reasoning of the candidates





Unit-4: Communication



- Elements in Communication
- Types of Communication and its Characteristics
- Barriers in Communication and its Characteristics
- Classroom Communication & its Effectiveness
- Models of Communication
- Mass Media & the Society



Answer this one:



- What is the primary function of feedback in the communication process?
 1. To interrupt the sender's message
 2. To ensure the message is transmitted accurately
 3. To distract the receiver from the message
 4. To entertain the audience

Answer: 2

Answer this one:



- What role does active listening play in communication effectiveness?
 1. It increases the volume of the speaker's voice.
 2. It allows the listener to interrupt the speaker with questions.
 3. It enhances understanding and helps build rapport with the speaker.
 4. It encourages the listener to focus on their response instead of the message.

Answer: 3



Unit-5: Mathematical Reasoning



- **Types of reasoning.**
- Number series, Letter series, Codes and Relationships.
- **Mathematical Aptitude:** Fraction, Time & Distance, Ratio, Proportion and Percentage, Profit and Loss, Interest and Discounting, Averages etc..



Age-related problems

- Father's age is 4 times of his son. 5 years ago, father's age was 7 times the age of the son. What is the present age of father?

A) 32

B) 36

C) 40

D) 42

- **Conventional Method :**

- According to question, $x = 4y$

- 5 years ago, $x - 5 = 7(y - 5)$



Age related problems (Shortcut)

- Father's age is 4 times of his son. 5 years ago, father's age was 7 times the age of the son. What is the present age of father?

A) 32

B) 36

C) 40

D) 42

- **Shortcut :**

Father's age = 4 times

- **Case 1:** Consider the multiples of '4' in the options → 32 , 36 , 40
- Having a case before 5 years, consider the multiples of '7' and subtract '5' from each options

• **Case 2:** $32 - 5 = 27$ $36 - 5 = 31$ $40 - 5 = 35$ $42 - 5 = 37$

- Only '35' is divisible by 7 .

• **Case 1 :** 32 36 40

• **Case 2 :** 27 31 35 37

Only '40' coincides in both cases
Hence, the Answer is c) 40

TRY THIS YOURSELF:

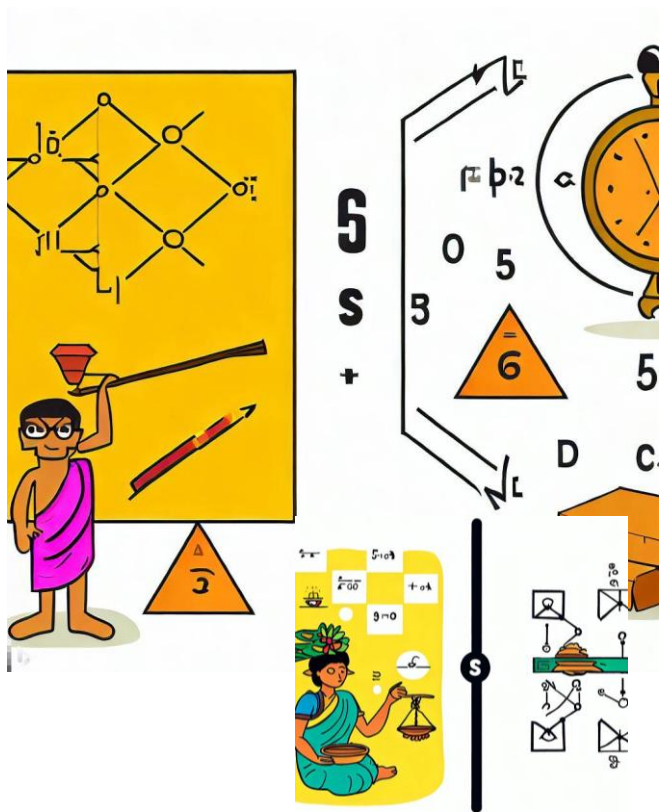
Father's age is 5 times the age of the son. 5 years ago, father was 9 times as old as the son. What is the present age of the father?

A) 35 B) 40 C) 50 D) 52

- **Case 1** : No.s divisible by 5 → 35 , 40 , 50
 - **Case 2** : 5 years ago → 30 , 35 , 45
 - Numbers divisible by 9 → Only 45
 - **'50'** satisfies both the cases
-
- Hence, the answer is **Option C) 50**



Unit-6: Logical Reasoning



- **Understanding the structure of arguments:** argument forms, the structure of categorical propositions, Mood and Figure, Formal and Informal fallacies, Uses of language, Connotations and denotations of terms, and Classical square of opposition.
- **Evaluating and distinguishing deductive and inductive reasoning.**
- **Analogies.**
- **Venn diagram:** Simple and multiple uses for establishing the validity of arguments.
- **Indian Logic:** Means of knowledge.
- **Pramanas:** Pratyaksha (Perception), Anumana (Inference), Upamana (Comparison), Shabda (Verbal testimony), Arthapatti (Implication) and Anupalabdhi (Non-apprehension).
- **Structure and kinds of Anumana** (inference), Vyapti (invariable relation)
- **Hetvabhasa:** fallacies of inference



Answer this one:



If proposition 'All republics are grateful' is taken to be true then which of the following propositions can be false?

- (i) Republics are not grateful
- (ii) Some republics are not grateful
- (iii) No republics are grateful
- (iv) Some republics are grateful

Select the correct answer from the options given below:

1. (i) only
2. (ii) only
3. (i), (ii) and (iii)
4. (ii) and (iii)

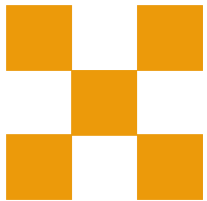
Answer: 3



Unit-7: Data Interpretation



- **Data:** Sources, acquisition and classification of Data.
- **Quantitative and Qualitative Data.**
- **Graphical representation:** Bar-chart, Histograms, Pie-chart, Table-chart and Line-chart and mapping of Data.
- **Data Interpretation.**
- **Data and Governance.**





Unit-8: Information & Communication Technology (ICT)



- **ICT:** General abbreviations and terminology.
- **Types of Computers & Devices**
- **Hardware & Software**
- **Basics of the Internet, Intranet, E-mail, Audio and Video-conferencing.**
- **Digital initiatives in higher education.**
- **ICT and Governance.**



Answer this one:



- Which of the following AI chatbots has access to the real-time internet with hyperlink responses?
 1. ChatGPT
 2. Google Bard
 3. Bing AI
 4. All of the above

Answer: 3

Try answering this now:



- Which of the following is NOT a benefit of using ICT in education?
1. Increased access to educational resources
 2. Improved student engagement
 3. Reduced costs
 4. Increased teacher workload

Answer: 4

Explanation:

The use of ICT in education can lead to increased teacher workload, as teachers need to learn how to use new technologies and integrate them into their teaching. However, the other benefits listed, such as increased access to educational resources and improved student engagement, outweigh the increased teacher workload.



Unit-9: People, Development & Environment



- **Development and environment:** Millennium development and Sustainable development goals.
- **Human and environment interaction:** Anthropogenic activities and their impacts on the environment.
- **Environmental issues:** Local, Regional and Global; Air pollution, Water pollution, Soil pollution, Noise pollution, Waste (solid, liquid, biomedical, hazardous, electronic), Climate change and its Socio-Economic and Political dimensions.
- **Impacts of pollutants on human health.**
- **Natural and energy resources:** Solar, Wind, Soil, Hydro, Geothermal, Biomass, Nuclear and Forests.
- **Natural hazards and disasters:** Mitigation strategies.
- **Acts & Agreements:** Environmental Protection Act (1986), National Action Plan on Climate Change, International agreements/efforts -Montreal Protocol, Rio Summit, Convention on Biodiversity, Kyoto Protocol, Paris Agreement, International Solar Alliance.

Answer this:



- Which field of study focuses on the statistical analysis of populations, including their size, composition, and distribution?
 - a) Geography
 - b) Anthropology
 - c) Demography
 - d) Sociology

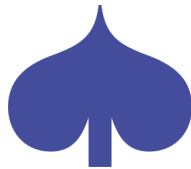
Answer: c



Unit-10: Higher Education System in India



- Institutions of Higher Learning and Education in Ancient India.
- Evolution of higher learning and research in Post Independence India.
- Oriental, Conventional and Non-conventional learning programmes in India.
- Professional, Technical and Skill-Based Education.
- Value education and Environmental Education.
- Policies, Governance, and Administration.



You can expect questions like this:



- For the day to day administration of University, which of the following bodies is responsible?
 1. Senate
 2. Syndicate/ Executive council
 3. Student council
 4. Academic council

Answer: 2

The Question of “How To?”



HOW TO START PREPARATIONS?

HOW TO LOCATE MATERIALS?

HOW TO ORGANISE THEM?

HOW TO STAY FOCUSED?

HOW NOT TO MISS OUT QUESTIONS?

HOW TO MAKE UPDATES?

1. Starting Preparation



- Know your **Syllabus**
- Be sure about the **crux** of the exam
 1. What areas need to be focussed?
 2. What not to be left out?
 3. The number of units and available time
- **MAKE A WELL-BALANCED TIMETABLE**



The Question of “How To?”



HOW TO START PREPARATIONS?

HOW TO LOCATE MATERIALS?

HOW TO ORGANISE THEM?

HOW TO STAY FOCUSED?

HOW NOT TO MISS OUT QUESTIONS?

HOW TO MAKE UPDATES?

2. Collect the Accurate Material



- Availability of the ocean of materials
- Chances of confusion
- Wasting time in 'out of syllabus'
- Choosing them wisely
- Personalised screening and Individual Note Making



The Question of “How To?”



HOW TO START PREPARATIONS?

HOW TO LOCATE MATERIALS?

HOW TO ORGANISE THEM?

HOW TO STAY FOCUSED?

HOW NOT TO MISS OUT QUESTIONS?

HOW TO MAKE UPDATES?

3. Dedication to Focus



- How to stay focussed?
- Remember the frontiers
- Stick to the prepared time-table
- Compensate the delays, if any.
- Find the interest– rely upon video lectures in the beginning
- Brush-up the lessons from time-to-time
- Notes & Hand-outs best for last-minute preparation
- Find your own refreshments and routines

The Question of “How To?”



HOW TO START PREPARATIONS?

HOW TO LOCATE MATERIALS?

HOW TO ORGANISE THEM?

HOW TO STAY FOCUSED?

HOW NOT TO MISS OUT QUESTIONS?

HOW TO MAKE UPDATES?

4. Stay Updated



- With the mind of a researcher
- Some data are arbitrary
- Be well-informed
- Portions in the realms of social-sciences
- Newer governmental policies
- Weather, Climate, Natural Calamities
- Socio-political updates that reflect in syllabus

You can expect questions like this:



- Which is the cyclone that hit Tamil Nadu, Andhra Pradesh and some parts of coastal Puducherry in 2018?
 1. Phetai
 2. Gaja
 3. Titli
 4. Hudhud

Answer: 2

Or like this:



- Indian government's projected figure for power production from non-fossil fuels by the year 2030 is
 - 1) 100 Giga-Watt
 - 2) 200 Giga-Watt
 - 3) 300 Giga-Watt
 - 4) 500Giga-Watt

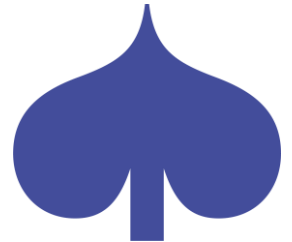
Answer: 4)



Target Revision, August 2021

- **Electrical Power Target** by recent reports
 - 500 GW** by the year **2030**
 - * Includes **300 GW** from **Solar Power**
 - * Also **140 GW** of **Wind Power**
 - * **Remaining from Hybrid Energy Sources**

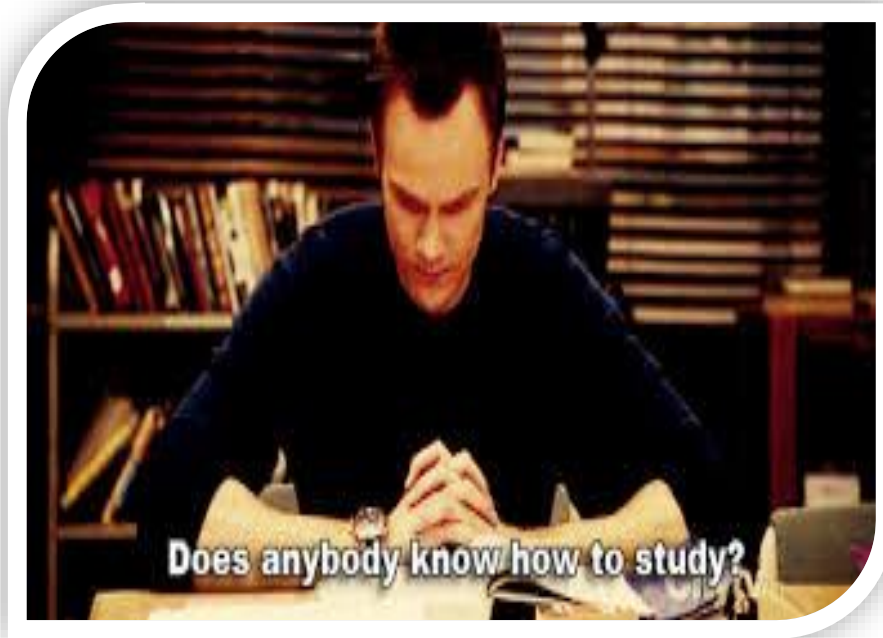
(Proposed in COP-26, Glasgow)



Next: Some Smart Study Techniques



Back to Technicalities



- **Most of you can score good marks in paper 2 but might face difficulty in paper 1, why?**
 - ❖ 90% of students spend their time mastering Paper 2 but show no interest in Paper 1.
 - ❖ We leave Paper 1 as it is and do a marathon reading just a few days before the exam.
 - ❖ This actually affects your paper 2 preparation as well, because by this time you might have started to get panic seeing the amount of syllabus you need to cover.

CAUSE



Lack of Intrinsic motivation



Motivation should come from within



Otherwise it will lead to lack of interest

Solution



- ❖ Intrinsic motivation can be created with the help of proper scaffolding.
- ❖ Instructional Scaffolding- A support or help that you receive from instructors or teachers.
- ❖ Extra support or help that you seek from the more knowledgeable other becomes a potion for your Paper 1 problems.



Some Smart Study Techniques

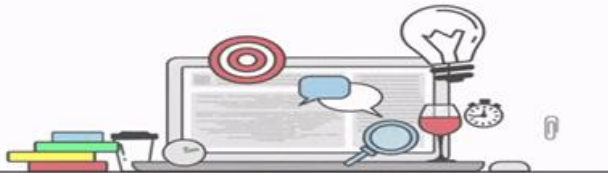
How PQ discussion Works?

In-depth analysis of focus areas, and easy topic coverage.

Purpose

- ✓ To avoid Hard Study.
- ✓ To focus on smart study.
- ✓ To improve your reading skill

**How to Study
Smart**
and Never Waste Your
Time



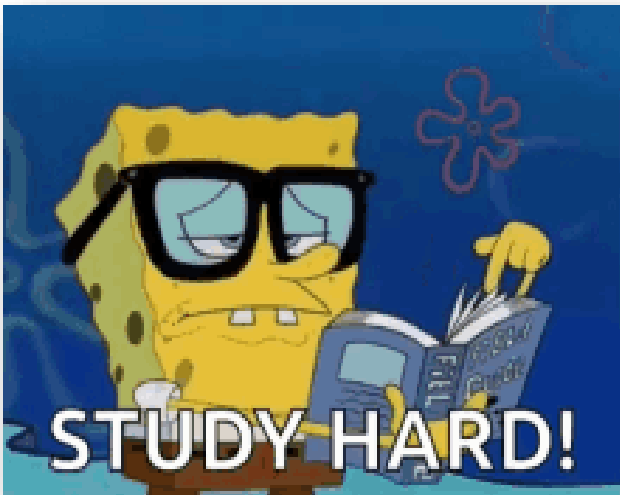
HARD STUDY

- Happens when you don't have any idea about the syllabus. You just read abruptly in order to finish the topic.

✓ RESULT- Wastage of time and Energy.

- Happens when you study everything that is given in the material or guide with equal importance. Here you fails to give importance to 'Focus Topics' or 'Focus areas'.

✓ RESULT- Wastage of time and energy.



Smart study

- Smart study is all about finding 'Focus areas' or 'Focus Topics'

Focus Topics

- Topics that helps you to gain more marks.

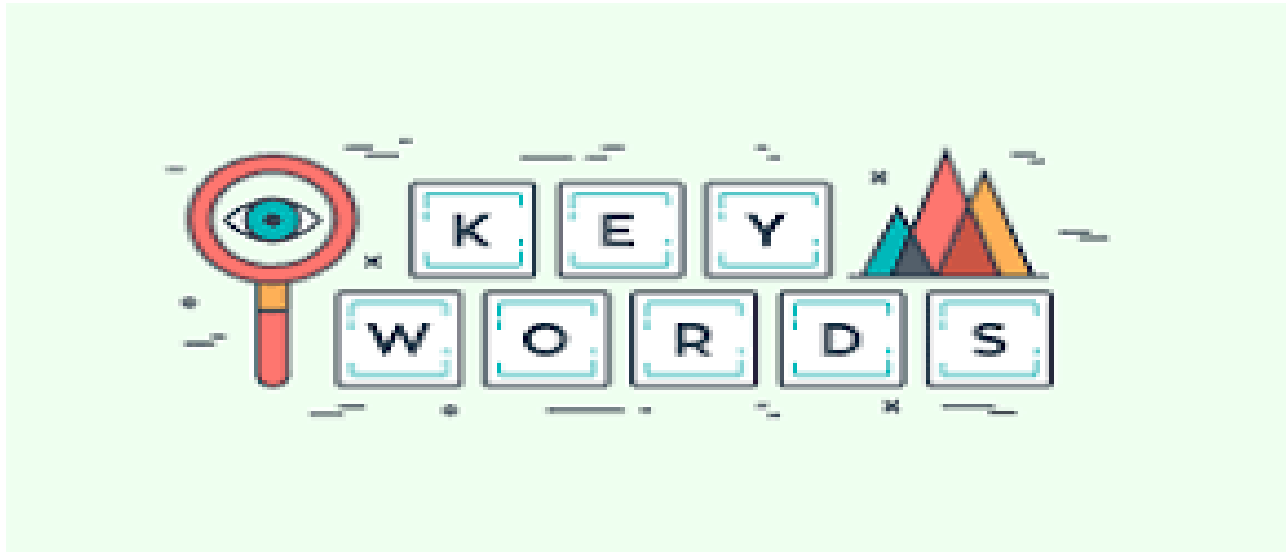
How to find focus areas or focus topics?

- With the help of systematic Analysis of Previous Year questions.

25:00



- Analysis of previous year questions helps you to find the topics that need more attention.
- Hence you can move from most important ones to less important ones accordingly.
- One's you get the focus topics you can make our own notes with the help of the reading materials provided and utilize your time fruitfully.



KEYWORD TECHNIQUE

KEYWORD TECHNIQUE:

Analyze: positive or negative

Dismiss all the connectors,
prepositions, articles etc.

Focus only on the bird's
eye....Keywords

Best suited to questions like these:



- gif, jpg, bmp, .png are used as extensions for files which store

.....

1. Audio data
2. Image data
3. Video data
4. Text data

Answer: 2

OTHER TECHNIQUES:

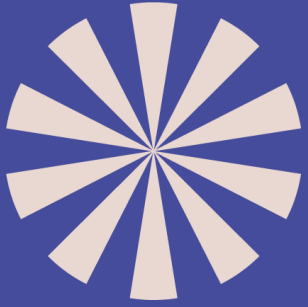
- Selection and Omission Technique
- Odd one out

From Previous Q.P:



- Which of the following phenomena is not a natural hazard?
 - a) Wildfire
 - b) Lightning
 - c) Landslide
 - d) Chemical Contamination

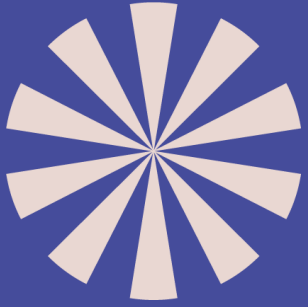
Answer: d)



INTERACTION SESSION

25 YEARS OF
EXCELLENCE





THANK YOU

**25 YEARS OF
EXCELLENCE**

