**List of topics for English exam (IT)**

**1. University Studies**

**Higher Education Today**

* levels of HE and length of study in Belarus, the UK and the USA;
* university organisation in Belarus, the UK and the USA;
* course of study in Belarus, the UK and the USA;
* assignments and grades in Belarus, the UK and the USA;
* cost of study in Belarus, the UK and the USA.

**My University**

* the mission of BSUIR and core areas of training;
* the University framework;
* the teaching stuff of BSUIR;
* subjects being studied and the University curriculum;
* University facilities at the students’ disposal;
* BSUIR as a scientific organisation;
* the role of sport and extracurricular activities in the University life.

**Student Life**

* personal traits and skills needed for university success;
* ways to be a better student;
* my daily routine as a student;
* the main characteristics of academic life and my workload;
* the main characteristics of student social life and my extracurricular activities;
* how to reach the balance between academic and social life at university.

1. **Youth and Society**

**Youth Issues**

* the youth problems that American, British, Belarusian teenagers face;
* how to build a path to problem-solving;
* how to solve youth problems;
* role of a family in a teen’s life;
* why the problem shouldn’t be hidden.

**Tech Addiction**

* types of tech and Internet addiction;
* problems that can be caused by tech and Internet addictions;
* reasons for becoming tech and Internet addicted;
* positive and negative sides of the Internet and technology;
* how to avoid tech and Internet addiction.

**Generation Gap**

* types of generations and their characteristics;
* how we can prevent the generation gap;
* what each generation can bring to the workplace;
* what barriers can affect communication;
* how we can manage different generations at the workplace;

**3. Career Path**

**Being a Successful Specialist**

* factors of career success;
* hard and soft skills of any successful specialist;
* qualities of successful leaders;
* typical functions of different department in the organisation;
* principles of business ethics and business communication.

**My Speciality: IT Professional**

* variety of jobs in the sphere of Information Technology;
* personal qualities of any IT specialist;
* typical responsibilities and skills for different IT department jobs;
* future skills for IT specialists and their importance.

**Professional Development**

* personal vs professional vs continuous professional development;
* elements of CPD;
* motivation as a key factor for professional development;
* training and its forms;
* the benefits of CPD.

**4. ICT Concepts**

* Impact of ICT on individuals and communities in terms of social, economic, business, and professional development.
* Core characteristics of a modern computer.
* Nature of ICT, its application and core attributes.
* Phases of digital revolution and main features of each.
* Difference between data and information.
* Data representation.
* Definition and types of computers. Basic components of a computer.
* Input and output devices. Processing device. Definition and types of storage.
* Definition of e-waste; state of the e-waste issue today.
* Threats of e-waste. Obstacles for tackling the problem of e-waste.
* Solutions to the problem of e-waste.

1. **Software**

* Definition of software and how it is made.
* Categories of software. Types of software.
* Definition, core elements, main tasks, and types of operating systems.
* Definition of copyright and licence agreement.
* Type of software licences.
* Pros and cons of using open source and proprietary software.
* Software troubleshooting basics.
* Definition of software piracy. Types of software piracy.
* Dangers of software piracy.
* State of the issue globally nowadays.
* Preventive measures against using pirated software

**6. Computer Networks**

* Definition of a network and its main characteristics.
* Classification of networks based on size and scope.
* Communication channels and their main types.
* Network topology. Network architecture. Network protocols.
* Cloud computing.
* The Internet and the Web. Types of the Internet protocols.
* Technologies and components of the WWW.
* Types of communication media: dial-up, DSL/ADSL, cable, 3G/4G
* Definition and applications of the IoT. IoT ecosystem. Benefits that IoT brings.
* Problems related to the IoT and their solutions. Future of the IoT.

**7. Information Systems**

* Definition of an information system, its goals, and examples of applications.
* Types of information systems and their main characteristics.
* SDLC and its core phases.
* Planning phase, its goal, and main activities.
* Analysis phase, its goal, and main activities.
* Design phase. Its purpose and activities. Hardware and software alternatives. Selection tools of the design phase.
* Implementation phase. Its purpose and activities. Types of testing. Types of conversion
* Goal, key activities, considerations of the maintenance phase.
* Types of modification during the maintenance phase. Quality of service and the metrics being used to measure it.
* Potential threats to information systems.
* Measures to protect data and information systems. Future of online voting.

1. **Computer Programming**

* Computer programming and the activities it involves.
* Programming paradigms. The types of programming languages.
* Object-oriented programming. Programming languages in demand.
* Artificial Intelligence, its usage, advantages and disadvantages.
* Machine Learning and Deep Learning.
* Virtual Reality and Augmented Reality.
* Game programming, genres, components, programming language.
* Robots, consistent characteristics. Robotic system, main components.
* Robotics, programming languages and approaches.
* Robotic systems, applications, benefits, challenges and threats.

**9. Digital Security**

* Security Basics. Computer protection and maintenance.
* Types of password attacks.
* Password security, authentication
* Malware, types. Ways to be infected. Ways to avoid computer infection;
* Antivirus software techniques; cyberwarfare attacks and cyber weapon
* Social Engineering, state of the issue. Methods of social engineering.
* Protection techniques against phishing, vishing, smishing.
* Encryption, its types, usage, importance.
* Protection against ransomware

**10. Job Hunting**

**Looking for a Job**

* the job that I want: the key characteristics a dream job should possess;
* the stages in the job application process;
* ways to research the market for job openings;
* my strengths and weaknesses, likes, dislikes, preferences, and interests in terms of professional behaviour;
* my profile: education, qualifications, transferable skills, experience;
* the strategy of a successful job-hunting process.

**Writing a CV / Résumé. Cover Letter**

* résumé writing rules: goal, structure, main sections, tips;
* cover letter: purpose, main features, challenges.

**Job Interview**

* pre-interview preparation tips;
* interview types: main characteristics and challenges;
* interview strategy: stages, common interview questions, do’s and don’ts;
* work values an employer is looking for in a candidate.